## Sonus

## 2017 Notice and Proxy Statement And <br> 2016 Annual Report

SONUS NETWORKS, INC.
4 Technology Park Driv
Westford, MA 0188
April 28, 2017

## Dear Shareholder,

2016 saw Sonus continue its path toward improved profitability, while expanding its portfolio through innovation and acquisition. Our longstanding commitment to research and development (R\&D) investments in particular paid significan dividends in 2016, and positions us well for future growth in the mobile, cloud and security markets.

Our earnings per share financial performance was the one of the best it has been looking back over the past five years. Additionally, our gross margins continued to improve and this performance allowed us to invest aggressively in R\&D in 2016. Investment in R\&D has been a linchpin of our success over the years, and those investments were at the root of our key accomplishments in 2016:

- We were selected by one of North America's largest mobile operators as the vendor of choice for their new Voice over LTE (VoLTE) initiative;
- We won Voice over WiFi (VoWiFi) contracts with two global Tier 1 providers as a result of our acquisition of Taqua, LLC in 2016;
- We added automation, elasticity and broader cloud integration to our solutions so that, entering 2017, we would have a completely virtual and cloud-ready product portfolio;
- We saw an encouraging response to our Skype for Business solutions;
- We transitioned our transcoding assets to a GPU-based platform to meet the scalability needs of cloud communications; and
- We doubled down on security functionality to address the rapidly growing threat-landscape that service providers and enterprises face.
That last point may be the most significant to us in the long term. We view Internet Protocol (IP) communications security as an evolving opportunity in the market and believe that our offerings are uniquely poised to capitalize on this opportunity. Specifically, we see our solutions as an important part of global organizations' security strategies, capable of
sharing network intelligence with firewalls, routers and other devices to unify our customers' IP data and communications security perimeters. Ultimately, this will allow service providers and enterprises to raise the trust level of their networks to an unprecedented point.
This change in the network security landscape will not happen overnight. But when it occurs, the change will be profound and, for those vendors that can meet the demand, profitable. Disruption is in our DNA and true and meaningful disruption takes time and begins with planning, often years in advance. We are putting those thoughtful plans into action today
As our technology has evolved, our conversation with customers has elevated from selling products and services to collaborating on a new overall architecture. Many of our customers perceive our solutions as a strategic advantage for the future, particularly as they look to migrate to virtualized environments and the cloud. This need is acutely felt in the mobile service provider market, as evidenced by our recent VoLTE and VoWiFi successes, and we expect to make significan inroads in the mobile communications market in 2017 and beyond

When I first joined Sonus in 2010, we were a Voice over IP (VoIP) gateway company whose flagship product was the GSX 000 - and we have done many amazing things since then. We have assembled the most robust portfolio of session border controllers (SBC) in the industry, then virtualized them around a shared code base that makes it simple for service provider and enterprises to deploy them in mixed physical/virtual/cloud environments. Our gross margin progress provided us with very fortunate to lead just such a team at Sonus.
Your continued support has been instrumental in getting us where we are today and where we need to be tomorrow. From all of us at Sones, thank you

## Payment Posen

Raymond P. Nolan
President and Chief Executive Officer

Proxy Statement

[^0]SONUS NETWORKS, INC.

Dear Fellow Stockholders:
We cordially invite you to the annual meeting of stockholders at 10:00 a.m. on Friday, June 9, 2017, at the offices of Wilmer Cutler Pickering Hale and Dorr LLP, located at 60 State Street, Boston, Massachusetts 02109 . We look forward to personally greeting those stockholders who are able to be present at the meeting. However, whether or not you plan to attend in person, please designate the proxies on the proxy card to vote your shares or provide voting instructions to your broker, bank or other nominee. Every stockholder's vote is important

Thank you very much for your continued trust and confidence in Sonus. Please remember to vote your shares at your earliest convenience.

Sincerely,
Gaypure P Aolem
Raymond P. Dolan
President and Chief Executive Officer

## Sonus

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS OF SONUS NETWORKS, INC

## Place:

WilmerHale
60 State Street
Boston, MA 02109
Date:
June 9, 2017

Time:
10:00 a.m.

## AGENDA

- Election of eight directors named in the proxy statement
- Amendment and restatement of Sonus Networks' stock incentive plan
- Ratification of the appointment of Deloitte \& Touche LLP as our independent registered public accounting firm for 2017
- Advisory vote to approve named executive officer compensation
- Advisory vote to approve the frequency of future advisory votes on named executive officer compensation
- Transaction of other business, if any, as may properly com before the meeting or any adjournment or postponement thereof

Record Date: You can vote at, and are entitled to notice of, the annual meeting if you were a stockholder of record on April 12, 2017.
f you are attending the meeting, you will be asked to present a valid, government-issued photo identification, such as a driver's license, as described in the Proxy Statement.

Westford, Massachusetts
April 28, 2017

By Order of the Board of Directors,
Crn
Chief Administrative Officer, Senior Vice President, General Counsel and Corporate Secretary
This Notice, the accompanying Proxy Statement and a form of proxy card are being mailed beginning on or about April 28, 2017 to all stockholders entitled to vote at the 2017 annual meeting of stockholders. The Sonus Networks, Inc. 2016 Annual Report on Form 10-K, which includes Sonus Networks' financial statements and constitutes its annual report to stockholders, is being mailed with this Notice.

Important Notice Regarding Availability of Proxy Materials for the Stockholder Meeting to be held on June 9, 2017: The Proxy Statement and the 2016 Annual Report to Stockholders are available for viewing, printing and downloading at https://materials.proxyvote.com/835916.

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## SONUS NETWORKS, INC.

 PROXY STATEMENT
## Summary Information

To assist you in reviewing the proposals to be acted upon at our 2017 annual meeting of stockholders (the "2017 Annual Meeting"), Sonus Networks, Inc. ("Sonus", "Sonus Networks", "our", "we", "us" or the "Company") would like to call your attention to the following information about Sonus' 2016 financial performance, key executive compensation actions and decisions, and corporate governance highlights. Please note that the following description is only a summary. For more complete information about these topics, please review our 2016 Annual Report on Form 10-K and this Proxy Statement.

## Business Overview

Sonus helps the world's leading communications service providers and enterprises embrace the next generation of Session Initiation Protocol ("SIP") and 4G/LTE (Long Term
Evolution)-based solutions, including Voice over Internet Protocol ("VoIP"), Voice over Wiri ("VoWiPl"), video and Unified Communications ("UC") by securing and enabling reliable nd scalable Internet Protocol ("IP") networks. With customers around the globe and 0 years of experience transforming networks to IP, we enable service providers and enterprises to capture and retain users and generate significant related return on investment. Sonus products include session border controllers ("SBCs"), diameter signaling controllers ("DSCs"), and VoWiFi solutions, which are supported by a global services team with experience in design, deployment and maintenance of some of the world's largest IP networks.

## 2016 Financial Highlights

We experienced modest revenue growth in 2016, but significantly improved profitability through margin expansion and cost cutting. Improved profitability will be used to drive our growth strategies for providing security for real-time internet-based communications.


## Industry and Company-Specific Challenges

Since 2014, our customer base has gone through fundamental transformations, including a shift towards all-IP, all-software networks. Simultaneously, there has been massive consolidation among our customers and our competitors. The consolidation of our customers and potential customers (e.g., the acquisition of Time Warner Cable Inc. and Bright House Networks by Charter Communications, Inc.; he acquisition of XO Communications, LLC by Verizon Communications; and the pending acquisition of Level 3 Communications Inc. by CenturyLink Inc.) has left us with fewer potential customers, and the consolidation of our competitors has allowed them to compete even more effectively.

These changes have caused traditional buying patterns to be disrupted, and in the first quarte of fiscal year 2015, our sales dropped precipitously, causing our stock price to drop precipitously too Neither has recovered to the pre-drop levels, which means that most quantitative analyses of the Company over this three-year period are not positive.

Qualitatively, however, during this same time period our management team has transformed Sonus from predominantly a provider of "legacy" media gateways that were used by large service providers (i.e., traditional telephone carriers) to convert circuit-based calls into IP-based calls, into redominantly a provider of current- and next-generation all-IP-based products like SBCs and DSC Further, we are now in the midst of leading the migration of our industry from hardware-based solutions to software-based "virtual" solutions, and are developing security solutions for this challenging "real-time" communications environment.

## Compensation Practices - Program Desig

Our incentive programs are designed to support our long-term business strategy


## Compensation Practices - 2016 Achievement

Our variable compensation payouts tied to 2016 performance were below target, demonstrating lignment of Company performance and compensation.


* The percentages represent the number of shares of Sonus common stock that vested for the 2016
performance period in connection with the performance-based restricted stock units ("PSUs") granted on performance period in connection with the performance-based restricted stock units ("PSUs") granted on
March 16, 2015 ("2015 Tranche II") and April 1, 2016 ("2016 Tranche I"), respectively. The PSUS relating to March 16, 2015 ("2015 Tranche II") and April 1, 2016 ("2016 Tranche I"), respectively. The PSUs relating 2015 Tranche II vested at $90.4 \%$ of target for the 2016 performance period. The PSUs relating to the 2016
Tranche I vested at $76 \%$ of target for the 2016 performance period. Performance for these awards during such Tranche I vested at $76 \%$ of target for the 2016 performance period. Performance for these awards during su
award's 2016 performance period was measured based on the Company's total shareholder return ("TSR") compared to pre-established relative TSR goals, based on the TSR of the NASDAQ Telecommunications Inde that were set by the Compensation Committee of the Company's Board of Directors.


## Pay and Performance: CEO Pay Opportunity vs. Realizable Value

Our bonus and performance-based equity payouts that were designed to be commensurate with absolute and relative Company performance resulted in alignment of pay and performance.


## Methodology and Assumptions:

- "CEO Pay Opportunity" means the sum of the base salary, target bonus and grant date fair value of long-tern incentive awards of the CEO for that applicable year
"Realizable Value" means the sum of the base salary and target bonus the CEO received for that applicable year plus the value of the long-term incentive awards at December 31, 2016
FY14
13-14 SMCIP opportunity reflect impact of stock-for-cash election premium
FY13 and FY14 realizable base salary reflects the value of stock-for-cash salary at the respective fiscal year end prices
FY13 and FY14 realizable SMCIP reflects value on date of vesting
FY14 base salary includes $\$ 29,167$, which was cash paid to the CEO in connection with a raise
Outstanding PSUs valued at target


## Responsiveness to Stockholder Feedback

## What We Stopped Doing in Response to Shareholder Feedback

X We did not exercise discretion to enhance bonus achievement-discretion exercised only to reduce cash bonus payouts
X We did not exercise discretion in determining achievement of performance-based equity awards

## What We Don't Do

$\mathbf{X}$ No gross-up provisions
$\mathbf{X}$ No pension plans or other post-employment benefit plan
$\mathbf{X}$ No severance multipliers in excess of two times pay
What We've Always Done
$\checkmark$ Independent compensation consultant
$\checkmark$ Annual market-based review of compensation level
$\downarrow$ Annual risk assessment of compensation plans and policies

## What We Did in Response to Sharcholder Feedback

$\downarrow$ Established fixed financial metrics for our cash bonus plans, based on revenue and profitability
$\checkmark$ Added performance awards to our equity incentive compensation mix
$\checkmark$ Instituted share ownership guidelines for our executives and board member
$\checkmark$ Adopted a formal clawback policy with respect to our incentive compensation plans

| Name, Age | Independent | Director Since | Committee Membership | Other Public Boards |
| :---: | :---: | :---: | :---: | :---: |
| Matthew W. Bross, 56 | Yes | February <br> 2014 | - Nominating and Corporate Governance Committee | 0 |
| Raymond P. Dolan, 59 | No | $\begin{aligned} & \text { October } \\ & 2010 \end{aligned}$ |  | 1 |
| Beatriz V. Infante, 63 | Yes | January 2010 | - Compensation Committee | 1 |
| Howard E. Janzen, 63 | Yes | January 2006 | - Audit Committee <br> - Nominating and Corporate Governance Committee (Chair) | 2 |
| Richard J. Lynch, 68 | Yes | February 2014 | - Chairman of the Board | 1 |
| Pamela D.A. Reeve, 67 | Yes | August <br> 2013 | - Compensation Committee <br> - Nominating and Corporate Governance Committee | 2 |
| John A. Schofield, 68 | Yes | $\begin{aligned} & \text { January } \\ & 2009 \end{aligned}$ | - Audit Committee <br> - Compensation Committee (Chair) | 1 |
| Scott E. Schubert, 63 | Yes | February 2009 | - Audit Committee (Chair, ACFE*) | 0 |

* ACFE-Denotes that Mr. Schubert is an "audit committee financial expert" as defined in Item 407(d)(5) of

Regulation S-K.
Annual Meeting Proposals

| Proposal | Recommendation of the Board |
| :--- | :--- |
| Election of directors | FOR each of the nominees |
| Approval of an amendment and restatement of our <br> stock incentive plan | FOR |
| Ratification of auditors | FOR |
| Advisory vote to approve named executive officer <br> compensation | FOR |

Advisory vote on the frequency of future advisory votes
on the approval of named executive officer
compensation
FOR holding ANNUAL advisory votes

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Proxy Statement contains "forward-looking statements" within the meaning of the U.S Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical fact contained in this Proxy Statement including statements regarding our future results of operations and financial position, industry developments, business strategy, plans and objectives of management for future operations and plan developments, business strategy, plans and objectives of management for future operations and plans "anticipates", "believes", "could", "estimates", "expects", "intends", "may", "plans", "seeks", "projects", "will" and other similar language, whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including, but not limited to: the timing of customer purchasing decisions and our recognition of revenues; economic conditions; our ability to recruit and retain key personnel; difficulties supporting our strategic focus on channel sales; difficulties retaining and expanding our customer base; difficulties leveraging market opportunities; the impact of restructuring and cost-containment activities; our ability to realize benefits from the Taqua, LLC ("Taqua") acquisition and the Treq Labs, Inc. ("Treq") asset acquisition; the effects of disruption from the Taqua and Treq transactions, making it more difficult to maintain relationships with employees, customers, business partners or government entities; the success implementing the integration strategie of Taqua and Treq assets; litigation and the ongoing SEC inquiry; actions taken by significant
stockholders; difficulties providing solutions that meet the needs of customers; market acceptance of our products and services; rapid technological and market change; our ability to protect our intellectua property rights; our ability to maintain partner, reseller, distribution and vendor support and supply relationships; higher risks in international operations and markets; the impact of increased competition; urrency fluctuations; changes in the market price of our common stock; and/or failure or
circumvention of our controls and procedures. Important factors that could cause actual results to differ materially from those in these forward-looking statements are discussed in the "Risk Factors" Management's Discussion and Analysis of Financial Condition and Results of Operations", and Quantitative and Qualitative Disclosures About Market Risk" sections in our filings with the Securities and Exchange Commission. Forward-looking statements involve known and unknown risks, ncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We therefore caution you against relying on any of these forward-looking atements. Also, any forward-looking statement made by us in this Proxy Statement speaks only as of he date of this Proxy Statement. Factors or events that could cause our actual results to differ may merge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

## INFORMATION ABOUT THE ANNUAL MEETING

Our Board of Directors (our "Board") is soliciting proxies for the annual meeting of stockholders of Sonus Networks, Inc. ("Sonus," "Sonus Networks," "our," "we," "us" or the Company") to be held on Friday, June 9, 2017, and at any adjournments or postponements thereof. This Proxy Statement contains important information for you to consider when deciding how to vote on the matters brought before the meeting. Please read it carefully.

## Why am I receiving these materials?

You have received these proxy materials because our Board is soliciting your vote at the 2017 Annual Meeting. This Proxy Statement includes information that we are required to provide to you under the rules of the U.S. Securities and Exchange Commission (the "SEC") and that is designed to assist you in voting your shares.

## When and where is the meeting?

The 2017 Annual Meeting will be held on Friday, June 9, 2017 at 10:00 a.m., local time, at the offices of Wilmer Cutler Pickering Hale and Dorr LLP, located on the $26^{\text {th }}$ floor at 60 State Street, Boston, Massachusetts 02109.

## Who may vote at the meeting?

Stockholders of record at the close of business on April 12, 2017, the record date, may attend and vote at the meeting. Each stockholder is entitled to one vote for each share of common stock held on all matters to be voted. As of the close of business on April 12, 2017, an aggregate of 51,611,279 shares of our common stock were outstanding (which includes 2,089,944 unvested shares underlying restricted stock grants that are not considered to be outstanding for accounting purposes). A list of our stockholders will be available for inspection at our corporate offices at 4 Technology Park Drive, Westford, Massachusetts 01886 beginning no less than ten days prior to the meeting.

## How many shares must be present to hold the meeting?

A majority of the $51,611,279$ shares of our common stock that were outstanding as of the record date must be present at the meeting in order to hold the meeting and conduct business. This is called a quorum. For purposes of determining whether a quorum exists, we count as present any shares that are properly represented in person at the meeting or that are represented by a valid proxy properly submitted over the Internet, by telephone or by mail. Further, for purposes of establishing a quorum, we count as present shares that a stockholder holds and which are represented by their proxy even if the stockholder does not vote on one or more of the matters to be voted upon.

## What proposals will be voted on at the meeting?

There are five proposals scheduled to be voted on at the meeting:

- The election of eight nominees for director to hold office until the 2018 annual meeting of stockholders of the Company (the "2018 Annual Meeting") (Proposal 1);
- The approval of an amendment and restatement of Sonus Networks' stock incentive plan (Proposal 2);
- The ratification of the appointment of Deloitte \& Touche LLP to serve as Sonus Networks' independent registered public accounting firm for the fiscal year ending December 31, 2017 (Proposal 3);
- The non-binding advisory vote on the compensation of our named executive officers as disclosed in the "Compensation Discussion and Analysis" section and the accompanying compensation tables and related narratives contained in this Proxy Statement (Proposal 4); and
- The non-binding advisory vote on the frequency of future advisory votes on the compensation of our named executive officers (Proposal 5).


## How does the Board of Directors recommend that I vote?

Our Board recommends that you vote your shares:

- "For" the election of each of the nominees to our Board (Proposal 1);
- "For" the approval of an amendment and restatement of Sonus Networks" stock incentive plan (Proposal 2);
- "For" the ratification of the appointment of Deloitte \& Touche LLP to serve as our independent registered public accounting firm for the fiscal year ending December 31, 2017 (Proposal 3);
- "For" the approval, on a non-binding, advisory basis, of the compensation of our named executive officers, as disclosed in the "Compensation Discussion and Analysis" section and the accompanying compensation tables and related narratives contained in this Proxy Statement (Proposal 4); and
- "For" the approval, on a non-binding, advisory basis, of holding future advisory votes on the compensation of our named executive officers every year (Proposal 5).


## What vote is required to approve each matter and how are votes counted?

Election of Directors (Proposal 1). In an uncontested election, such as the election of directors at the 2017 Annual Meeting, to be elected, each of the nominees for director must receive more votes "For" such nominee's election than "Against" such election (with abstentions and broker non-votes not counted as a vote for or against). With respect to each nominee, you may vote "For," "Against," or "Abstain." Abstaining will have no effect on the outcome of the election.

Approval of an Amendment and Restatement of Sonus Networks' Stock Incentive Plan Proposal 2). The affirmative vote of a majority of the shares of common stock present or represented at the 2017 Annual Meeting and entitled to vote on this proposal will be required to approve this proposal. You may vote "For", "Against", or "Abstain" from voting on this proposal. Abstaining from voting on this proposal will have the effect of a vote against approval of this proposal.

Ratification of the Appointment of Deloitte \& Touche LLP to Serve as Sonus Networks' Independent Registered Public Accounting Firm for the Fiscal Year Ending December 31, 2017 (Proposal 3) The affirmative vote of a majority of the shares of common stock present or represented at the 2017 Annual Meeting and entitled to vote on this proposal will be required to approve this proposal. You may vote "For", "Against", or "Abstain" from voting on this proposal. Abstaining from voting on this proposal will have the effect of a vote against this proposal.

A Non-Binding Advisory Vote on the Compensation of Our Named Executive Officers (Proposal 4). The vote on the compensation of the named executive officers is non-binding, as provided by law. However, our Board and its Compensation Committee will review and consider the outcome of this vote when making future compensation decisions for our named executive officers. Th affirmative vote of a majority of the shares of common stock present or represented at the 2017 Annual Meeting and entitled to vote on this proposal will be required to approve this proposal. You
may vote "For", "Against", or "Abstain" from voting on this proposal. Abstaining from voting on this proposal will have the effect of a vote against this proposal.

A Non-Binding Advisory Vote on the Frequency of Future Advisory Votes on the Compensation of Our Named Executive Officers (Proposal 5). Votes on the frequency of future advisory votes on the compensation of our named executive officers are non-binding, and, as described in more detail in
Proposal 5, the Board may decide that it is in the best interest of our stockholders and the Company to hold future executive compensation advisory votes more or less frequently. However, our Board will review and consider the outcome of this vote when making determinations as to when we will again review and consider the outcome of this vote when making determinations as to when we will again
submit the advisory vote on the compensation of our named executive officers to stockholders for approval at the annual meeting of stockholders. The frequency option receiving the greatest number of votes cast (every year, once every two years, or once every three years) will be the frequency option that stockholders approve. Abstentions and broker non-votes do not constitute a vote for any of the three frequency options.

For the proposals relating to the election of directors (Proposal 1), the approval of an amendment and restatement of Sonus Networks' stock incentive plan (Proposal 2), the non-binding advisory vote on the compensation of our named executive officers (Proposal 4), and the non-binding advisory vote on the frequency of future advisory votes on the compensation of our named executive officers (Proposal 5), please note that if you are a beneficial owner of our common stock and your stock is held through a broker, bank or other nominee, under stock exchange rules a broker, bank or other nominee subject to those rules is not permitted to vote your shares on these four proposals without your instruction. Therefore, if a beneficial owner of our common stock fails to instruct such a broker, bank or other nominee on how to vote for these four proposals, that beneficial owner's shares cannot be voted on these matters-in other words, your broker, bank or other nominee's proxy will be treated as a "broker non-vote," which is explained in the following question and explanation.

## What are broker non-votes and what is the effect of broker non-votes?

Brokers, banks and other nominees have the discretion to vote shares held in "street name"-a term that means the shares are held in the name of the broker, bank or other nominee on behalf of its customer, the beneficial owner-on routine matters, such as the ratification of the appointment of our independent registered public accounting firm, but not on non-routine matters. Generally, broker non-votes occur when shares held by a broker, bank or other nominee for a beneficial owner are not voted with respect to a non-routine matter because the broker, bank or other nominee has not received voting instructions from the beneficial owner and the broker, bank or other nominee lacks discretionary authority to vote the shares because of the non-routine nature of the matter. Broker non-votes with respect to a matter are not counted as shares entitled to vote with respect to that matter and do no affect the voting results on that matter (unless the required vote is a percentage of all outstanding shares, which is not the case for any of the proposals to be voted on at the 2017 Annual Meeting). Broker non-votes are counted as shares present for purposes of determining the presence of a quorum The election of directors, the approval of an amendment and restatement of Sonus Networks' stock incentive plan, the non-binding advisory vote on the compensation of our named executive officers, and the non-binding advisory vote on the frequency of future advisory votes on the compensation of ou named executive officers are "non-routine" matters for which brokers, banks and other nominees, under applicable stock exchange rules, may not exercise discretionary voting power without instructions from the beneficial owner. Your vote is very important, whether you hold directly or through a broker, bank or other nominee. We encourage you to read this Proxy Statement and the 2016 Annual Report carefully and if you are a beneficial owner, please be sure to give voting instructions to your broker, bank or other nominee.

## What happens if an incumbent director nominee fails to receive more "For" votes than "Against"

 votes?Our Corporate Governance Guidelines require that as a condition to being nominated by the Board for re-election as a director, each incumbent director must deliver to the Board an irrevocable resignation from the Board that will become effective if, and only if, both (i) in the case of an resignation from the Board that will become effective if, and only if, both (i) in the case of an "Against" such election, and (ii) the Board accepts such resignation. The Board will decide (based on the recommendation of a committee of the Board) whether to accept the director's resignation within 90 days after the election results are certified.

An incumbent director who does not receive the required vote in an uncontested election will continue to serve as a director while the committee and the Board decide whether to accept or reject such director's resignation. If the Board accepts such resignation, the Board may fill the remaining vacancy or may decrease or increase the size of the Board in accordance with our by-laws. Our Corporate Governance Guidelines are posted on our website at www.sonusnet.com.

## How can I vote my shares in person at the meeting?

Shares held directly in your name as the stockholder of record may be voted in person at the meeting. If you choose to attend the meeting, please bring the enclosed proxy card and a valid, government-issued photo identification, such as a driver's license, for entrance to the meeting.

If you hold your shares in street name, please bring the enclosed voting instruction form you receive from your broker, bank or other nominee and proof of identification for entrance to the meeting. You must also request a legal proxy from your broker, bank or other nominee and bring it to the annual meeting if you would like to vote at the meeting.

## How can I vote my shares without attending the meeting?

Whether you hold shares directly as a stockholder of record or beneficially in street name, you may vote without attending the meeting. If you are a stockholder of record, you may submit a proxy in any of the following ways:

- Submit your proxy by mail. You may complete, date and sign the proxy card and mail it in the postage-prepaid envelope that you received. The persons named in the proxy card will vote the shares you own in accordance with your instructions on the proxy card you return. If you return the proxy card but do not give any instructions on a particular matter described in this Proxy Statement, the persons named in the proxy card will vote the shares you own in accordance with the recommendations of our Board.
- Submit your proxy over the Internet. If you have Internet access, you may submit your proxy by following the instructions set forth on your proxy card. If you submit your proxy over the Internet, please do not return your proxy card.
- Submit your proxy by telephone. If you are located in the United States or Canada, you may submit your proxy by telephone by following the instructions set forth on your proxy card. If you submit your proxy by telephone, please do not return your proxy card.
The ability to submit your proxy by telephone or over the Internet will be available until The ability to submit your proxy by telephone
11:59 p.m., Eastern Daylight Time on June 8, 2017.

If your shares are held in the name of a broker, bank or other nominee, please follow the voting instructions on the forms you receive from such nominee. The availability of submitting your voting instructions by telephone or over the Internet will depend upon their voting procedures.

## Who is serving as the Company's inspector of elections?

Broadridge Financial Solutions, Inc. has been engaged as our independent inspector of elections to tabulate stockholder votes for the 2017 annual meeting.

## How can I change my vote?

You may revoke your proxy and change your vote at any time before the polls close at the meeting. You may do this by signing and submitting a new proxy card with a later date, submitting a counted) or by attending the meeting and voting in person. Attending the meeting by itself, however, will not revoke your proxy unless you specifically request it.

## Is my vote confidential?

Proxy instructions, ballots and voting tabulations that identify stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within Sonus or to third parties, except as necessary to meet applicable legal requirements and to allow for the tabulation and certification of votes. Occasionally, stockholders provide written comments on their proxy cards, which may be forwarded to management and our Board.

## What are the directions to the meeting?

The meeting is being held at the offices of Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109, telephone: (617) 526-6000. The main reception area where you should check in is on the $26^{\text {th }}$ floor, where the annual meeting will be held.

## PROPOSAL 1 - ELECTION OF DIRECTORS

Our Board has nominated eight directors for election at the 2017 Annual Meeting to hold office until the next annual meeting and the election of their successors. All of the nominees are currently directors. Each agreed to be named in this Proxy Statement and to serve if elected. All Board attended the Company's 2016 annual meeting of stockholders (the "2016 Annual Meeting")

Except for our Chief Executive Officer (the "CEO"), each of our nominees is independent within our director independence standards, which meet the director independence standards of the NASDAQ Stock Market Rules. We have no reason to believe that any of the nominees will be unable or unwilling to serve if elected. However, if any nominee should become unable for any reason or unwilling to serve, proxies may be voted for another person nominated as a substitute by the Board, or the Board may reduce the number of directors.

## Director Experience and Tenure

Our directors collectively possess a broad mix of skills, qualifications and proven leadership abilities. The Nominating and Corporate Governance Committee practices a long-term approach to board refreshment. The Committee regularly identifies individuals who would complement and enhance the current directors' skills and experience.

## Board Highlights

Reduction in the Size of the Board. In June 2016, we reduced the size of the Board from eleven directors to eight directors to better reflect the size and cost structure of our business.
Adoption of Majority Voting Standard in Uncontested Director Elections. In December 2016, our Board adopted a majority voting standard in uncontested director elections, eliminating plurality voting in such elections.

New Board Chairman. In June 2016, our Board of Directors rotated chairmen, and Richard J. Lynch was elected as the Chairman of the Board.

New Nominating and Corporate Governance Committee Chair. In June 2016, our Board of Directors appointed Howard Janzen as the new chair of the Nominating and Corporate Governance Committee

Director Attendance. Each of our directors attended $100 \%$ of the total number of meetings of the Board in 2016. No director attended less than $95 \%$ of the combined total meetings of the full Board and the committees on which he or she served in 2016.

Technology Oversight. In June 2016, technology oversight was transferred from the Technology Strategy and Oversight Committee to the entire Board, and the Technology Strategy and Oversight Committee - with its attendant expense - was eliminated. This reflects the importance the Board places on determining the technology direction of the Company.

## Board Tenure for 2017 Nominees

Our directors' expertise combines to provide a broad mix of skills, qualifications and proven leadership abilities.

The Nominating and Corporate Governance Committee practices a long-term approach to board refreshment. The Committee regularly identifies individuals who would complement and enhance the current board's skills and experience.

Director Tenure


It is of great importance to the Company that the Nominating and Corporate Governance committee recruit directors who help achieve the goal of an experienced, diverse Board that function effectively as a group. The Nominating and Corporate Governance Committee expects each of the Company's directors to have proven leadership skills, sound judgment, integrity, and a commitment to he success of the Company. In evaluating director candidates and considering incumbent directors for omination to the Board, this Committee considers a variety of factors, including independence, inancial literacy, personal and professional accomplishments, and experience in light of the needs of he Company. For incumbent directors, the factors also include attendance, past performance on the Board and contributions to the Board and their respective committees

## Director Nominees

The biographies below describe the skills, qualities, attributes and experience of the nominees hat led the Board and its Nominating and Corporate Governance Committee to determine that it is appropriate to nominate these directors.

Matthew W. Bross, 56, has been a director since February 2014. Since April 2016, Mr. Bross ha served as a general consultant in the telecommunications industry and, since March 2016, as Senio Advisor at Cool Planet Energy Systems, Inc. ("Cool Planet"), a company that converts non-food iomass into sustainable, high-octane gasoline. Mr. Bross previously served as the Chairman and Chief Executive Officer of Compass Networks, a supplier of icPhotonics ${ }^{\text {TM }}$ technology that delivers a ommercial chip-to-chip direct silicon-to-photonics solution, from February 2014 until April 2016. Prio that, Mr. Bross was the Global Chier Technology Officer of Huawei Technologies Co. Ltd., a global information and communications technology solutions provider, from October 2009 to October 2012, rritish Telecommunications plc, a global provider of communications services and solutions and holly-owned subsidiary of BT Group plc, from November 2002 to July 2009, and Williams Communications Group, Inc. from March 1997 to November 2002. He has led the technology novation and investment strategies for the companies he has served across multiple technology and business domains, including carrier, enterprise, devices, applications and services. Additionally, he was warded a William Pitt Fellowship by Pembroke College at the University of Cambridge. Mr. Bross currently serves as Chairman of the Global Information Infrastructure Commission and Local Backhau Networks, LLC, and is a member of the Board of Directors for Anova Data, Inc., the EastWest Institute, RIFT.io Inc. and X-IO Technologies. Among other qualifications, Mr. Bross brings to the Board executive management and leadership experience as global chief technology officer of various public companies, along with his deep technology expertise and understanding of advanced technology
aaymond P. Dolan, 59, has been our President, Chief Executive Officer and a director since October 2010, and is responsible for the strategic direction and management of our company. Mr. Dolan has more than 25 years of experience in the telecommunications industry, having served in senior leadership positions at QUALCOMM Incorporated, NextWave Telecom and BellAtlantic/ YNEX Mobile. In 2016, Mr. Dolan was appointed by President Barack Obama to serve on the served as Chief Executive Officer of QUALCOMM/Flarion Technologies, a developer of mobile roadband communications technologies, as well as Senior Vice President of QUALCOMM Incorporated. Prior to its acquisition by QUALCOMM in 2006, Mr. Dolan served as Chairman and Chief Executive Officer of Flarion Technologies. Before his role at Flarion Technologies, from 1996 to 2000, Mr. Dolan was Chief Operating Officer of NextWave Telecom. Prior to that, he spent eight year t BellAtlantic/NYNEX Mobile, serving in numerous roles of increasing responsibility, most recently as Executive Vice President of Marketing. He began his career in the telecommunications industry at PacTel Cellular as a Manager of Network Operations. Mr. Dolan also served as an officer in the United States Marine Corps, where he spent more than seven years as a tactical jet pilot. He has served on the Board of Directors of American Tower Corporation since 2003, including as a member of he Compensation Committee since 2016 and as a member of the Nominating and Corporate Governance Committee from 2004 until 2016. He also served on the Board of Directors of NII Holdings, Inc. from 2008 until 2012. Mr. Dolan graduated from the U.S. Naval Academy with a degree in Mechanical Engineering and also holds a Master of Business Administration degree from the Columbia University School of Business. Among other qualifications, Mr. Dolan brings to the Board executive leadership experience, including from his service as our Chief Executive Officer, along with xtensive brand marketing experience and strong financial, risk analysis and corporate governance skills and experience.

Beatriz V. Infante, 63, has been a director since January 2010. Since 2009, Ms. Infante has served as Chief Executive Officer of BusinessExcelleration LLC, a business consultancy specializing in corporate transformation and renewal, and since 2008, has been a limited partner in Tandem Capital, Silicon Valley venture capital firm investing in mobile technology companies. From 2010 until its cquisition by Infor in 2011, Ms. Infante was the Chief Executive Officer and a director of ENXSUITE corporation, a leading supplier of energy management solutions. From 2006 until its acquisition by Voxeo Corporation in 2008, she was the Chief Executive Officer and a director of VoiceObjects Inc., a arket leader in voice applications servers. Ms. Infante served as a director and Interim Chie Executive Officer of Sychron Inc., a data center automation company, from 2004 to 2005 until its sale an investor group. Ms. Infante was Chier Executive Officer and President of Aspect Communication Corporation (Aspect'), a market leader in communications solutions, from April 2000 until October 2003. She was named Chairman of Aspect in February 2001, 00, held additional executive roles, including Co-President. Since May 2014, she has served on the ard of Directors and Audit Committee of Liquidity Services Inc., and has additionally served as hair of the Compensation Committee since November 2015. Ms. Infante joined the Board of Directors of Ultralech, Inc. in July 2016 and serves on its Nominating and Corporate Governance Committee. Since 1994, she has served on the Advisory Committee to the Princeton University School of Engineering and Applied Science. From May 2012 until its acquisition by Broadcom Limited in May 015, she served on the Board of Directors and Compensation Committee of Emulex Corporation, an additionally became Chair of the Nominating and Corporate Governance Committee in February 2014 Ms. Infante has previously served as a director at a number of privately held companies as well as two ot-for-profit organizations, Silicon Valley Leadership Group and Joint Venture Silicon Valley Network Ms. Infante has also served since June 2016 as an Advisory Board member of Guardian Analytics and since July 2015 as the Chair of the Advisory Board of Infrascale. Additionally, Ms. Infante is a National Association of Corporate Directors Board Leadership Fellow, and in 2016 was named to the 2016 NACD Directorship 100, which honors the most influential boardroom leaders each year. In 2013, she was named to the Financial Times Agenda "Top 50 Digital Directors' List." Ms. Infante holds a

Bachelor of Science and Engineering degree in Electrical Engineering and Computer Science from Princeton University and holds a Master of Science degree in Engineering Science from California Princeton University and holds a Master of Science degree in Engineering Science from Califor nstitute of Technology. Among other qualifications, Ms. Infante brings to the Board executive along with extensive operational expertise and experience in engineering, sales, and marketing.

Howard E. Janzen, 63, has been a director since January 2006 and was the Chairman of the Board from December 2008 to June 2016. Mr. Janzen has been the Executive Chairman of Cool Planet since December 2016, and previously served as its President and Chief Executive Officer since May 2012. He has been a director at Cool Planet since July 2012. Since 20102, Mr. Janzen has served as President and Chief Executive Officer of Janzen Ventures, Inc., a private investment business venture. Mr. Janzen was the Chief Executive Officer and a director of One Communications Corp., a supplier of integrated telecommunications solutions to businesses, from March 2007 until its sale to EarthLink, Inc. in April 2011. He served as President of Sprint Business Solutions, the business unit serving Sprint Corporation's business customer base, from January 2004 to September 2005. From May 2003 to anuary 2004, he was President of Sprint Corporation's Global Markets Group, responsible for Sprint Corporation's long distance business for both consumer and business customers. From 1994 until October 2002, Mr. Janzen served as President and Chief Executive Officer, and Chairman from 2001 to 2002, of Williams Communications Group, Inc., a high-technology company. Mr. Janzen has been on he Board of Directors of Global Telecom \& Technology, Inc. since October 2006, and is a member of both its Compensation Committee and Corporate Governance Committee. He has also served as a member of the Board of Directors of Vocera Communications, Inc. since May 2007, including as its Lead Independent Director since July 2016 and is a member of its Audit Committee. He previously served as a member of the Board of Directors, Compensation Committee and Strategy Committee of Macrosolve, Inc. from April 2006 to May 2012. Mr. Janzen also serves as a member of the Board of Directors of Bye Aerospace Inc., a privately held aerospace engineering and technology company. He is he Commissioner and Chairman Emeritus of the Global Information Infrastructure Commission and lso serves as a member of the Board of Directors for HeritX, Inc., the Colorado School of Mines Foundation and Denver Area Boy Scouts of America, each a non-profit organization. Mr. Janzen received his Bachelor of Science and Master of Science degrees in Metallurgical Engineering from the Colorado School of Mines and is a licensed Professional Engineer. He also has completed the Harvar Business School Program for Management Development. Mr. Janzen was named a Colorado School of Mines Distinguished Achievement Medalist and was induced into the University of Tulsa, College or Engineering and Natural Science Hall of Fame. Among other qualifications, Mr. Janzen brings to the board executive leadership experience, including from his service as a chief executive officer of various elecommunications companies and his past service as a chief executive officer and chairman of a public company, along with extensive financial expertise and brand marketing experience

Richard J. Lynch, 68, has been a director since February 2014 and the Chairman of the Board since June 2016. Since September 2011, Mr. Lynch has served as the President of FB Associates, LLC which provides advisory and consulting services at the intersection of technology, marketing and business operations. Mr. Lynch was the Executive Vice President and Chief Technology Officer for Verizon Communications between 2007 and 2011, and the Executive Vice President and Chief lechnology Officer of Verizon Wireless and its predecessors from 1990 until 2007. Mr. Lynch has been at the forefront of wireless technology solutions and was responsible for the selection of CDPD, CDMA, EV-DO and LTE for use within the Verizon network. Building on these and other key echnology decisions, Mr. Lynch has driven the introduction of key innovative products and services into the marketplace. Mr. Lynch is a Life Fellow of the Institute of Electrical and Electronic Engineer and has been awarded patents in the field of wireless communications. Mr. Lynch has served as a member of the Board of Directors and the Compensation, Nominating and Governance Committee of Blackberry Limited since February 2013. From March 2012 to May 2016, he served as a member of the Board of Directors, Chairman of the Nominating and Corporate Governance Committee and a
member of the Compensation Committee of Ruckus Wireless, Inc. From November 2010 to Novembe 2013, Mr. Lynch served as Chairman of the Board of Directors and a member of the Nominating and Corporate Governance Committee of TranSwitch Corp. Mr. Lynch also serves as a member of the Board of Directors of three privately held companies. He has also sat on the boards of numerou industry organizations, including the GSM Association and the CDMA Development Group, and as a member of the Federal Communications Commission Technical Advisory Committee and Communications Security Reliability and Interoperability Council. For his leadership in the early years of wireless data, Mr. Lynch was honored with the President's Award by the Cellular
Telecommunications Industry Association. He has also been inducted into the Wireless History Foundation's Hall of Fame. Mr. Lynch is a graduate of Lowell Technological Institute (now the University of Massachusetts, Lowell), where he received Bachelor of Science and Master of Science degrees in electrical engineering. He has also completed post-graduate work at the Wharton School of he University of Pennsylvania and the Johnson School of Management at Cornell University. Among ther qualifications, Mr. Lynch brings to the Board executive leadership experience, including from his service as chief technology officer of Verizon and its predecessor companies, along with his deep technology expertise and understanding of advanced technology.

Pamela D.A. Reeve, 67, has been a director since August 2013. From November 1989 to August 2004, Ms. Reeve was the President, Chief Executive Officer and a director of Lightbridge, Inc., a glob provider of mobile business solutions, offering products and services for the wireless communication dustry. Prior to joining Lightbridge, Inc. in 1989, Ms. Reeve spent 11 yeass as a consultant and in series of executive positions at the Boston Consulting Group, Inc. Ms. Reeve has served as a member of the Board of Directors of Frontier Communications Corporation since 2010, including as its Lead Director since 2015, and previously served on its Compensation Committee and the Nominating and Corporate Governance Committee. Effective April 1, 2016, Ms. Reeve became the Chairman of the Board of Directors of Frontier Communications Corporation. Since 2002, Ms. Reeve has served as nember of the Board of Directors of American Tower Corporation, including as its Lead Director ince 2004 and member of its Nominating and Corporate Governance Committee since 2009, and was reviously a member of its Compensation Committee from 2004 to 2016. From 1997 to 2008, Ms. Reeve served as a director of NMS Communications Corp., which sold its core business and the emaining business became Livewire Mobile, Inc. Ms. Reeve served on the Board of Directors of livewire Mobile, Inc. from 208 to November 2009. She also has been a director at several non-profit Hanzations. Ms. Reeve Harvard Business School, and received her Bachelor or Arts degree, wh honors, from the University
 , industries.

John A. Schofield, 68, has been a director since January 2009. From 1999 to 2005, Mr. Schofield served as President, Chief Executive Officer and Chairman of the Board of Advanced Fibre Communications, Inc., a leading supplier of next-generation edge access equipment and multi-service Coadband solutions for the telecommunications industry. From 1992 to 1999, Mr. Schofield served as enior Vice President and then President of the Integrated Solutions Group of ADC
Telecommunications, Inc., a world-wide supplier of network equipment, software solutions, and integration services for broadband and multiservice networks. Since 2000, he has served as the Chairman of the Board of Directors of Integrated Device Technology, Inc., as well as a member of its Compensation Committee and its Nominating and Governance Committee. Mr. Schofield has a Bachelor of Science degree in Electrical Engineering from the NSW Institute of Technology in Sydney Australia and is a graduate of Raytheon's Management Development Program. Among other qualifications, Mr. Schofield brings to the Board executive leadership experience, including from his service as a chairman of a public company, along with extensive financial expertise and brand marketing experience.

Scott E. Schubert, 63, has been a director since February 2009. From 2005 until 2008, Mr. Schubert served as Chief Financial Officer of TransUnion LLC, a leading global information solutions company. From 2003 to 2005, Mr. Schubert served as Chief Financial Officer and, prior to that, Executive Vice President of Corporate Development of NTL, Inc. (now Virgin Media, Inc.). From 1999 to 2003, Mr. Schubert held the position of Chief Financial Officer of Williams Communications Group, Inc., a high-technology company. Mr. Schubert also served as head of BP Amoco's Global Financial Services from 1995 to 1999, leading the initial integration of BP and Amoco's worldwide Financial services from 1995 to 1999, leading the initial integration of BP and Amoco's worldwide
financial operations following the merger of the two companies in 1998. From August 2011 to October financial operations following the merger of the two companies in 1998. From August 2011 to October
2014, he served as a member of the Board of Directors, the Compensation Committee, the Audit 2014, he served as a member of the Board of Directors, the Compensation Committee, the Audit
Committee and the Compliance Committee of Isle of Capri Casinos, Inc. Mr. Schubert is a graduate of the Krannert School of Business at Purdue University, where he completed his Master of Business Administration degree in Finance and Economics. He also earned his Bachelor of Science degree at Administration degree in fual majors in Engineering and Accounting. Among other qualifications,
Purdue University, with dual mate Mr. Schubert brings to the Board executive leadership experience, including from his service as a chief financial officer of various companies, along with extensive financial expertise.

## Board of Directors' Recommendation

The Board of Directors recommends that stockholders vote "FOR" all of the nominees.

## PROPOSAL 2 - APPROVAL OF AN AMENDMENT AND RESTATEMENT OF

 SONUS NETWORKS' STOCK INCENTIVE PLANOur Board believes that the future success of Sonus depends, in large part, on our ability to maintain a competitive position in attracting, retaining and motivating key employees with relevant experience and superior ability. On April 25, 2017, our Board adopted, subject to stockholder approval, an amendment and restatement of our Amended and Restated Stock Incentive Plan (the "Amended Plan").

## Summary of Amendment

The proposed amendments would, among other things:

- Increase in Aggregate Share Limit. Our Amended Plan currently limits the aggregate number of shares of our common stock that may be issued pursuant to all awards granted under the Amended Plan to $16,476,713$ shares. Our Amended Plan, as amended and restated, will increase this limit by an additional 900,000 shares so that the new aggregate share limit for the Amended Plan will be 17,376,713 shares.
- Dividends Relating to Restricted Stock, Restricted Stock Units and Other Stock Unit Awards. Our Amended Plan currently provides that dividends on unvested restricted stock and dividend equivalents granted with respect to unvested restricted stock units will be accumulated or reinvested and paid only upon the vesting of the underlying award and that dividend equivalents with respect to other stock unit awards are subject to the same vesting and forfeiture provisions as the underlying award. We revised the language in the Amended Plan to make it more explicit by providing that any dividends on unvested restricted stock or with respect to shares of common stock granted under an other stock unit award will be paid to a participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares and that any dividend equivalents with respect to restricted stock units and other stock unit awards will
be subject to the same vesting conditions and restrictions on transfer and forfeitability applicable to the underlying award with respect to which paid. No interest will be paid on any such dividends or dividend equivalents.
- Clawback. In 2014, our Compensation Committee adopted a formal clawback policy with respect to our executive incentive compensation, which will apply in the event we are required to prepare an accounting restatement after the adoption of the policy due to any material noncompliance with any financial reporting requirement under the U.S. federal securities laws. The amendment and restatement of our Amended Plan explicitly requires a participant who accepts an award under the Amended Plan on or after the time this proposal is approved by stockholders to be bound by any clawback policy that we have in effect or may adopt in the future.
- Change in Share-Counting Procedures. The Amended Plan, as amended and restated, eliminates the current requirement that each share of stock subject to an award of restricted stock, restricted stock units, performance awards or other stock unit awards, which we refer to collectively as full value awards, be counted against the share reserve as 1.50 shares for every 1 share subject to such award. This change would apply to all full value awards from and after the time this proposal is approved by stockholders. Shares of common stock subject to awards that were granted under any prior ratio that applied at the time such awards were granted will continue to return to the Amended Plan upon forfeiture of such awards at the previous ratio of $1.50,1.57$ or 1.61 , as applicable.

Attached as Appendix B to this Proxy Statement is a copy of the Amended Plan, marked to show changes proposed to be made. This description of the effect of the proposed amendment and restatement of the Amended Plan is a summary and is qualified by the full text of the Amended Plan, as amended and restated, included in Appendix B.

## Reasons to Adopt the Proposed Amendment and Restatement of the Amended Plan

Shares currently available under the Amended Plan are insufficient to meet our current needs based on our historical grant rate and our anticipated hiring and retention needs. We believe that our future success depends, in large part, upon our ability to maintain a competitive position in attracting, motivating and retaining employees and consultants who are expected to make important contributions to the Company and by providing such employees and consultants with equity ownership opportunities and performance-based incentives that are intended to align their interests with those of our stockholders. If we are not able to provide long-term equity value to our employees and consultants, we will risk losing a capable and proven workforce. Based on our history of grants over the prior several years, the shares currently available under the Amended Plan would be sufficient to meet our needs only though the 2018 Annual Meeting.

Stock-based incentive compensation encourages and rewards performance while aligning our employees', consultants', officers' and directors' interests with those of our stockholders. We continue to believe that alignment of the interests of our stockholders and our employees, consultants, officers and directors is best advanced through the issuance of equity incentives as a portion of their total compensation. Stock-based incentive compensation encourages and rewards performance by increasing the value of their compensation if our stock performance improves. This results in employees, consultants, officers and directors being motivated to increase our share price. In this way, we reinforce the link between our stockholders and our employees', consultants', officers' and directors' focus on personal responsibility, creativity and stockholder returns.

Stock-based incentive compensation supports long-term tenure. We believe that delivering a portion of total compensation in the form of equity compensation helps to encourage a long-term view. portion of total compensation in the form of equity compensation helps to encourage a long-term view.
Imposing vesting requirements also encourages long-term retention, which is beneficial to our growth Imposing vesting requirements also encourages long-term retention, which is beneficial to our
and success. We need the continued ability to use equity compensation to motivate existing high-performing employees, hire additional qualified employees and align the interests of our employees, consultants, officers and directors with those of our stockholders.

## Highlights of the Amended Plan

No "Evergreen" Provision $\quad$| Shares authorized for issuance under the Amended Plan are not |
| :--- |
| automatically replenished. |

No Liberal Share Counting The Amended Plan prohibits the reuse of shares withheld or delivered to satisfy the exercise price of an award or to satisfy tax withholding requirements with respect to any award.

Shares repurchased on the open market using the proceeds from the exercise of an award will not increase the number of shares available for future grant of awards under the Amended Plan.

When a stock appreciation right ("SAR") is exercised, the number of hares available under the Amended Plan will be reduced by the full number of shares for which the SAR is exercised, regardless of the number of shares actually issued upon settlement of the SAR

## No Repricing of Stock <br> Options or Stock <br> Appreciation Rights

The Amended Plan prohibits the direct or indirect repricing of stock options or SARs without stockholder approval, including a prohibition on the exchange of "underwater" stock options or SARs for a cash payment.

All stock options and SARs must have an exercise price or measurement price equal to or greater than the fair market value of the underlying common stock on the grant date.

Stockholder approval is required prior to an amendment of the Amended Plan that would (i) materially increase the number of hares available, (ii) expand the types of available awards or (iii) materially expand the class of participants eligible to participate.

Awards under the Amended Plan are subject to a minimum vesting period of one year, other than awards granted, in the aggregate, for up to $5 \%$ of the maximum number of authorized shares under the Amended Plan.

| Awards Subject to Forfeiture/ <br> Clawback | All awards granted under the Amended Plan and payments made <br> thereunder are subject to the Company's Clawback Policy or any <br> other clawback policy established from time to time by the Company. |
| :--- | :--- |

## Stock Available for Awards

The Amended Plan provides for the grant of incentive stock options intended to qualify under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), non-statutory stock options, SARs, restricted stock, restricted stock units ("RSUs") and other stock unit awards and options, SARs, restricted stock, restricted stock units (collectively referred to as "awards"). The Amended Plan currently provides that $16,476,713$ shares of common stock of the Company (subject to adjustment in the event of stock splits and other similar events) are authorized for the grant of awards.

There were 775,460 shares available for future issuance under the Amended Plan as of March 31, 2017.

Our Board has approved, and recommends that stockholders approve, an increase of 900,000 in the maximum number of shares of our common stock available for awards under the Amended Plan and the other amendments set forth above. Our Board believes that such amendments, if approved, would assist in recruiting, motivating and retaining our employees, officers, directors, consultants and advisors.

As of March 31, 2017:

- Options underlying 5,527,688 shares of our common stock with a weighted average exercise price of $\$ 15.70$ were outstanding under the Amended Plan, with the outstanding options having a weighted average remaining term of 5.09 years;
- $2,750,570$ shares underlying unvested shares of common stock granted under the Amended Plan were outstanding, comprised of:
- 2,376,867 unvested shares of restricted stock;
- 88,284 unvested restricted stock units with time-vesting; and
- 285,419 unvested performance-based stock units with future market conditions; and
- 775,460 shares were available for grant under the Amended Plan.

For information about activity under our equity incentive plans, see Note 15 of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2016.

The 900,000 additional shares that we are requesting to add to the Amended Plan were recommended by our Compensation Committee based upon careful consideration of the equity compensation needs of the Company, including assessing the number of shares likely to be needed for future grants through the 2018 Annual Meeting. As described below, our Compensation Committee also considered the cost of the Amended Plan to our stockholders, as well as the potential dilution to our stockholders that would result from their approval of this proposal.

In developing the number of authorized shares to be added and analyzing the impact of issuing additional equity on our stockholders, we considered our "burn rate" and "overhang." Burn rate provides a measure of the potential dilutive impact on our annual equity award program. Based on shares of our common stock outstanding as of April 12, 2017, our record date, the proposal to authorize 900,000 additional shares would result in additional dilution of approximately $1.74 \%$ to our

- Our historical burn rate is within market practice for a technology company, and is not high compared to our peers. The Company's three-year average annual burn rate as of December 31, 2016 was $5.01 \%$. The burn rates for the years ended December 31, 2016, 2015 and 2014 were $4.08 \%, 5.11 \%$, and $5.84 \%$, respectively. We calculate our burn rate by dividing the total number of shares underlying options and other awards granted in the year by weighted-average common shares outstanding for that year. We granted 0.2 million, 0.3 million, and 2.3 million options to purchase common stock during the years ended December 31, 2016, 2015 and 2014, respectively. We granted an aggregate of 1.9 million 2.2 million and 0.6 million share awards (restricted stock, RSUs and performance-based stock unit awards) during the years ended December 31, 2016, 2015, and 2014, respectively
- Overhang is a measure of potential dilution and is defined as the sum of (1) the tota number of shares underlying all equity awards outstanding, excluding restricted stock awards, and (2) the total number of shares available for future award grants, divided by: the sum of (a) the total number of shares underlying all equity awards outstanding, excluding restricted stock awards, (b) the total number of shares available for future award grants; and (c) the total number of common stock outstanding. Our overhang at April 12, 2017 was $11.41 \%$. If the additional 900,000 shares proposed to be authorized for grant under the Amended Plan were included in the calculation, our overhang would have been 12.75\% at April 12, 2017.
- From 2012 through 2015, our annual burn rate was inflated as a result of elections made by (i) our executive officers in 2013 and 2014 to receive their annual bonuses in the form of common stock in lieu of cash, (ii) our CEO for the years 2012, 2013 and 2014 to receive his annual base salary in the form of common stock in lieu of cash and (iii) certain directors in 2014 and 2015 to receive all or a portion of their annual fees in the form of common stock in lieu of cash. Although we recognized that these elections would have a negative impact on our burn rate, we felt it was important given the pivotal transition that the Company was making and better aligned our management team with the interests of our stockholders. In 2016, there were no stock-for-cash elections made by either our executive officers or any of our directors. The following tables demonstrate the impact of these stock-for-cash elections on our burn rate.


|  | Total <br> Yhar <br> Yhares and <br> Options <br> Granted | Full Burn <br> FRate | Agtal Equity <br> Agregate <br> Stock-for-Cash <br> Awards | Adjusted <br> Awards Less <br> Agockegate <br> Awards <br> Awh | Aurn Rate <br> Btock-foring <br> Ewards |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 2012 | $1,583,193$ | $2.83 \%$ | 77,858 | $1,505,335$ | $2.69 \%$ |
| 2013 | $3,505,287$ | $6.29 \%$ | 144,055 | $3,361,232$ | $6.04 \%$ |
| 2014 | $2,884,783$ | $5.84 \%$ | 272,057 | $2,612,726$ | $5.33 \%$ |
| 2015 | $2,542,896$ | $5.11 \%$ | 282,843 | $2,260,053$ | $4.54 \%$ |
| 2016 | $2,023,782$ | $4.08 \%$ | - | $2,023,782$ | $4.08 \%$ |

Our Board believes that approving the amendment and restatement of the Amended Plan is appropriate and in the best interests of stockholders given (i) our historical rate of issuing equity awards, (ii) our current expectations of the number of shares likely to be needed for future grants, iii) the importance of equity as a proportion of total compensation and (iv) the need to effectively der value creatio

## Summary of the Amended Plan (as proposed to be amended and restated)

The following summary of the Amended Plan is qualified in its entirety by reference to the ful text of the Amended Plan, a copy of which is included as Appendix B hereto. References to our Board in this summary include the Compensation Committee or any similar committee appointed by ou Board to administer the Amended Plan.

## Shares Available for Issuance under the Amended Plan

Awards may be made under the Amended Plan for the number of shares described above under the heading "Stock Available for Awards." Certain sub-limitations apply to the shares available for issuance under the Amended Plan. The maximum number of shares of common stock with respect which awards may be granted to any participant under the Amended Plan is $1,000,000$ shares per calendar year. The maximum number of shares with respect to which awards may be granted to non-employee directors shall not exceed 100,000 shares of common stock in any calendar year. The number of shares issuable under the Amended Plan is subject to adjustment for changes in number of shares issuable under the Amended Plan is subject to adjustment for changes in
capitalization, including stock splits and other similar events. No more than $17,376,713$ shares of common stock may be issued as incentive stock options under the Amended Plan

If an award expires, terminates, is cancelled or otherwise results in shares not being issued, the unused shares covered by such award will generally become available for future grant under the Amended Plan. However, any shares tendered to pay the exercise price of an award or to satisfy a tax withholding obligation will not become available for future grant under the Amended Plan. Furthermore, any shares repurchased by us on the open market using the proceeds from the exercise of an award will not increase the number of shares available for the future grant of awards. In addition, he full number of shares subject to any stock-settled SARs will count against the shares available fo ssuance under the Amended Plan, regardless of the number of shares actually issued to settle such SAR upon exercise

Shares of common stock subject to full value awards count against the shares of common stock vailable for issuance under the Amended Plan as one share for every one share subject to such award however, the shares subject to awards that were outstanding (i) as of our 2017 Annual Meeting (but not as of June 9, 2016, June 11, 2015, or December 2, 2014) and that expire, terminate, are cancelle or otherwise result in shares not being issued and become available for future grant under the Amended Plan would return to the Amended Plan at a ratio of 1.50 for every share subject to such award, (ii) as of June 9, 2016 (but not as of June 11, 2015 or December 2, 2014) and that expire, terminate, are cancelled or otherwise result in shares not being issued and become available for future grant under the Amended Plan would return to the Amended Plan at a ratio of 1.61 for every share subject to such award, (iii) as of June 11, 2015 (but not as of December 2, 2014) and that expire, terminate, are cancelled or otherwise result in shares not being issued and become available for future rant under the Amended Plan would return to the Amended Plan at a ratio of 1.57 for every share subject to such award, and (iv) as of December 2, 2014 and that expire, terminate, are cancelled or therwise result in shares not being issued and become available for future grant under the Amended Plan would return to the Amended Plan at a ratio of 1.50 for every share subject to such award. This mendment and restatement of the Amended Plan removes the fungible share counting with respect to awards granted after shareholder approval of the amended and restated Amended Plan at the 2017 Annual Meeting.

In connection with a merger or consolidation of an entity with us or our acquisition of propert tock of an entity, our Board may grant awards under the Amended Plan in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof on such terms as our Board determines appropriate in the circumstances, notwithstanding any limitation on wards contained in the Amended Plan. No such substitute awards will count against the overall share mits or sub-limitations described above, except as required by Section 422 and related provisions of the Code.

## Administration of the Amended Pla

The Amended Plan is administered by our Board, which has the authority to adopt, amend and repeal the administrative rules, guidelines and practices relating to the Amended Plan and to interpre the provisions of the Amended Plan. Pursuant to the terms of the Amended Plan and to the extent permitted by applicable law, our Board may delegate authority under the Amended Plan to one or nore committees or subcommittees of our Board. Our Board has authorized the Compensatio Committee to administer the Amended Plan.

Subject to any applicable limitations contained in the Amended Plan, our Board, th Compensation Committee, or any other committee to whom our Board delegates authority, as the case may be, selects the recipients of awards and determines the terms of the awards.

Subject to any requirements of applicable law, our Board may delegate to one or more of our ffficers the power to grant awards to our employees or non-executive officers and to exercise such
other powers under the Amended Plan as our Board may determine, provided that our Board shall fix the terms of the awards to be granted by such officers, the maximum number of shares subject to awards that the officers may grant, and the time period in which such awards may be granted. No officer shall be authorized to grant awards to any of our executive officers.

Our Board is required to make equitable adjustments in connection with the Amended Plan and any outstanding awards to reflect stock splits, stock dividends, recapitalizations, combination of shares, reclassification of shares, spin-offs and other similar changes in capitalization, and any other dividend or distribution other than an ordinary cash dividend. The Amended Plan also contains provisions addressing the consequences of any Reorganization Event, which is defined as: (i) any merger or consolidation of Sonus with or into another entity as a result of which all of our common stock is converted into or exchanged for the right to receive cash, securities or other property, or is cancelled; (ii) any exchange of all of our common stock for cash, securities or other property pursuant to a share exchange transaction; or (iii) any liquidation or dissolution of our Company.

In connection with a Reorganization Event, our Board may take any one or more of the following actions as to all or any (or any portion of) outstanding awards, other than awards of restricted stock and RSUs, on such terms as our Board determines

- provide that awards will be assumed, or substantially equivalent awards will be substituted by the acquiring or succeeding corporation (or an affiliate thereof);
- upon written notice, provide that all unexercised awards will terminate immediately prio to the consummation of such Reorganization Event unless exercised within a specified period following the date of such notice;
- provide that outstanding awards will become exercisable, realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part prior to or upon such Reorganization Event
- in the event of a Reorganization Event under the terms of which holders of our common stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the "Acquisition Price"), make or provide for a cash paymen to an award holder equal to the excess, if any, of (A) the Acquisition Price times the number of shares of common stock subject to the holder's awards (to the extent the exercise price does not exceed the Acquisition Price) over (B) the aggregate exercise price of all such outstanding awards and any applicable tax withholdings, in exchange for the termination of such awards
- provide that, in connection with a liquidation or dissolution of our company, awards will convert into the right to receive liquidation proceeds (if applicable, net of the exercise price thereof and any applicable tax withholdings); and
- any combination of the foregoing

In taking any of the actions permitted directly above, the Board is not obligated by the Amended Plan to treat identically all awards, all awards held by a holder of such awards or all awards of the same type.

With respect to awards of restricted stock and RSUs, upon the occurrence of a Reorganization Event other than a liquidation or dissolution of our Company, the repurchase and other rights of the Company under each such award will inure to the benefit of our successor, and will, unless the Board
determines otherwise, apply to the cash, securities or other property into which our common stock is converted or exchanged in the same manner and to the same extent as they applied to the common stock subject to such award. Upon the occurrence of our liquidation or dissolution, except to the extent stock subject to such award. Upon the occurrence of our liquidation or dissolution, except to the
specifically provided to the contrary in the award agreement governing the award or any other agreement between the award holder and the Company, all restrictions and conditions on such awards will automatically be deemed terminated or satisfied.

Our Board may at any time provide that any award will become immediately exercisable in ful or in part, free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be, including, without limitation, (A) upon the death or disability of the holder of such award or (B) in connection with an Acquisition of the Company (as defined in the Amended Plan).

Except as otherwise provided in the Amended Plan with respect to repricing outstanding stock options or SARs, our Board may amend, modify or terminate any outstanding award, including but not limited to, substituting another award of the same or a different type, changing the date of exercise or realization, and converting an incentive stock option to a non-statutory stock option, provided that the participant's consent to any such action will be required unless our Board determines that the action, change is otherwise permitted under the terms of the Amended Plan in connection with a change in capitalization or reorganization event.

## Descriptions of Awards

The Amended Plan provides for the grant of incentive stock options intended to qualify under Section 422 of the Code, non-statutory stock options, SARs, restricted stock, RSUs and other stock unit awards and performance awards as described below.

Incentive Stock Options and Non-statutory Stock Options. Optionees receive the right to purchase a specified number of shares of common stock at a specified option price and subject to such other terms and conditions as are specified in connection with the option grant. Options must be granted at an exercise price that is not less than the fair market value of our common stock at the close of trading on the date of grant. Under present law, incentive stock options and options intended to qualify as performance-based compensation under Section 162(m) of the Code may not be granted at an exercise price less than $100 \%$ of the fair market value of the common stock on the date of grant (or less than $110 \%$ of the fair market value in the case of incentive stock options granted to optionees holding more than $10 \%$ of our voting power). Options may not be granted for a term in excess of 10 years. The Amended Plan permits the following forms of payment for the exercise price of options: payment by cash; check; via "cashless exercise" through a broker; subject to certain conditions and if permitted by our Board, surrender to Sonus of shares of our common stock held by the optionee; any other lawful means as provided for in the applicable option agreement or approved by the Board; and any combination of these forms of payment. Stock options granted under the Amended Plan may not provide for the payment or accrual of dividend equivalents or contain any provision entitling the grantee to the automatic grant of additional stock options in connection with the exercise of the original stock option.

Stock Appreciation Rights. A SAR is an award entitling the holder, upon exercise, to receive an amount in common stock or cash or a combination thereof determined by reference to appreciation, from and after the date of grant, in the fair market value of a share of common stock over the exercise price, which may not be less than the fair market value of the common stock on the date the SAR is granted. SARs may be granted independently or in tandem with an option granted under the Amended Plan. No SAR will be granted with a term in excess of 10 years. SARs granted under the Amended Plan may not provide for the payment or accrual of dividend equivalents or contain any provision
entitling the grantee to the automatic grant of additional SARs in connection with the exercise of the original SAR.

Restricted Stock Awards. Restricted stock awards entitle recipients to acquire shares of common stock, subject to our right to repurchase all or part of such shares at their issue price or other stated or formula price or to require forfeiture if issued at no cost if the conditions specified in the applicable award are not satisfied prior to the end of the applicable restriction period established by the Board for such award. Our Board will determine the terms and conditions of the applicable award, including the conditions for vesting and repurchase and the issue price, if any. Any dividends, whether including the conditions for vesting and repurchase and the issue price, if any. Any dividends, whether be paid to a participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. No interest will be paid on unvested dividends.

Restricted Stock Unit Awards. RSU awards entitle the recipient to receive shares of common stock or cash to be delivered at the time such award vests pursuant to the terms and conditions established by our Board. The award agreement for RSUs may provide the participant with a right to receive dividend equivalents, which may be paid currently or credited to an account for the participant, may be settled in cash and/or shares of common stock and will be subject to the same restrictions on transfer and forfeitability as the underlying RSUs. No interest will be paid on dividend equivalents.

Other Stock Unit Awards. Under the Amended Plan, our Board has the right to grant other awards of shares of common stock and other awards that are valued in whole or in part by reference to, or otherwise based on, shares of common stock or other property, and the grant of awards entitling recipients to receive shares of common stock to be delivered in the future (collectively, "Other Stock Unit Awards"). Other Stock Unit Awards will have such terms and conditions as our Board may determine. An Other Stock Unit Award may provide the participant with a right to receive dividend equivalents, which may be paid currently or credited to an account for the participant, may be settled in cash and/or shares of common stock and will be subject to the same restrictions on transfer and forfeitability as the underlying Other Stock Unit Award. No interest will be paid on dividend equivalents.

Performance Awards. Restricted stock and RSU awards and Other Stock Unit Awards that are intended to qualify as performance-based compensation under Section $162(\mathrm{~m})$ of the Code will be made subject to the achievement of performance goals. We refer to these awards as "performance awards." With respect to performance awards intended to qualify as "performance-based compensation" under Section 162(m) of the Code, such awards shall be made only by a committee comprised of two or more "outside directors within the meaning of Section 162(m) of the Code (the "Committee"). Such Committee shall specify that the degree of granting, vesting and/or payout will be subject to the achievement of one or more objective performance measures established by the Committee as described below.

The performance criteria for each such award will be based on the relative or absolute attainment of specified levels of one or more of the following measures: (a) net income; (b) earnings before or after discontinued operations, interest, taxes, depreciation and/or amortization; (c) operating profit before or after discontinued operations and/or taxes; (d) sales; (e) sales growth; (f) earnings growth; (g) cash flow or cash position; (h) gross margins; (i) stock price; (j) market share; (k) return on sales, assets, equity or investment; (1) improvement of financial ratings; (m) achievement of balance sheet or income statement objectives; or (n) total stockholder return; and may be absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated. Such Committee may specify that such performance measures will be adjusted to exclude any one or more of: (i) extraordinary, nonrecurring or unusual items; (ii) gains or losses on the dispositions
of discontinued operations; (iii) the cumulative effects of changes in accounting principles; (iv) writedown of any asset; and (v) charges for restructuring and rationalization programs.

Such performance measures: (x) may vary by participant and may be different for different awards; (y) may be particular to a participant or the department, branch, line of business, subsidiary or other unit in which the participant works and may cover such period as may be specified by the Committee; and (z) will be set by the Committee within the time period prescribed by, and will otherwise comply with the requirements of, Section $162(\mathrm{~m})$ of the Code. The Committee may adjust downwards, but not upwards, the cash or number of shares payable pursuant to such awards and may not waive the achievement of the applicable performance measures except in the case of the death or disability of the participant or a change in control of Sonus.

Awards that are not intended to qualify as "performance-based compensation" under Section $162(\mathrm{~m})$ of the Code may be based on these performance measures or such other performance measures as our Board may determine.

## Restrictions on Repricings

Unless approved by our stockholders: (i) no outstanding option or SAR granted under the Amended Plan may be amended to provide an exercise price that is lower than its then-current exercise price (other than adjustments for changes in capitalization); (ii) no outstanding option or SAR grant may be cancelled and substituted with a new award under the Amended Plan covering the same or a different number of shares of common stock and having an exercise price lower than the then-current exercise price of the cancelled option or SAR; and (iii) no outstanding option or SAR granted under the Amended Plan may be purchased by the Company for cash.

## Transferability of Awards

Awards, other than vested awards of restricted stock and RSUs, may not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an incentive stock option, pursuant to a qualified domestic relations order. During the life of the holder of an award, awards, other than vested awards of restricted stock and RSUs, are exercisable only by such holder. Our Board may permit the gratuitous transfer of an award by the holder of an award to or for the benefit of any immediate family member, family trust or other entity established for the benefit of such holder or an immediate family member of such holder if, with respect to such transferee, Sonus would be eligible to use a Form S-8 for the registration of the sale of the common stock subject to such award under the Securities Act of 1933, as amended.

## Eligibility to Receive Awards

Our employees, officers, directors, consultants and advisors and those of our subsidiaries are eligible to be granted awards under the Amended Plan. Under present law, however, incentive stock options may only be granted to employees of Sonus and its subsidiaries.

As of March 31, 2017, approximately 1,388 persons were eligible to receive awards under the Amended Plan, including our executive officers and non-employee directors. On April 12, 2017, the last reported sale price of common stock on the Nasdaq Global Select Market was $\$ 6.67$.

## Plan Benefits

The benefits that will be received by participants, including the named executive officers, under the Amended Plan depend on a variety of factors, including the fair market value of the Company's common stock at various future dates and the Board's discretion in granting awards. Therefore, it is not possible to determine the benefits that will be received by named executive officers or other employees if the Amended Plan is approved by our stockholders.

Since the Amended Plan was first adopted through December 31, 2016, we have granted the following number of options and restricted stock awards (including performance-based stock unit awards) of our common stock under the Amended Plan to the individuals and groups listed below. ${ }^{1}$

| Named Executive Officers | Options <br> Granted | Restricted Stock Awards Granted | Shares <br> Forfeited under Performance-Based Awards* |
| :---: | :---: | :---: | :---: |
| Raymond Dolan <br> President and Chief Executive Officer | 905,000 | 1,103,978 | 36,423 |
| Susan Villare <br> Interim Chief Financial Officer, Treasurer and Vice President, Financial Planning and Analysis | 41,008 | 101,358 | - |
| Kevin Riley Senior Vice President, Engineering and Chief Technology Officer | 79,100 | 199,039 | 5,833 |
| Jeffrey Snider Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary | 202,416 | 270,619 | 4,166 |
| Michael Swade Senior Vice President, Worldwide Sales | 30,000 | 195,000 | 8,333 |
| Mark Greenquist Former Chief Financial Officer | 120,000 | 232,746 | 5,416 |
| Anthony Scarfo Former Executive Vice President, Services, Product Management and Corporate Development | 335,000 | 274,637 | 5,000 |
| All current executive officers as a group | 1,257,524 | 1,869,994 | 54,755 |
| All current directors who are not executive officers as a group | 159,941 | 401,495 | - |
| All employees, including all current officers who are not executive officers, as a group | 8,289,084 | 4,449,215 | 10,416 |
| Total | 9,706,549 | 6,720,704 | 65,171 |

* Represents forfeited shares from non-performance against metrics only; does not include shares forfeited due to separation from the Company or for other reasons.

[^1]
## Clawback Policy

All awards granted under the Amended Plan are subject to clawback pursuant to the Company's Clawback Policy and any other clawback policy that the Company may adopt in the future.

## Minimum Vesting Periods

No award issued under the Amended Plan since the 2015 annual meeting may vest earlier than the first anniversary of its date of grant; provided, however, that this minimum vesting requirement does not apply to an aggregate of up to $5 \%$ of the maximum number of shares of our common stock authorized for issuance under the Amended Plan.

## Provisions for Foreign Participants

Our Board may modify awards granted to participants who are foreign nationals or employed outside the United States or establish subplans or procedures under the Amended Plan to recognize differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

## Effective Date and Term of Amended Plan; Amendment or Termination

The Amended Plan will be amended and restated effective upon stockholder approval at our 2017 annual meeting. No new award may be granted under the Amended Plan after June 9, 2026, but awards previously granted may extend beyond that date. Our Board may at any time amend, suspend or terminate the Amended Plan; provided that, to the extent determined by our Board, no amendment requiring stockholder approval under any applicable legal, regulatory or listing requirement will become effective until such stockholder approval is obtained.

## Federal Income Tax Consequences

The following summarizes the United States federal income tax consequences that generally will arise with respect to awards granted under the Amended Plan. This summary is based on the federal tax laws in effect as of the date of this Proxy Statement. In addition, this summary assumes that all awards are exempt from, or comply with, the rules under Section 409A of the Code regarding nonqualified deferred compensation. Changes to these laws or assumptions could alter the tax consequences described below.

Incentive Stock Options. A participant will not have income upon the grant of an incentive stock option. Also, except as described below, a participant will not have income upon exercise of an incentive stock option if the participant has been employed by us or our corporate parent or a $50 \%$ or more-owned corporate subsidiary at all times beginning with the option grant date and ending three months before the date the participant exercises the option. If the participant has not been so employed during that time, then the participant will be taxed as described below under the section entitled "Non-statutory Stock Options." The exercise of an incentive stock option may subject the participant to the alternative minimum tax.

A participant will have income upon the sale of the stock acquired under an incentive stock option at a profit (if sales proceeds exceed the exercise price). The type of income will depend on when the participant sells the stock. If a participant sells the stock more than two years after the option was granted and more than one year after the option was exercised, then all of the profit will be long-term capital gain. If a participant sells the stock prior to satisfying these waiting periods, then the
participant will have engaged in a disqualifying disposition and a portion of the profit will be ordinary income and a portion may be capital gain. This capital gain will be long-term if the participant has held income and a portion may be capital gain. This capital gain will be long-term if the participant has held
the stock for more than one year and otherwise will be short-term. If a participant sells the stock at a the stock for more than one year and otherwise will be short-term. If a participant sells the stock at
loss (sales proceeds are less than the exercise price), then the loss will be a capital loss. This capital loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Non-statutory Stock Options. A participant will not have income upon the grant of a non-statutory stock option. A participant will have ordinary income upon the exercise of a non-statutory stock option equal to the value of the stock on the day the participant exercised the option less the exercise price. Upon sale of the stock, the participant will have capital gain or loss equal option less the exercise price. Upon sale of the stock, the participant will have capital gain or loss
to the difference between the sales proceeds and the value of the stock on the day the option was exercised. This capital gain or loss will be long-term if the participant has held the stock for more than one year and otherwise will be short-term.

Stock Appreciation Rights. A participant will not have income upon the grant of a SAR. A participant will recognize ordinary income upon the exercise of a SAR equal to the amount of the cash and the fair market value of any stock received. Upon the sale of the stock, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the day the SAR was exercised. This capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Restricted Stock Awards. A participant will not have income upon the grant of restricted stock unless the participant voluntarily makes an election under Section 83(b) of the Code within 30 days of the date of grant. If a timely Section 83 (b) election is made, then a participant will have ordinary income equal to the value of the stock on the date of grant less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the date of grant, if a timely Section $83(\mathrm{~b})$ election has been made

If the participant does not make a Section 83(b) election, then when the stock vests (i.e., the transfer restrictions and forfeiture provisions lapse) the participant will have ordinary income equal to the value of the stock on the vesting date less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the sales proceeds less the value of the stock on the vesting date, if no Section 83(b) election has been made. Any capital gain or loss will be long-term if the participant held the stock for more than one year following (i) the day after the grant date if a timely Section 83(b) election has been made or (ii) the day after the vesting date if no Section 83(b) election has been made, and otherwise will be short-term.

Restricted Stock Units. A participant will not have income upon the grant of an RSU. A participant is not permitted to make a Section 83(b) election with respect to an RSU award. When the RSU vests, the participant will have income on the vesting date in an amount equal to the amount of cash received or the fair market value of the stock on the vesting date less the purchase price, if any. When the stock is sold, the participant will have capital gain or loss equal to the sales proceeds less the value of the stock on the vesting date. Any capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Other Stock Unit Awards. The tax consequences associated with any other stock unit award granted under the Amended Plan will vary depending on the specific terms of such award. Among the relevant factors are whether or not the award has a readily ascertainable fair market value, whether or not the award is subject to forfeiture provisions or restrictions on transfer, the nature of the property to
be received by the participant under the award and the participant's holding period and tax basis for the award or underlying common stock.

Tax Consequences to the Company. There will be no tax consequences to us except that we will be entitled to a deduction when a participant has ordinary income. Any such deduction may be subject to the limitations of Sections $162(\mathrm{~m})$ of the Code.

## Board of Directors' Recommendation

The Board of Directors recommends that stockholders vote "FOR" an amendment and restatement of Sonus Networks' stock incentive plan.

## PROPOSAL 3 - RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has appointed Deloitte \& Touche LLP ("Deloitte") as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2017. Deloitte has acted in this capacity since August 2005. We are asking our stockholders to ratify this appointment. If this proposal is not approved at the 2017 Annual Meeting,
our Audit Committee will reconsider this appointment. Even if the proposal is approved at the 2017 Annual Meeting, the Audit Committee may, in its discretion, direct the appointment of a different Annual Meeting, the Audit Committee may, in its discretion, direct the appointment of a different independent registered public accounting firm at any time during the year if
change would be in the best interests of the Company and its stockholders.

Representatives of Deloitte are expected to be present at the 2017 Annual Meeting and will have the opportunity to make a statement and be available to respond to appropriate questions by have the opps.
stockholders.

## Deloitte Fees

The following is a summary and description of fees for services provided by Deloitte in 2016 and 2015:

| Fee Category | 2016 | 2015 |
| :---: | :---: | :---: |
| Audit Fees | \$1,413,585 | \$1,302,175 |
| Audit-Related Fees | - | 632,000 |
| Tax Fees. | 226,171 | 170,659 |
| All Other Fees | 13,475 | 12,500 |
| Total. | \$1,653,231 | \$2,117,334 |

Audit Fees. These amounts represent fees for the audit of our consolidated financial statements included in our Annual Report on Form 10-K, the review of financial statements included in our Quarterly Reports on Form 10-Q, the audit of internal control over financial reporting and the services that an independent auditor would customarily provide in connection with subsidiary audits, statutory requirements, regulatory filing and similar engagements for the fiscal year, such as consents and assistance with review of documents filed with the SEC. Audit fees also include advice on accounting matters that may arise in connection with or as a result of the audit or the review of periodic consolidated financial statements and statutory audits that non-U.S. jurisdictions require.

Audit-Related Fees. Audit-related fees consist of fees related to due diligence services and accounting consultations regarding the application of generally accepted accounting principles to proposed transactions.

Tax Fees. Tax fees consist of professional services for tax compliance, tax advice and tax planning. These services include assistance regarding federal, state and international tax compliance, value-added tax compliance, and transfer pricing advice and planning. Of this amount for fiscal 2016, $\$ 119,951$ represents fees for tax compliance and preparation.

All Other Fees. All other fees consist of professional products and services other than the servic
tool.

## Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services

The Audit Committee has adopted a policy to pre-approve audit and permissible non-audit services provided by our independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services. Prior to engagement of the independent registered public accounting firm for the next year's audit, the independent registered public accounting firm and our management submit a list of services expected to be rendered during that year for each of the four categories of services to the Audit Committee for approval. Pre-approval is generally provided for up to one year and any pre-approval is detailed as to the particular service or category of services. The independent registered public accounting firm and our management periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval process. The Audit Committee may also pre-approve particular services on a case-by-case basis. The Audit Committee pre-approved all of the services and fees of Deloitte set forth above.

Our Audit Committee requires the regular rotation of the lead audit partner and concurring partner as required by Section 203 of the Sarbanes-Oxley Act of 2002 and is responsible for
recommending to our Board policies for hiring employees or former employees of the independent registered public accounting firm. The Audit Committee has determined that the provision of services described above to us by Deloitte is compatible with maintaining their independence.

## Board of Directors' Recommendation

The Board of Directors recommends that stockholders vote "FOR" the ratification of The Board of Directors recommends that stockholders vote "FOR" the ratification of
Deloitte \& Touche LLP as our independent registered public accounting firm for 2017.

## PROPOSAL 4 - A NON-BINDING ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

The Board is dedicated to excellence in governance and is mindful of the interests our stockholders have in our executive compensation program. As part of that commitment and pursuant to SEC rules, our stockholders are being asked to approve a non-binding advisory resolution on the compensation of our named executive officers. This proposal, which is typically called the "Say-on-Pay" proposal, offers stockholders the opportunity to endorse or not approve our 2016 executive compensation program and policies for our named executive officers through the following resolution:
"RESOLVED, that the stockholders of Sonus Networks, Inc. (the "Company") approve, on an advisory basis, the compensation paid to the Company's named executive officers as disclosed pursuant to the compensation disclosure rules of the U.S. Securities and Exchange pursuant to the compensation disclosure rules of the U.S. Securities and Exchange
Commission, including the "Compensation Discussion and Analysis" section and the accompanying compensation tables and the related narratives in the Proxy Statement for the Company's 2017 annual meeting of stockholders."

This vote is not intended to address any specific element of compensation, but rather the overall compensation policies and practices relating to the named executive officers. Even though the Compensation Committee and the Board will, as they have done in prior years, take into account the outcome of this vote when making future compensation arrangements. Neither the outcome of this advisory vote nor the advisory vote included in Proposal 5 overrules any decision by the Company or advisory vote nor the advisory vote included in Proposal 5 overrules any decision by the Company or
the Board (or any committee thereof), creates or implies any change to the fiduciary duties of the Company or the Board (or any committee thereof), or creates or implies any additional fiduciary duties for the Company or the Board (or any committees thereof).

We believe that for the reasons summarized in the "Compensation Discussion and Analysis" section of this Proxy Statement, we have a compensation program deserving of stockholder support.

## Board of Directors' Recommendation

The Board of Directors recommends that stockholders vote "FOR" the advisory vote to approve our named executive officer compensation.

## PROPOSAL 5 - A NON-BINDING ADVISORY VOTE ON THE FREQUENCY OF FUTURE <br> ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

In accordance with Section 14A of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and SEC rules, our stockholders may vote, on a non-binding advisory basis, on the frequency of future advisory votes on the compensation of our named executive officers should be held. Stockholders may choose to approve holding an advisory vote on the compensation of our named Stockholders may choose to approve holding an advisory vote on the compensation of our named
executive officers annually, every two years or every three years. We believe an annual advisory vote a executive officers annually, every two years or every three years. We betieve an annual advisory vote o
the compensation of our named executive officers will allow us to obtain information on stockholders' views of the compensation of our named executive officers on a more consistent basis. Additionally, we believe that a one-year frequency period provides the highest level of accountability and constructive communication by enabling our stockholder vote to correspond to the majority of information presented in our annual proxy statement. Moreover, an annual advisory vote on the compensation of our named executive officers aligns more closely with our objective to engage in regular dialogue with our stockholders on corporate governance matters, including our executive compensation philosophy, policies and programs. Currently, the Company's stockholders may vote, on a non-binding, advisory basis, on the compensation of our named executive officers on an annual basis.

The Board will take the outcome of this vote into consideration in determining the frequency of future advisory votes on the compensation of our named executive officers. However, because this vote is advisory and non-binding, the Board may decide that it is in the best interests of our stockholders and the Company to hold future advisory votes more or less frequently.

## Board of Directors' Recommendation

The Board of Directors recommends that stockholders vote "FOR" holding future advisory votes on named executive officer compensation every year.

## CORPORATE GOVERNANCE AND BOARD MATTERS

We are committed to strong corporate governance practices, which include building long-term value for our stockholders and assuring the success of the Company for its stockholders and stakeholders, including employees, customers, suppliers and the communities in which we operate. To achieve these goals, our Board is charged with monitoring the performance of the Company and its officers as well as its programs and procedures to ensure compliance with law and our overall success. Governance is an ongoing focus at Sonus, starting with the Board and extending to management and employees. Consequently, our Board reviews the Company's policies and business strategies and dvises and counsels the Chief Executive Officer and our executive team. In addition, we solicit feedback from stockholders on governance and executive compensation practices in order to improve our practices.

We believe our governance practices are strong for the following reasons:
$\checkmark$ Annual Election of Directors: Yes (no staggered board)
$\checkmark$ Separate Chairman and CEO: Yes
$\checkmark$ Substantial Majority of Independent Directors: Yes (all directors independent, other than CEO)
$\checkmark$ Independent Directors Meet without Management: Yes
$\checkmark$ Board Diversity (as to gender, experience and skills): Yes

- Annual Equity Grant to Non-Employee Directors: Yes
$\checkmark$ Annual Board and Committee Self-Evaluations: Yes
$\checkmark$ Annual Advisory Approval of Executive Compensation: Yes
$\checkmark$ Disclosure Committee for Financial Reporting: Yes
$\checkmark$ Review and Approval Policy for Related Party Transactions: Yes
$\checkmark$ Code of Conduct for Non-Employee Directors: Yes
- Share Ownership Guidelines for our CEO, our Other Section 16 Reporting Officers and our Non-Employee Directors: Yes


## Oversight of Risk Managemen

At Sonus, we believe that innovation and leadership are impossible without taking risks. We also recognize that imprudent acceptance of risk or the failure to appropriately identify and mitigate risks could be destructive to stockholder value. The Board is responsible for assessing the Company's approach to risk management and overseeing management's execution of its responsibilities for identifying and managing risk. The Board exercises its responsibilities through discussions in Board meetings and also through its committees, each of which examines various components of enterprise risk as part of its responsibilities. Generally, strategic risks and the risks related to management delegation are overseen and evaluated by the full Board; financial and internal control risks are
overseen and evaluated by the Audit Committee; risks relating to our compensation policies are overseen and evaluated by the Compensation Committee; and risks related to governance are overseen and evaluated by the Nominating and Corporate Governance Committee. Each committee assesses identified risks and informs the Board about the risks as needed. Management also regularly reports on each such risk to the relevant committee or the Board. Moreover, an overall review of risk is inherent in the Board's consideration of our long-term strategies and in the transactions and other matters in the Board's consideration of our long-term strategies and in the transactions and other matters matters. Additional review or reporting on risks is conducted as needed or as requested by the Board or one of its committees.

## Director Independence

The current Board consists of eight directors, one of whom is employed by the Company (Mr. Dolan). During its annual review of director independence, the Board considers all information it deems relevant, including without limitation, any transactions and relationships between each director or any member of his or her immediate family and the Company and its subsidiaries and affiliates. The Board conducted an annual review of director independence and affirmatively determined that none of our non-employee directors have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director, and that, as a result, each non-employee director (Matthew W. Bross, Beatriz V. Infante, Howard E. Janzen, Richard J. Lynch, Pamela D.A. Reeve, John A. Schofield, and Scott E. Schubert) is an "independent director" as defined under Rule 5605(a)(2) of the NASDAQ Stock Market Rules. Our Board reached a similar determination with respect to each of Messrs. Brewington, Cunningham and Thompson, each of whom served as a director until the date of the 2016 Annual Meeting.

There are no family relationships among any of our directors, nominees for director and executive officers.

For a discussion of related person transactions considered by the Board in its determination of director independence, please see the section entitled "Transactions with Related Persons" below.

## Meeting Attendance

Our Board recognizes the importance of director attendance at Board and committee meetings. Our Board held five meetings during 2016, four of which were regular meetings and one of which was a special meeting. Each of the directors attended $100 \%$ of the total number of meetings of the Board and, together, the directors attended $99.62 \%$ of the combined total meetings of the Board and its committees on which they served in. No director attended less than $95 \%$ of the combined total meetings of the full Board and the committees on which he or she served in 2016. While we do not have a policy regarding the attendance of directors at our annual meetings of stockholders, $100 \%$ of the directors who served on our Board at the time attended the 2016 Annual Meeting.

## Board Committees

Our Board has three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee. Each of the standing committees is composed entirely of independent directors as defined under applicable rules, including the NASDAQ Stock Market Rules and, in the case of all members of the Audit Committee, the independence requirements of Rule 10A-3 under the Exchange Act and, in the case of all members of the Compensation Committee, the independence requirements under Rule 10C-1 under the Exchange Act.

Audit Committee. Our Board has established an Audit Committee consisting of three members: Messrs. Schubert (Chairman), Janzen and Schofield. Our Board has determined that
Mr. Schubert is an "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K. This designation is a disclosure requirement of the SEC related to Mr. Schubert's experience and understanding with respect to certain accounting and auditing matters, but it does not impose upon Mr . Schubert any duties, obligations or liability that are greater than are generally imposed on him as a member of the Audit Committee and the Board, and his designation as an audit committee financial expert pursuant to this SEC requirement does not affect the duties, obligations or liability of any other member of the Audit Committee or the Board. The Audit Committee held eight meetings during 2016

As described more fully in its charter, the Audit Committee's responsibilities include, among other things: (i) appointing, evaluating, compensating, overseeing the work of and, if appropriate terminating the appointment of the independent auditor; (ii) overseeing the Company's financial
reporting, including reviewing and discussing with management, the independent auditor and a member of the internal audit function, prior to public release, the Company's annual and quarterly financial statements to be filed with the SEC; (iii) overseeing management's design and maintenance of the Company's internal control over financial reporting and disclosure controls and procedures; and (iv) reviewing and discussing with management and the independent auditor the Company's financial risk exposures and assessing the policies and procedures management has implemented to monitor and control such exposures. The Audit Committee operates pursuant to a written charter adopted by the Board that reflects standards and requirements adopted by the SEC and the NASDAQ Stock Market, a current copy of which is available at www.sonusnet.com, in the section entitled Company-Investor Relations-Corporate Governance.

Compensation Committee. The Compensation Committee consists of three members: Mr. Schofield (Chairman), Ms. Infante, and Ms. Reeve. The Compensation Committee held four meetings during 2016.

As described more fully in its charter, the Compensation Committee's responsibilities include, among other things: (i) reviewing and approving the Company's compensation plans, practices and policies for directors and executive officers, including a review of any risks arising from compensation practices and policies for employees that are reasonably likely to have a material adverse effect on the Company; (ii) reviewing the Company's succession plans for executive officers, where requested to do so by the Board; (iii) making recommendations to the Board regarding the establishment and terms of any incentive compensation or equity-based plans and monitoring their administration; and (iv) before selecting or receiving advice from a compensation advisor (other than in-house legal counsel), considering various factors relating to the independence of such advisor. The Compensation Committe operates pursuant to a written charter adopted by the Board that reflects standards and requirements adopted by the NASDAQ Stock Market, a current copy of which is available at www.sonusnet.com, in the section entitled Company-Investor Relations-Corporate Governance.

Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee consists of three members: Messrs. Janzen (Chairman) and Bross, and Ms. Reeve. The Nominating and Corporate Governance Committee held four meetings during 2016

As described more fully in its charter, the Nominating and Corporate Governance Committee's responsibilities include, among other things: (i) identifying, screening and reviewing individuals qualifie to serve as directors, consistent with criteria approved by the Board, and recommending to the Board candidates for: (a) nomination for election by the stockholders and (b) any Board vacancies that are to be filled by the Board, subject to any rights regarding the selection of directors by holders of preferred shares and any other contractual or other commitments of the Company; (ii) developing and
recommending to the Board, overseeing the implementation and effectiveness of, and recommending modifications as appropriate to, a set of corporate governance guidelines applicable to the Company; (iii) reviewing annually with the Board the composition of the Board as a whole and a succession plan iii) reviewing annually with the Board the composition of the Board as a whole and a succession p
in the event on more directors ceases to serve for any reason; and (iv) identifying appropriate in the event one or more directors ceases to serve for any reason; and (iv) identifying appropriate
director development and continuing education opportunities and making recommendations to the director development and continuing education opportunities and making recommendations to the
Board as appropriate. The Nominating and Corporate Governance Committee operates under a written charter adopted by the Board that reflects standards and requirements adopted by the NASDAQ Stock Market, a current copy of which is available at www.sonusnet.com, in the section entitled CompanyInvestor Relations-Corporate Governance.

## Compensation Committee Interlocks and Insider Participation

During 2016, the members of the Compensation Committee were Mr. Schofield (Chairman), Ms. Infante, and Ms. Reeve. Mr. Thompson served as a member of our Board as well as its Compensation Committee from January 1, 2016 until he stepped down from the Board right before the 2016 Annual Meeting as a result of his decision not to stand for re-election. No interlocking relationship exists between any member of our Board or our Compensation Committee and any member of our Board or Compensation Committee of any other company, and none of these interlocking relationships have existed in the past.

## Director Nomination Process

The Nominating and Corporate Governance Committee screens and recommends candidates for nomination by the full Board. There are no specific minimum qualifications for a recommended nominee to our Board; however, the Nominating and Corporate Governance Committee considers, among other skills and criteria, the following for nomination as a director: demonstrated business knowledge and experience and an ability to exercise sound judgment in matters that relate to our current and long-term objectives; commitment to understanding us and our industry and to regularly attend and participate in meetings of our Board and its committees; a reputation for integrity, honesty and adherence to high ethical standards; the ability and experience to understand the sometimes conflicting interests of our various constituencies and to act in the interests of all stockholders; and the absence of any conflict of interest that would impair the nominee's ability to represent the interest of all our stockholders and to fulfill the responsibilities of being a director.

In considering whether to recommend any particular candidate for inclusion in our Board's slate of recommended director nominees, the Nominating and Corporate Governance Committee applies the criteria generally set forth in the Nominating and Corporate Governance Committee Charter. The process followed by the Nominating and Corporate Governance Committee to identify and evaluate director candidates includes requests to our Board members and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the Nominating and Corporate Governance Committee and our Board. Our Board believes that the backgrounds and qualifications of its directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our Board to fulfill its responsibilities. In identifying potential director candidates, the Nominating and Corporate Governance Committee and the Board also focus on ensuring that the Board reflects a diversity of experiences, gender, ethnicity, backgrounds and skills. The Nominating and Corporate Governance Committee has the authority to engage independent advisors to assist in the process of identifying and evaluating director candidates, but has not engaged any such advisors to date.

Our Board believes that the backgrounds and qualifications of its directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our Board group, should provide a composite mix of experience, knowledge and abilities that will allow our Board
to fulfill its responsibilities. In identifying potential director candidates, the Nominating and Corporate Governance Committee and the Board also focus on ensuring that the Board reflects a diversity of Governance Committee and the Board also focus on ensuring that the Board reflects a diversity of
experiences, gender, ethnicity, backgrounds and skills. The Nominating and Corporate Governance experiences, gender, ethnicity, backgrounds and skills. The Nominating and Corporate Governance
Committee has the authority to engage independent advisors to assist in the process of identifying and evaluating director candidates, but has not engaged any such advisors to date.

## Stockholder Nominations and Recommendations of Director Candidates

Stockholders who wish to recommend candidates to the Nominating and Corporate Governance Committee for consideration as potential director candidates should send their recommendation to the Nominating and Corporate Governance Committee, c/o Corporate Secretary, Sonus Networks, Inc., 4 Technology Park Drive, Westford, MA 01886. The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders in the same manner as candidates recommended by the Nominating and Corporate Governance Committee, as described above in "Director Nomination Process."

Stockholders who wish to nominate director candidates for inclusion in our Proxy Statement or directly at an annual meeting in accordance with the procedures set forth in our by-laws should follow the procedures set forth under the section entitled "Stockholder Proposals For Presentation At 2018 Annual Meeting."

## Board Leadership Structure

The Company's by-laws delegate to the Board the right to exercise its discretion to either separate or combine the offices of Chairman of the Board and CEO. The Board evaluates its leadership structure and role in risk oversight on an ongoing basis, and makes decisions on the basis of what it considers to be best for the Company at any given point in time. Currently, our Board leadership structure consists of an independent Chairman, a separate CEO and strong committee chairs. The Board believes its leadership structure provides for appropriate independence between the Board and management because the current leadership structure offers the following benefits:
(i) increasing the independent oversight of Sonus and enhancing our Board's objective evaluation of our CEO; (ii) liberating the CEO to focus on company operations instead of Board administration; (iii) providing the CEO with an experienced sounding board; (iv) providing greater opportunities for communication between stockholders and our Board; (v) enhancing the independent and objective assessment of risk by our Board; and (vi) providing an independent spokesperson for our Company.

## Executive Sessions of the Board

The Company's Board is structured to promote independence and is designed so that independent directors exercise oversight of the Company's management and key issues related to strategy and risk. With the exception of our CEO, all of our Board members are independent directors Under our Corporate Governance Guidelines, our independent directors are required to meet regularly in executive session without management to review the performance of management and our Company and any related matters. Generally, executive sessions are held in conjunction with regularly scheduled meetings of the Board. We expect the Board to have a least four executive sessions each year.

## Stock Ownership Guidelines

The Board believes that it is important to link the interests of our directors and management to those of our stockholders. Accordingly, our non-employee directors, our Chief Executive Officer and our other Section 16 reporting officers are subject to a stock ownership policy. For additional information regarding our stock ownership policy, please see the section entitled "Compensation Discussion and Analysis-Stock Ownership Requirements" below.

## Additional Governance Matters

Code of Ethics. Our Board has adopted a written Code of Conduct, which qualifies as a "code of ethics" as defined by the regulations promulgated under the Securities Act of 1933, as amended, and the Exchange Act. The Code of Conduct is intended to provide guidance on the conduct expected of Sonus' employees, officers and directors in the interests of preserving Sonus' reputation for integrity, accountability and fair dealing. To ensure that our business is conducted in a consistently legal and ethical manner, all of our directors, officers and employees must act in accordance with our Code of Conduct.

We intend to disclose any amendment to or waiver of a provision of the Code of Conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, by posting such information on our website (available at www.sonusnet.com) and/or our public filings with the SEC.

Public Availability of Corporate Governance Documents. For more corporate governance information, you are invited to access our key corporate governance documents, including our Corporate Governance Guidelines, Code of Conduct and the charters of our Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee on our corporate website at www.sonus.net, in the section entitled Company-Investor Relations-Corporate Governance o in print, free of charge, if you request them from our corporate secretary at Sonus Networks, Inc., 4 Technology Park Drive, Westford, Massachusetts 01886, Attention: Corporate Secretary. The references in this Proxy Statement to our corporate website are not intended to, and do not, incorporate by reference into this Proxy Statement any materials contained on such website.

Stockholder Communications with the Board of Directors. Stockholders may communicate with our Board by writing, calling or e-mailing our Investor Relations Department at Sonus Networks, Inc., 4 Technology Park Drive, Westford, MA 01886, Attention: Investor Relations, (978) 614-8440, ir@sonusnet.com. Our Investor Relations Department will review all such communications and will forward to the Chairman of the Audit Committee all communications that raise an issue appropriate for consideration by our Board.

## AUDIT COMMITTEE REPORT

The information contained in this report shall not be deemed to be "soliciting material" or "filed" or incorporated by reference in future filings with the U.S. Securities and Exchange Commission, or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that we specifically request that it be treated as soliciting material or specifically incorporate it by reference into a document filed under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

We reviewed Sonus' audited financial statements for the fiscal year ended December 31, 2016 and discussed these financial statements with Sonus' management, including a discussion of the quality
ot just the acceptability, of the accounting principles, the reasonableness of significant judgments and the clarity of disclosures in the financial statements. Sonus' management is responsible for Sonus' financial reporting process, including its system of internal controls, and for the preparation of consolidated financial statements in accordance with generally accepted accounting principles. Sonus' independent registered public accounting firm, Deloitte \& Touche LLP ("Deloitte"), is responsible for performing an independent audit of Sonus' financial statements in accordance with standards of the Public Company Accounting Oversight Board (United States) ("PCAOB") and issuing a report on those financial statements and issuing a report on the effectiveness of Sonus' internal control over financial reporting as of the end of the fiscal year. Our responsibility is to monitor and review these processes. We also reviewed and discussed with Deloitte the audited financial statements and the matters required by SEC Regulation S-X Rule 2-07 and AS No. 1301. Communications with Audit Committees.

Deloitte provided us with, and we reviewed, the written disclosures and the letter required by PCAOB Ethics and Independence Rule 3526, Communications with Audit Committees Concerning Independence. This rule requires independent registered public accounting firms annually to disclose in writing all relationships that in the independent registered public accounting firm's professional opinion may reasonably be thought to bear on independence, to confirm their independence and to engage in a discussion of independence. In addition to engaging in this discussion with Deloitte regarding its independence, we also considered whether Deloitte's provision of other, non-audit related services to Sonus is compatible with maintaining Deloitte's independence.

Based on our discussions with management and Deloitte, and our review of information provided by management and Deloitte, we recommended to the Sonus Board of Directors that the audited financial statements be included in Sonus' Annual Report on Form 10-K for the year ended December 31, 2016.

Submitted by,
AUDIT COMMITTEE:
Scott E. Schubert (Chairman)
Howard E. Janzen
John A. Schofield

## DIRECTOR COMPENSATION

The Compensation Committee reviews the compensation of our non-employee directors periodically and recommends changes to the Board when it deems appropriate. The following table describes the components of the non-employee directors' compensation for 2016:

| Compensation Element | Director Compensation Program |
| :---: | :---: |
| Annual Retainer | \$40,000 |
| Annual Equity Retainer* | $\$ 150,000$ in shares of restricted stock that vest after one year (or, if earlier, on the date of the next annual meeting if the non-employee director does not stand for re-election or is not re-elected by stockholders of the Company) |
| Committee Fees** | $\$ 10,000$ for the Audit Committee <br> $\$ 7,500$ for the Compensation Committee <br> $\$ 5,000$ for the Nominating and Corporate Governance Committee <br> $\$ 5,000$ for the Technology, Strategy and Oversight Committee ${ }^{+}$ |
| Chair Fee | $\$ 20,000$ for the Non-Executive Chairman of the Board** <br> $\$ 20,000$ for the Audit Committee ${ }^{* * *}$ <br> $\$ 15,000$ for the Compensation Committee*** <br> $\$ 10,000$ for the Nominating and Corporate Governance <br> Committee*** <br> $\$ 10,000$ for the Technology, Strategy and Oversight Committee ${ }^{+}$ |
| New Director Equity Award (one-time grant) | \$200,000 in shares of restricted stock that vest after one year |
| Stock Ownership Guidelines | Ownership of common stock that has a value equivalent to five times the annual cash retainer; to be satisfied on or before September 16, 2019 for current directors or within five years of joining the Board for future directors |

* To qualify as a recipient of an annual equity retainer, a non-employee director must have been continuously serving on the Board since the Company's last annual meeting of stockholders

Compensation for service as the chairman of the Board or a committee member is in addition to the compensation paid for Board service.
*** Compensation for service as a committee chair includes all compensation for service on such committee.
The Board authorized the dissolution of the Technology, Strategy and Oversight Committee, which consisted of Messrs. Brewington, Bross and Lynch, effective June 9, 2016. Mr. Brewington received $\$ 5,000$ for his services as chair of such committee for the first half of 2016, while each of Messrs. Bross and Lynch received $\$ 2,500$ for his services as a member of such committee for the first half of 2016.

## Total Director Compensation for 2016

The following table contains information on compensation earned by each non-employee member of our Board during 2016:

## 2016 Director Compensation

## Director

Matthew W. Bross
Beatriz V. Infante
Howard E. Janzen
Richard J. Lynch
Pamela D.A. Reeve
John A. Schofield
Scott E. Schubert .
James K. Brewington(1)
ohn P. Cunningham(1)
H. Brian Thompson(1)

| Fees Earned or <br> Paid in Cash <br> (\$) | Stock Awards | $\begin{aligned} & \text { Total } \\ & \text { (\$)(3) } \end{aligned}$ |
| :---: | :---: | :---: |
| \$45,000 | \$150,005 | \$195,005 |
| \$47,500 | \$150,005 | \$197,505 |
| \$70,000 | \$150,005 | \$220,005 |
| \$52,500 | \$150,005 | \$202,50 |
| \$52,500 | \$150,005 | \$202,50 |
| \$65,000 | \$150,005 | \$215,005 |
| \$60,000 | \$150,005 | \$210,005 |
| \$27,500 | - | \$27,500 |
| \$25,000 | - | \$25,00 |
| \$28,750 | - | \$28,75 |

(1) Messrs. Brewington, Cunningham and Thompson did not stand for re-election at the 2016 Annual Meeting and consequently, their terms expired on June 9, 2016, the date of the 2016 Annual Meeting. As a result, the compensation paid to these non-employee directors for 2016 only reflects their service as Board members from January 1, 2016 to June 9, 2016.
(2) The amounts in this column do not reflect compensation actually received by the director Instead the amounts reflect the grant date fair value of 2016 awards of restricted stock, as calculated in accordance with Accounting Standards Codification 718, Compensation-StockBased Compensation ("ASC 718"). The grant date fair values of restricted stock awards granted to our directors are equal to the closing price of our common stock on the date of grant. The number of shares granted to each director is rounded up to account for any partial shar amounts.
(3) Non-employee directors also are eligible to be reimbursed for reasonable out-of-pocke expenses incurred in connection with attendance at our Board or committee meetings.

At December 31, 2016, our non-employee directors held options to purchase the following aggregate numbers of shares: Mr. Brewington, 30,688 ; Mr. Bross, 13,496; Mr. Cunningham, 28,688; Ms. Infante, 30,826 ; Mr. Janzen, 28,826; Mr. Lynch, 13,496; Ms. Reeve, 11,645; Mr. Schofield, 28,326; Mr. Schubert, 30,826 ; and Mr. Thompson 29,688. With the exception of 7,500 options held by Mr . Schofield, none of the options held by our non-employee directors have exercise prices below $\$ 6.30$ (the closing price of our common stock on December 30, 2016)

At December 31, 2016, each of our non-employee directors held 17,046 unvested shares of our common stock

> Director Stock Ownership Guidelines. Each director is expected, within five years of joining the Board, to own common stock with an aggregate value equivalent to five times his or her annual cash retainer.

## EXECUTIVE OFFICERS OF THE REGISTRANT

The executive officers of the Company as of the date hereof are listed below:

Name
Raymond Dolan.
Susan Villare .
Jeffrey Snider
Kevin Riley .
59 President and Chief Executive Officer
48 Interim Chief Financial Officer, Treasurer and Vice President of Financial Planning and Analysis
53 Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary
46 Senior Vice President, Engineering and Operations and Chief Technology Officer
54 Senior Vice President, Worldwide Sales
Michael Swade.
Biographical information regarding each executive officer other than Raymond P. Dolan is set forth below. Mr. Dolan's biographical information is set forth above under the section entitled "Proposal 1-Election of Directors."

Susan Villare has served as the Company's interim Chief Financial Officer and Treasurer since June 2016 and its Vice President of Financial Planning and Analysis since February 2012. Previously, from June 2008 to February 2012, she served as the Vice President of Financial Planning and Analysis of BigBand Networks, Inc., a company that developed and sold network-based solutions that enable cable multiple system operators and telecommunications companies to offer video services across their networks and that was acquired by ARRIS Group in 2011. Prior to BigBand Networks, Inc.,
Ms. Villare was the Chief Financial Officer of Burst Media, a company that provided display advertising for specialty content web publishers, from 2007 to 2008. From 1999 to 2006, Ms. Villare served in various positions, including Chief Financial Officer, at Enovia, a division of MatrixOne, Inc., a leading service provider of Internet collaborative software that was acquired by Dassault Systèmes in 2006. Prior to joining Enovia, Ms. Villare was a senior auditor at PricewaterhouseCoopers LLP. Ms. Villare is a certified public accountant and holds a Bachelor of Science in Management from Boston College.

Jeffrey Snider has served as our Chief Administrative Officer since September 2012 and our Senior Vice President, General Counsel and Secretary since June 2009. Prior to joining Sonus, from 2006 to 2008, Mr. Snider served in a dual legal and operating role as Executive Vice President and General Counsel of BMS, Inc., a provider of hardware, software and services to the legal industry. From 2003 to 2006, Mr. Snider was the Senior Vice President and General Counsel of Geac Computer Corporation, Ltd., a global software and services provider. Prior to Geac Computer Corporation, Ltd., Mr. Snider was Senior Vice President and General Counsel at Lycos, Inc., an industry-leading Internet conglomerate, from 1997 to 2002. Before his in-house career, Mr. Snider was a member of the Boston law firm of Hutchins \& Wheeler from 1989 to 1997. Mr. Snider served as a Director on the Board of the New England Legal Foundation from 2001 to 2009, and was a Trustee of the Boston Bar Foundation from 2003 to 2007. Mr. Snider holds a Bachelor of Arts degree from Amherst College and a Juris Doctor from the University of Virginia School of Law.

Kevin Riley has served as our Senior Vice President, Engineering and Operations and Chief Technology Officer since February 2016. Previously, Mr. Riley served as our Vice President, Engineering and Chief Technology Officer from July 2014 to January 2016; Vice President of Platform Engineering from October 2012 to July 2014; and a Sonus Fellow from May 2011 to September 2012. Prior to joining Sonus, he was the Software Development Director at Verivue, Inc., a content delivery network software company, from August 2009 to May 2011. Mr. Riley holds a Bachelor of Science
degree in Electrical Engineering from the University of Massachusetts, Amherst and a Master of Science degree in Electrical Engineering from Northeastern University.

Michael Swade has served as our Senior Vice President, Worldwide Sales since September 2014 and was previously our Interim Senior Vice President, Worldwide Sales and Marketing from July 2014 to September 2014 and Vice President and General Manager, Americas from May 2014 to July 2014. Prior to joining Sonus, from September 2011 to May 2014, he was the Executive Vice President, Sales at York Telecom Corporation ("Yorktel"), a global provider of unified communications and collaboration, cloud, and video managed services for large enterprise and federal government customers. Prior to his tenure at Yorktel, from February 2011 to September 2011, Mr. Swade acted as an independent consultant. From November 2010 to February 2011, Mr. Swade served as the Senior an independent consultant. From November Pise President, Global Field Operations at Polycom, Inc. He was also Polycom, Inc.'s President, Europe from January 2010 to November 2010; Vice President, Service Provider and Unified Communications Sales from January 2008 to January 2010; and Vice President, Global Account Sales from January 2007 to January 2008. Mr. Swade holds a Bachelor of Science degree in Marketing from Eastern Illinois University and a Master of Business Administration degree from Dominican University.

## BENEFICIAL OWNERSHIP OF OUR COMMON STOCK

The following table sets forth information regarding beneficial ownership of our common stock as of April 3, 2017 by:

- each person who beneficially owns, to the best of our knowledge, more than $5 \%$ of the outstanding shares of our common stock;
- each of our Chief Executive Officer, our Interim Chief Financial Officer, our other three most highly compensated executive officers serving as executive officers at December 31, 2016, our former Chief Financial Officer, and one individual for whom disclosure would have been provided as one of our three most highly compensated executive officers but for the fact that he was not serving as an executive officer at December 31, 2016;
- each of our directors; and
- all of our current executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the SEC, and include voting or investment power with respect to shares. In computing the number of shares beneficially owned by each person named in the following table and the percentage ownership of that person, shares of common stock that the person has the right to acquire within 60 days of April 3, 2017, through the exercise of any stock option or other equity right, are deemed owned by that person and are also deemed outstanding. These shares are not, however, deemed outstanding for purposes of computing the percentage ownership of any other person.

Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except to the extent authority is shared by spouses under applicable law. The percentage of common stock outstanding as of

April 3, 2017 is based upon $49,521,089$ shares of common stock outstanding on that date plus shares subject to options to the extent noted below.

| Name and Address of Beneficial Owner | Number of Shares Beneficially Owned | Percentage of Common Stock Outstanding |
| :---: | :---: | :---: |
| Named Executive Officers: |  |  |
| Raymond Dolan(1) | 2,084,972 | 4.26\% |
| Susan Villare(2) | 114,130 |  |
| Kevin Riley(3) | 303,641 |  |
| Jeffrey Snider(4) | 432,940 |  |
| Michael Swade(5) | 250,196 |  |
| Mark Greenquist(6) | 187,380 |  |
| Anthony Scarfo(7) | 501,035 | 1.01\% |
| Non-Employee Directors: |  |  |
| Matthew W. Bross(8) | 69,553 |  |
| Beatriz V. Infante(9) | 90,404 |  |
| Howard E. Janzen(10) | 98,422 |  |
| Richard J. Lynch(11) | 69,553 |  |
| Pamela D.A. Reeve(12) | 67,882 |  |
| John A. Schofield(13) | 74,103 |  |
| Scott E. Schubert(14) | 85,511 |  |
| All current executive officers and directors as a group <br> (12 persons)(15) | 3,802,446 | 7.68\% |
| 5\% Owners: |  |  |
| Capital Research Global Investors-333 South Hope Street, Los Angeles, CA 90071(16) | 4,739,200 | 9.57\% |
| First Trust Portfolios L.P., First Trust Advisors L.P. and The Charger Corporation-120 East Liberty Drive, Suite 400, Wheaton, IL 60187(17) | 2,925,010 | 5.91\% |
| The Vanguard Group, Inc.-100 Vanguard Blvd., Malvern, PA 19355(18). | 3,577,981 | 7.23\% |
| BlackRock, Inc.-55 East $52^{\text {nd }}$ Street, New York, NY 10055(19) | 3,127,866 | 6.32\% |

(1) Includes 805,717 shares subject to outstanding options that are exercisable as of June 2, 2017 and 470,831 shares of restricted stock subject to vesting
(2) Includes 29,015 shares subject to outstanding options that are exercisable as of June 2, 2017 and 114,165 shares of restricted stock subject to vesting.
(3) Includes 71,738 shares subject to outstanding options that are exercisable as of June 2, 2017 and 218,748 shares of restricted stock subject to vesting.
(4) Includes 176,937 shares subject to outstanding options that are exercisable as of June 2, 2017 and 176,665 shares of restricted stock subject to vesting.
(5) Includes 22,500 shares subject to outstanding options that are exercisable as of June 2, 2017 and 21,250 shares of restricted stock subject to vesting.
(6) Mr. Greenquist stepped down as our Chief Financial Officer, effective June 15, 2016. This number includes 75,416 shares subject to outstanding options as of June 15, 2016.
(7) Mr. Scarfo stepped down as our Executive Vice President of Services, Product Management and Corporate Development, effective July 27, 2016, and remained with the Company in an advisory role to assist in the transition of his duties until October 3, 2016. This number includes 320,000 shares subject to outstanding options as of October 3, 2016.
(8) Includes 13,496 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(9) Includes 30,826 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(10) Includes 28,826 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(11) Includes 13,496 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(12) Includes 11,645 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(13) Includes 28,326 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(14) Includes 30,826 shares subject to outstanding options that are exercisable as of June 2, 2017 and 17,046 shares of restricted stock subject to vesting.
(15) Includes 1,263,348 shares subject to outstanding options that are exercisable as of June 2, 2017 and $1,315,563$ shares of restricted stock subject to vesting owned by our current directors and executive officers. Each of our current directors and executive officers may be reached at 4 Technology Drive, Westford, Massachusetts 01886.
(16) According to a Schedule 13G/A No. 2 filed with the SEC on February 13, 2017, reporting the beneficial ownership of $4,739,200$ shares of our common stock, Capital Research Global Investors reported sole voting and dispositive powers with respect to all $4,739,200$ shares, and Global Investors is a division of Capital Research and Management Company, which acts as investment adviser to various investment companies registered under the Investment Company invest 1940. Capital Research Global Investors reported that it held more than 5\% of our Act of 19ing common stock on behalf of SMALLCAP World Fund Inc. outstanding common stock on behalf of SMALLCAP World Fund, Inc.
(17) According to a Schedule 13G/A No. 1 jointly filed with the SEC on January 25, 2017, reporting the beneficial ownership of 2,925,010 shares of our common stock, each of First Trust Portfolios L.P., First Trust Advisors L.P. and The Charger Corporation reported shared voting and dispositive powers with respect to all $2,925,010$ shares, and sole voting and dispositive powers with respect to none of the shares. The Charger Corporation is the General Partner of both First Trust Portfolios L.P. and First Trust Advisors L.P.
(18) According to a Schedule 13G/A No. 3 filed with the SEC on February 13, 2017, reporting the beneficial ownership of $3,577,981$ shares of our common stock, The Vanguard Group, Inc. beneficial ownership of $3,577,981$ shares of our common stock, The Vanguard Group, Inc.
reported that it had sole dispositive power with respect to $3,513,236$ shares of common stock, shared dispositive power over 64,745 shares of common stock, sole voting power with respect to 62,635 shares, and shared voting power with respect to none of the shares. Vanguard Fiduciary Trust Company, a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner with respect to 60,240 shares mentioned above as a result of its serving as investmen manager of collective trust accounts and Vanguard Investments Australia, Ltd., a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner with respect to 6,900 shares offerings.
(19) According to a Schedule 13G/A No. 2 filed with the SEC on January 27, 2017, reporting the beneficial ownership of $3,127,866$ shares of our common stock, BlackRock, Inc. reported that it had sole voting power with respect to $3,016,043$ shares, sole dispositive power with respect to $3,127,866$ shares, and shared voting and dispositive powers with respect to none of the shares.

## SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our executive officers, directors and persons who beneficially own more than $10 \%$ of our common stock to file reports of initial ownership and subsequent changes in that ownership with the SEC. Based solely on a review of the copies of reports furnished to us and the written representations of our directors and executive officers, we believe that during the year ended Dember 31, 2016, our directors, executive officers and greater than $10 \%$ stockholders complied with all Section 16(a) filing requirements.

## TRANSACTIONS WITH RELATED PERSONS

Our Board has adopted a written related party transaction policy, which sets forth our policies and procedures for the review, approval or ratification of any transaction required to be reported in our filings with the SEC. Our policy with regard to related party transactions is that all related party transactions are to be reviewed by our general counsel, who, in consultation with our CEO, will determine whether the contemplated transaction or arrangement requires the approval or ratification of the Audit Committee, the Compensation Committee (in the case of compensation of executive officers), both committees or neither committee. The Audit Committee may approve or ratify the transaction only if the Audit Committee determines that, under all of the circumstances, the transaction is in the best interests of the Company and its stockholders, as the applicable committee determines in good faith. The Audit Committee may, in its sole discretion, impose such conditions as it deems appropriate on the Company or the related person in connection with approval of the related person transaction. If the Audit Committee does not approve or ratify a related person transaction, such transaction will not be entered into or will be terminated, as the Audit Committee directs.

Other than as described in the next two paragraphs and the compensation arrangements described elsewhere in this Proxy Statement, since January 1, 2016, there has not been, and there is no currently proposed, any transaction or series of similar transactions (i) to which we were or will be a participant, (ii) in which the amount involved exceeded or will exceed $\$ 120,000$, and (iii) in which any director, executive officer or a holder of five percent or more of any class of our capital stock or any member of their immediate family had or will have a direct or indirect material interest.
H. Brian Thompson, who was an independent member of the Board until the Company's 2016 Annual Meeting (which was held on June 9, 2016), is the Executive Chairman of GTT
Communications, Inc., a leading global cloud networking provider to multinational clients ("GTT") Howard Janzen is an independent member of the Board and also serves as an independent director of global data Internet SIP trunking and managed services ("One Source"). One Source is a customer the Company The Company had a well-established and ongoing business relationship with One Source the Company. The Company prior to its acquisition by GTT

The Company recognized revenue aggregating $\$ 121,679$ from One Source in the year ended December 31, 2016 pursuant to the terms of a June 28, 2010 contract between the parties, including $\$ 22,546$ for the six months ended June 30, 2016. The Company believes the terms of this contract are consistent with third-party arrangements that provide similar services.

## COMPENSATION COMMITTEE REPORT

The information contained in this report shall not be deemed to be "soliciting material" or "filed" or incorporated by reference in future filings with the U.S. Securities and Exchange Commission, or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that to the liabilitites of Section is of the Securities Exchange Act of 1934, as amended, except to the extent that
we specifically request that it be treated as soliciting material or specifically incorporate it by reference into a document filed under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

The Compensation Committee consists of John A. Schofield (Chairman), Beatriz V. Infante and Pamela D.A. Reeve. The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with our management. Based on this review and discussion, the Compensation Committee recommended to our B
the Compensation Discussion and Analysis be included in this Proxy Statement.

Submitted by,
COMPENSATION COMMITTEE:
John A. Schofield (Chairman)
Beatriz V. Infante
Pamela D.A. Reeve

## COMPENSATION DISCUSSION AND ANALYSIS

The following discussion and analysis contains statements regarding Company performance targets and goals. These targets and goals are discussed in the limited context of our compensation programs and should not be understood to be statements of management's expectations or estimates of results or other guidance. Investors should not apply these statements to other contexts.

## Overview

This section explains our compensation philosophy and describes the material components of our executive compensation program for our named executive officers, whose compensation is set forth in the 2016 Summary Compensation table and other compensation tables contained in this Proxy Statement. We also provide an overview of our executive compensation philosophy and our executive compensation program. Moreover, we discuss how and why the Compensation Committee made its compensation decisions involving the named executive officers for 2016.

2016 Named Executive Officers ("NDOs")

- Raymond Dolan, our President and Chief Executive Officer
- Susan Villare, our Interim Chief Financial Officer, Treasurer and Vice President, Financial Planning and Analysis
- Kevin Riley, our Senior Vice President, Engineering and Operations and Chief Technology Officer
- Jeffrey Snider, our Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary
- Michael Swade, our Senior Vice President, Worldwide Sales
- Mark Greenquist*, our former Chief Financial Officer
- Anthony Scarfo*, our former Executive Vice President, Services, Product Management and Corporate Development
* Effective June 15, 2016, Mr. Greenquist resigned as the Company's Chief Financial Officer. Effective July 27, 2016, Mr. Scarfo stepped down as the Company's Executive Vice President, Product Management and Corporate Development. Mr. Scarfo remained with the Company in an advisory role to assist in the transition of his duties until October 3, 2016.


## 2016 Financial Highlights

We experienced modest revenue growth in 2016, but significantly improved profitability through margin expansion and cost cutting. Improved profitability will be used to drive our growth strategies for providing security for real-time internet-based communications


## Consideration of Stockholder Say-on-Pay Vote

The Compensation Committee considers the outcome of the Company's annual say-on-pay vote when making decisions regarding the Company's executive compensation program. At the 2016 Annual Meeting, approximately $43 \%$ of the votes cast on the Company's 2016 say-on-pay proposal were cast in favor of approving the compensation of the NEOs. Although this was an advisory vote and not binding on the Company, it represented clear communication to us from our stockholders to review and reconsider our NEO compensation decisions. We have therefore taken this vote seriously and enhanced reconsider our NEO compensation decisions. We have therefore taken this vote seriously and
our stockholder outreach efforts with 47 of our largest institutional investors, representing
approximately $59 \%$ of our outstanding shares as of December 31, 2016, for the purposes of (i) gathering feedback regarding our executive compensation programs, (ii) identifying any specific concerns and issues reflected in the 2016 vote, (iii) initiating a discussion about potential changes to our program and (iv) further understanding the shareholder advisory firms' policies and how the relate to the perspectives held by our investors.

In these discussions, stockholders were generally supportive of, and did not express substantial disagreement with, the overall design of our executive compensation program. The negative feedback that we received, however, focused primarily on (i) wanting to see fixed financial metrics in our cash bonus plans and (ii) removing any discretion for awarding bonus achievement in such plans. In response, as discussed more fully below, in 2016 the Compensation Committee utilized fixed financial metrics for our cash bonus plans, based on revenue and profitability, and implemented two half-year measurement periods to more closely align cash bonus payouts with the Company's actual performance. Giving the Compensation Committee the ability to exercise its judgment in setting fixed financial metrics over shorter, more predictable measurement periods has obviated the need for the Compensation Committee to exercise discretion in enhancing bonus achievement at the end of a bonus period. As a result, in 2016 the Compensation Committee only exercised discretion to reduce cash bonus payouts in alignment with the Company's actual performance for the applicable measurement period.

We believe these changes to our cash bonus plans are a major step forward and responsive to stockholder input. Our 2017 cash bonus plans therefore incorporate these same design features. The Compensation Committee continues to consider the outcome of both the 2016 say-on-pay vote and our ongoing stockholder outreach efforts when making decisions regarding the Company's executive compensation in 2017 and beyond.

## Industry and Company-Specific Challenges

Since 2014, our customer base has gone through fundamental transformations, including a shif towards all-IP, all-software networks. Simultaneously, there has been massive consolidation among our customers and our competitors. The consolidation of our customers and potential customers (e.g., the acquisition of Time Warner Cable Inc. and Bright House Networks by Charter Communications, Inc.; the acquisition of XO Communications, LLC by Verizon Communications; and the pending acquisition of Level 3 Communications Inc. by CenturyLink Inc.), has left us with fewer potential customers, and the consolidation of our competitors has allowed them to compete even more effectively

These changes have caused traditional buying patterns to be disrupted, and in the first quarter of fiscal year 2015, our sales dropped precipitously, causing our stock price to drop precipitously too. Neither has recovered to the pre-drop levels, which means that most quantitative analyses of the company over this three-year period are not positive.

Qualitatively, however, during this same time period our management team has transformed Sonus from predominantly a provider of "legacy" media gateways that were used by large service providers (i.e., traditional telephone carriers) to convert circuit-based calls into IP-based calls, into predominantly a provider of current- and next-generation all-IP-based products like SBCs and DSCs. Further, we are now in the midst of leading the migration of our industry from hardware-based solutions to software-based "virtual" solutions, and are developing security solutions for this challenging "real-time" communications environment.

## Compensation Practices - Program Design

Our incentive programs are designed to support our long-term business strategy.


## Compensation Practices - 2016 Achievement

Our variable compensation payouts tied to 2016 performance were below target, demonstrating alignment of Company performance and compensation.


* The percentages represent the number of shares of Sonus common stock that vested for the 2016 performance period in connection with the performance-based restricted stock units ("PSUs") granted on March 16, 2015 ("2015 Tranche II") and April 1, 2016 ("2016 Tranche I"), respectively. The PSUs relating to the 2015 Tranche II vested at $90.4 \%$ of target for the 2016 performance period. The PSUs relating to the 2016 Tranche I vested at $76 \%$ of target for the 2016 performance period. Performance for these awards during such award's 2016 performance period was measured based on the Company's total shareholder return ("TSR") compared to pre-established relative TSR goals, based on the TSR of the NASDAQ Telecommunications Index, that were set by the Compensation Committee of the Company's Board of Directors.


## Pay and Performance: CEO Pay Opportunity vs. Current Realizable Value

Our bonus and performance-based equity payouts that were designed to be commensurate with absolute and relative Company performance resulted in alignment of pay and performance.


## Methodology and Assumptions:

 value of long-term incentive awards of the CEO for that applicable year"Realizable Value" means the sum of the base salary and target bonus the CEO received for that applicable year plus the value of the long-term incentive awards at December 31, 2016
FY14 salary and FY13-14 SMCIP opportunity reflect impact of stock-for-cash election premium
FY13 and FY14 realizable base salary reflects the value of stock-for-cash salary at th
respective fiscal year end prices
FY13 and FY14 realizable SMCIP reflects value on date of vesting
FY14 base salary includes $\$ 29,167$, which was cash paid to the CEO in connection with a rais Outstanding PSUs valued at target

## Executive Compensation Highlights

The Compensation Committee has instituted a number of changes to our executive compensation program over the last few years to align our program with competitive compensation plans and evolving governance practices, and to reinforce the relationship between Company performance and executive compensation. These modifications include the following

- Establishing Fixed Metrics. We strengthene the rigor of our annual incentive award program by establishing fixed metrics fo each of the first and second halves of the year to reduce the possibility that the achievement of certain revenue and net income targets were either too easy or too difficult to achieve.

Having a formulaic framework. We
introduced a formulaic framework based on the Company's financial results relative to pre-established targets for each incentive program. These targets include revenue and profitability, which we believe are critical to onger-term success.

- Adding Performance Awards. In 2015, we started to issue PSUs to our Chief Executive Officer and certain of his direct reports. These awards are tied directly to our stock performance, such that the underlying shares will vest, if at all, in annual installments ove three years, based on our TSR relative to the TSR of each of the companies included in the NASDAQ Telecommunications Inde at the time of grant.
- Instituting Share Ownership Guidelines. In 2014, we established share ownership guidelines for our Chief Executive Officer, our other Section 16 reporting officers and our non-employee directors. These Guidelines require six times the annual base salary for our CEO, one time the annual base salary of our Section 16 reporting officers and five times the annual cash retainer of our non-employee directors
- Adopting Formal Clawback Policy.

Additionally, in 2014, our Compensation Committee adopted a formal clawback polic with respect to our executive incentive compensation, which will apply in the event we are required to prepare an accounting estatement after the adoption of the policy due to any material noncompliance with any inancial reporting requirement under the U.S. federal securities laws.

## esponsiveness to Stockholder Feedback

## What We Stopped Doing in Response to Shareholder Feedback

X We did not exercise discretion to enhance bonus achievement -discretion exercised only to reduce cash bonus payouts
X We did not exercise discretion in determining achievement of performance-based equity award

## What We Don't Do

$\mathbf{X}$ No gross-up provisions
$\mathbf{X}$ No pension plans or other post-employment benefit plan
$\mathbf{X}$ No severance multipliers in excess of two times pay

## What We Did in Response to Shareholder Feedback

$\checkmark$ Established fixed financial metrics for our cash bonus plans, based on revenue and profitabilit
$\checkmark$ Added performance awards to our equity incentive compensation mix
$\checkmark$ Instituted share ownership guidelines for our executives and board member
Adopted a formal clawback policy with respect to our incentive compensation plans

## What We've Always Done

$\checkmark$ Independent compensation consultant
$\downarrow$ Annual market-based review of compensation level
$\downarrow$ Annual risk assessment of compensation plans and policie

## Executive Summary of 2016 Executive Compensation Decisions

We believe that our executive compensation program supports our business strategies an alent management objectives and is consistent with governance best practices that serve our tockholders' long-term interests. In making its compensation decisions for 2016, the Compensation Committee considered, among other things, our financial and operational results for the year, the result of the say-on-pay vote at the 2016 Annual Meeting, and the achievement of the compensation objectives set by the Compensation Committee

Additionally, our Compensation Committee believes that the bonus and performance-based equity payouts were commensurate with absolute and relative company performance, which further upports the alignment of pay and performance.

In 2016, our NEOs received two forms of equity compensation-grants of time-vesting restricted stock and grants of performance- and time-vesting PSUs. The chart below illustrates the
proportion of direct compensation comprised of cash and equity-related awards. The "Target bonus" components represent $100 \%$ of target bonus:

## 2016 Target Compensation Components of CEO and Other Named Executive Officers

 (as a Percentage of Total Direct Compensation)


Consistent with our compensation philosophy, at least $50 \%$ of each NEO's total direct compensation for 2016 was equity-based. The "Other NEOs" chart above does not reflect the compensation mix of Messrs. Greenquist and Scarfo, who ceased to be executive officers in 2016.

We believe that our 2016 executive compensation program is responsive to the feedback we have received from stockholders and is aligned with stockholder interests. The Compensation Committee respects all stockholder votes, both for and against our compensation program. The Company to fully understand diverse viewpoints and discuss the important connections betw the Company to fully understand diverse viewpoints and discuss the important connections betwee
compensation program, business strategy and long-term financial and operating performance.

## Overview of the Company's Compensation Program

The Company's executive compensation programs are administered by the Compensation Committee. In addition to attracting and retaining high caliber executives, the components of the executive compensation program are designed to reward both annual and long-term business performance. Additionally, other factors are critical, such as the successful execution of corporate strategies and fostering and driving continuous improvement and a high-performance culture.

## Who Oversees the Company's Compensation Program?

The Compensation Committee. The Compensation Committee, which is comprised entirely of independent directors as defined by the independence standards of the NASDAQ Stock Market Rules, is primarily responsible for overseeing the Company's executive compensation program, after considering advice from an independent compensation consultant regarding competitive market pay
practices. Our Board sets the overall corporate performance objectives for each year, while the Compensation Committee determines and approves the compensation level for the CEO; reviews and sets compensation levels of other key executive officers; evaluates the performance of these executives; and evaluates and approves all grants of equity-based compensation to the CEO and the other executive officers. All decisions regarding the CEO's compensation are made by the Compensation Committee in executive session without the CEO present. After the end of the fiscal year, the Compensation Committee reviews the actual corporate performance to determine the appropriate bonus amount, if any, to be paid to each eligible executive.

Role of the Compensation Consultant. The duties of the compensation consultant we engage are generally to evaluate executive compensation, perform an analysis on realized pay alignment with financial and stock performance, discuss general compensation trends, provide competitive market practice data and benchmarking, participate in the design and implementation of certain elements of the executive compensation program and assist our CEO in developing compensation recommendations to present to the Compensation Committee for the executive officers other than himself. The compensation consultant provides the Compensation Committee with advice, consultation and market information on a regular basis, as requested, throughout the year. The Compensation Committee may accept, reject or modify any recommendations by compensation consultants or other outside advisors. The compensation consultant does not make specific recommendations on individual amounts for the executive officers or the independent directors, nor does the consultant determine the amount or form of executive and director compensation.

Pearl Meyer \& Partners LLC ("Pearl Meyer") has served as the compensation consultant of the Compensation Committee since June 2015. The Compensation Committee assessed Pearl Meyer's independence relative to standards prescribed by the SEC and determined that no conflicts existed.

Roles of the Chief Executive Officer, the Chief Administrative Officer and the Vice President of Human Resources. The CEO, in consultation with the Compensation Committee's compensation consultant, develops compensation recommendations for the Compensation Committee to consider. The CEO considers various factors when making individual compensation recommendations, including the relative importance of the executive's position within the organization, the individual tenure and experience of the executive, and the executive's individual performance and contributions to the Company's results.

The Chief Administrative Officer and the Vice President of Human Resources work with the CEO to monitor existing compensation plans and programs applicable to NEOs and other executives, to recommend financial and other targets to be achieved under those plans and programs, to prepare analyses of financial data, peer comparisons and other briefing materials for the Compensation Committee to aid in making its decisions and, ultimately, to implement the decisions of the Compensation Committee.

The Compensation Committee considers, but is not bound by, recommendations made by Company management.

## Compensation Philosophy and Practices

Our compensation philosophy and practices are an important part of our business strategy. We have a rigorous performance and compensation management system and we believe our compensation
processes and programs are aligned to provide strong incentive for success while appropriately balancing risk. Our overall executive compensation program is founded on three guiding principles:

- We offer competitive compensation packages to attract executives from larger telecommunications companies that offer significantly greater cash compensation, and from smaller private telecommunications companies that offer greater perceived equity growth potential;
- We offer incentive compensation to motivate our executives to transform Sonus from a media gateway company in a declining market into a profitable company in growing markets for SBCs, DSCs, policy/routing servers, network intelligence applications, and network analytics tools markets; and
- We seek to retain our key executives in the face of other opportunities.

We seek to accomplish these objectives by providing independent Board oversight; avoiding being overly rigid, formulaic or short-term oriented; encouraging and rewarding outstanding initiative, achievement, teamwork and a shared success environment; and reinforcing critical measures of performance derived from our business strategy and key success factors. These objectives, and our general compensation philosophy, are reviewed on an annual basis and updated as appropriate.

## Competitive Benchmarking

The Compensation Committee, with the assistance of its compensation consultant, reviews market compensation data, including the compensation practices of selected similar companies (the "peer group"). The peer group consists of publicly traded industrial companies that are in the information technology and related sub-industries with market capitalization and revenue in a similar range to that of the Company. The compensation consultant reviews the business descriptions of potential peer companies to identify businesses generally in the telecommunications and/or networking industries. Then the Compensation Committee considers factors such as executive talent and business-line competitors, global scope and complexity, research and development expenses, and market capitalization-to-revenue multiples when selecting peers.

For executive compensation relating to 2016, at Pearl Meyer's recommendation, the Compensation Committee discussed changes to the Company's peer group in December 2015, and such peer group was updated in February 2016 to remove (i) Aruba Networks, Inc. because it was acquired by HP Inc. in May 2015; (ii) Mavenir Systems, Inc. because it was acquired by Mitel Networks Corporation in April 2015; (iii) Riverbed Technology, Inc. because it was acquired by Thoma Bravo, a private equity investment firm, in April 2015; and (iv) Palo Alto Networks, Inc. because its market capitalization had grown too large in relation to the Company's market capitalization. After a review to determine if there were any additional companies that would be appropriate to add to the 2016 peer group, the Compensation Committee decided to replace these four companies with: 8x8 Inc. and Xura, Inc.

The Compensation Committee believes that the revised peer group is relevant for purposes of benchmarking executive pay because the component companies are similar to us with respect to business model profile and size in terms of revenue and market capitalization. The revised peer group
consists of the companies below. Pearl Meyer compiled compensation information from the peer group based on the publicly filed documents of each member of the peer group."

| Company | Data at Time of Peer Group Roster Selection |  |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Last Twelve } \\ & \text { Months } \\ & \text { Revenue } \\ & \text { (\$ Millions) } \end{aligned}$ | $\begin{gathered} \text { Market } \\ \text { Capitalization } \\ \text { (\$ Millions) } \end{gathered}$ |
| 8x8 Inc. | \$184 | \$733 |
| ADTRAN, Inc. | \$605 | \$729 |
| BroadSoft, Inc. | \$255 | \$881 |
| Calix, Inc. | \$414 | \$405 |
| Extreme Networks, Inc. | \$541 | \$380 |
| F5 Networks, Inc. | \$1,920 | \$8,222 |
| Infinera Corporation | \$813 | \$2,567 |
| Ixia | \$506 | \$1,155 |
| QLogic Corp. | \$490 | \$898 |
| RadiSys Corporation | \$189 | \$99 |
| Ruckus Wireless, Inc. | \$359 | \$1,041 |
| ShoreTel, Inc. | \$360 | \$488 |
| Xura, Inc. | \$445 | \$561 |
| Sonus Networks, Inc. | \$250 | \$284 |

* All data was compiled by Pearl Meyer, who obtained peer company financial market intelligence from S\&P Capital IQ. The data generally represents revenue and operating income for the most recent four quarters available to Pearl Meyer at the time it compiled the data in November 2015. The income statement metrics reflect trailing 12-month data, generally as of September 2015, and market capitalization as of September 30, 2015
At Pearl Meyer's recommendation, in September 2016 and as ratified by the Compensation Committee in February 2017, the peer group was further updated to remove QLogic Corp., Ruckus Wireless, Inc., and Xura, Inc. because they were acquired by Cavium, Brocade Communications and
Siris Capital Group, respectively. Further, the Compensation Committee identified two replacement Siris Capital Group, respectively. Further, the Compensation Committee identified two replacement companies as new peers: Aerohive Networks, Inc. and Comtech Telecommunications Corp. In identifying new peer companies, the Compensation Committee reviewed companies based on the following characteristics. they were based in the United States, they were in one of the following services; they has hardware and equipment makers, telecons whiling four quarter revenue; services; they had annual revenue within a reasonable range of Sonus trailing four-quarter revenue, for executive compensation products, where possible. Compared to the peer group we previously used or expany sizes as measured by revenue and market capitalization. The revised peer group consists of
 the complicly filed documents of each member of the peer group** the publicly filed documents of each member of the peer group.

|  |  | Data at Time of Peer Group <br> Roster Selection |  |
| :--- | ---: | ---: | :---: |
|  | Company <br> Mant Twelve <br> Revenue <br> (\$ Millions) | Market <br> Capitatization <br> (\$ Millions) |  |
| 8x8 Inc. | $\$ 221$ | $\$ 1,190$ |  |
| ADTRAN, Inc. | $\$ 602$ | $\$ 904$ |  |
| Aerohive Networks, Inc. | $\$ 177$ | $\$ 346$ |  |
| BroadSoft, Inc. | $\$ 314$ | $\$ 1,379$ |  |
| Calix, Inc. | $\$ 423$ | $\$ 366$ |  |
| Comtech Telecommunications Corp. | $\$ 336$ | $\$ 306$ |  |
| Extreme Networks, Inc. | $\$ 528$ | $\$ 410$ |  |
| F5 Networks, Inc. | $\$ 1,971$ | $\$ 8,233$ |  |
| Infinera Corporation | $\$ 996$ | $\$ 1,239$ |  |
| Ixia | $\$ 497$ | $\$ 959$ |  |
| RadiSys Corporation | $\$ 205$ | $\$ 190$ |  |
| ShoreTel, Inc. | $\$ 360$ | $\$ 537$ |  |
| Sonus Networks, Inc. | $\$ 264$ | $\$ 431$ |  |

* All data was compiled by Pearl Meyer, who obtained peer company financial market intelligence from S\&P Capital IQ. The data generally represents revenue and operating income for the most recent four quarters available to Pearl Meyer at the time it compiled the data in September 2016. The income statement metrics reflect trailing 12-month data generally as of June 2016, and market capitalization as of August 30, 2016


## Compensation Components

The Compensation Committee annually reviews the total fixed, cash incentive and equity incentive compensation received by our NEOs, including base salary, annual and long-term incentives, equity awards, and total equity in the Company. Our executive compensation program has four major omponents that support the Company's compensation objectives, each of which is discussed in detail below. The Compensation Committee reviews the executive compensation program on an annual basis.

Compensation Mix. A significant portion of our executive officers' total direct compensation (which includes base salary, cash bonus and equity-based incentives) opportunity is attributable to variable compensation-that is, the amount our executives earn is dependent upon Company erformance. The equity-based component of each NEO's compensation package consists primarily of estricted stock and performance units, each of which vest over time, if at all, and the value of which ied to the Company's stock performance. These variable elements are intended to align the executives performance and interests with Company performance and long-term stockholder value.

The table below generally summarizes the elements of our compensation program for our

## NEOs:

| Element | Form of Compensation | Purpose | Link to Company Performance |
| :---: | :---: | :---: | :---: |
| Base Salaries | Cash | Provide competitive, fixed compensation to attract and retain exceptional executive talent | Low |
| Annual Cash Incentives | Cash | Provide a direct incentive to achieve strong operating results | High |
| Long-Term Equity Incentives | Restricted shares of common stock and performance share units | Encourage executive officers to equity ownership position in Sonus so that their interests are aligned with those of our stockholders | High |
| Health, Retirement and Other Benefits | Eligibility to participate in benefit plans generally available to our employees, including 401(k) plan, premiums paid on long-term disability and life insurance | Benefit plans are part of a broadbased employee benefits program <br> Our executives do not generally receive any nonqualified deferred compensation plans or perquisites, with the exception of $\$ 16,585$ paid to Mr. Dolan in connection with moving expenses he incurred in 2016 | Low |

How Target Levels of Compensation are Determined. In determining the amount of compensation to pay our NEOs, the Compensation Committee considers factors such as the executive's role within the Company and the level of responsibility, skills and experiences required by the position, the executive's qualifications, our ability to replace such individual and the overall competitive environment for executive talent. The Compensation Committee also takes into account the Company's performance, the executive's performance, the Compensation Committee's view of internal equity and consistency and other considerations it deems relevant. In analyzing these factors, the Compensation Committee reviews competitive compensation data gathered in comparative surveys (benchmarking data). The Compensation Committee does not have a policy for allocating target compensation among the that used by other companies with whom the Company competes for executive talent using the peer data provided by our outside compensation consultant. Of the elements of total direct compenatio only base salary is compensatio performance-contingent and variable compensation.

## 2016 Compensation Payouts

The established targets for individual components and overall executive compensation are designed to be competitive in order to attract, motivate and retain the executives necessary to drive and achieve the Company's objectives. In some cases, individual components may be over or under market (in order to emphasize a particular element or if individual circumstances dictate), but the total compensation package is market competitive for executives with the backgrounds and skill sets w need. The Compensation Committee believes that the overall compensation program serves to balance both the mix of cash and equity compensation as well as the mix of short- and long-term compensation for our NEOs.

Base Salary. Base salaries are designed to reflect the scope of responsibilities, performance and competencies of the individual executives, and the relation of that position to other positions in the Company. Each NEO's salary and performance is reviewed annually as well as at the time of a Company. Each NEO shatary and performance is reviewed annually as well as at the time of a
promotion or other change in responsibilities. Increases in base salary, if any, are based upon an evaluation of the individual's performance and level of pay compared to benchmark data for similar positions at peer companies.

In 2016, with the exception of Mr. Riley, who received a base salary increase from $\$ 275,000$ to $\$ 325,000$ in February 2016 due to his performance in 2015 and his promotion in February 2016 to Senior Vice President of Engineering and Operations and Chief Technology Officer, no changes were made to any NEO's base salary.

Cash Bonuses. The eligibility for an annual cash bonus creates an incentive to achieve desired near-term corporate goals that are in furtherance of the Company's long-term objectives. The compensation program establishes target bonuses, set as a percentage of annual base salary, for each position. Cash bonuses are expected to represent a substantial part of total compensation for our
executives if earned. The Company has one cash incentive plan - the Senior Management Cash executives if earned. The Company has one cash incentive plan - the Senior Management Cash Incentive Plan (the "SMCIP") - that covers all executive officers and certain other senior employees. Annual cash incentives provide named executive officers with the opportunity to earn additional annual compensation beyond base salary.

As it did in prior years, the Compensation Committee determined that payments made under the SMCIP for 2016 would be calculated pursuant to a fixed formula based on the achievement of two
financial metrics, with $60 \%$ of the Company bonus metric attributable to net income and the remaining financial metrics, with $60 \%$ of the Company bonus metric attributable to net income and the remaining
$40 \%$ of Company bonus metric attributable to revenue. For 2016, the Compensation Committee elected to implement two half-year bonus periods such that $30 \%$ of the full year target payout was attributable to the first half of 2016 and $70 \%$ of the full year target payout was attributable to the second half of 2016.

The Compensation Committee made the change to two, half-year measurement periods because both our industry and therefore our business have been changing so rapidly over the past few years that it became impossible to determine annual metrics that were neither too easy to achieve nor too rigorous to achieve with any predictability. Rather than set those annual metrics and then exercise discretion to align the payout with the Company's actual performance, the Compensation Committee can now exercise its judgment to adjust metrics over the shorter measurement periods. In 2016, for example, after the metrics for the first half of the year were over-achieved, the Compensation Committee set metrics for the second half of the fiscal year that were more rigorous than contemplated at the beginning of the year, which resulted in a payout for the second half of the year that was considerably below $100 \%$ and an annualized payout that was below $100 \%$ in the aggregate. The Compensation Committee believed that this was an accurate reflection of the Company's annual performance. Accordingly, our eligible NEOs received their 2016 bonus payouts in August 2016 ( $30 \%$ of target based on achievement of the financial metrics for the first half of 2016) and in March 2017 ( $70 \%$ of target based on achievement of the financial metrics for the second half of 2016).

Based on these fixed metrics, in July 2016, our Compensation Committee determined that the achievement level under the SMCIP for the first half of 2016 was at $164 \%$ of target. However, the Compensation Committee decreased the payout of such cash bonuses to $150 \%$ of target. While the Compensation Committee has spoken with our shareholders in the past and understands that our shareholders do not embrace discretion to enhance executive compensation achievement, the Compensation Committee believed that a payout of $164 \%$ of target to executive officers was too generous and therefore elected to reduce the cash bonus payouts from $164 \%$ to $150 \%$ of target. The

Compensation Committee believed $150 \%$ of target was a sufficient percentage to motivate and incent its executive officers, while reducing expense and cash outflows.

In February 2017, the Compensation Committee determined that the achievement level under the SMCIP for the second half of 2016 was at $69 \%$ of target. Based upon these achievement levels, the overall financial performance resulted in an aggregate cash bonus payout for 2016 of $93 \%$.

The performance targets for the SMCIP as well as the actual results of these financial measurements for the first and second halves of 2016 were as follows:

| TARGET First Half of 2016 Bonus Metrics (in millions) |  |  |
| :---: | ---: | ---: |
| Bonus Payout | Pre-Bonus Net Income | Revenue |
| $200 \%$ | $\$ 10.57$ | $\$ 132.0$ |
| $100 \%$ | $\$ 0.99$ to $\$ 3.52$ | $\$ 115.0$ to $\$ 120.0$ |
| $0 \%$ | $\$(6.05)$ | $\$ 95.5$ |


| ACTUAL Results for the First Half of 2016 (in millions, except percentages) |  |  |  |
| :---: | ---: | ---: | :---: |
| Bonus Payout | Pre-Bonus Net Income | Revenue |  |
| Actual Achievement | $\$ 11.02$ | $\$ 120.0$ |  |
| \% Weighting | $60 \%$ | $40 \%$ |  |
| Individual Metric \% Achievement | $206 \%$ | $100 \%$ |  |
| \%Weighting) $\times$ (Individual Metric \% <br> Achievement) | $124 \%$ | $40 \%$ |  |
| \% Achievement for First Half of 2016 | $\mathbf{1 6 4 \%}$ |  |  |
| \% Payout for First Half of 2016 | $\mathbf{1 5 0 \%}$ |  |  |


| TARGET Second Half of 2016 Bonus Metrics (in millions) |  |  |  |
| :---: | ---: | ---: | :---: |
| Bonus Payout | Pre-Bonus Net Income | Revenue |  |
| $200 \%$ | $\$ 41.25$ | $\$ 159.50$ |  |
| $100 \%$ | $\$ 21.54$ to $\$ 23.88$ | $\$ 140.00$ to $\$ 145.00$ |  |
| $0 \%$ | $\$ 4.18$ | $\$ 116.20$ |  |


| ACTUAL Results for the Second Half of 2016 (in millions, except percentages) |  |  |  |
| :---: | ---: | ---: | :---: |
| Bonus Payout | Pre-Bonus Net Income | Revenue |  |
| Actual Achievement | $\$ 20.37$ | $\$ 130.7$ |  |
| \% Weighting | $60 \%$ | $40 \%$ |  |
| Individual Metric \% Achievement | $82 \%$ | $50 \%$ |  |
| \%Weighting) $\times$ (Individual Metric \% |  |  |  |
| Achievement) | $49 \%$ | $20 \%$ |  |
| \% Achievement for Second Half of 2016 | $\mathbf{6 9 \%}$ |  |  |
| \% Payout for Second Half of 2016 | $\mathbf{6 9 \%}$ |  |  |

Aggregate \% Cash Bonus Payout to NEOs for Overall Financial Performance in 2016

Based upon these achievement levels, the overall financial performance resulted in an aggregate cash bonus payout for 2016 of $93 \%$.

The following table summarizes the actions taken with respect to 2016 cash bonuses for our NEOs who are current executive officers:

| Named Executive Officer and Principal Position(1) |
| :---: |
| Raymond Dolan |
| President and Chief Executic |
| Officer |
| Susan Villare |
| Interim Chief Financial Officer, |
| Treasurer and Vice Preside |
| Financial Planning and Analysis |
| Kevin Riley |
| Senior Vice President, Engineer and Operations and Chief |
| Technology Officer |
| Jeffrey Snider |
| Senior Vice President, Chic |
| Administrative Officer |
| Counsel and Corporate Secreta |
| Michael Swade |
| Senior Vice P |
|  |


| $\begin{gathered} \text { Bonus } \\ \text { Eligibility } \\ \text { Performanter } \\ \text { Pnder SMCIP } \\ \text { Under SMC } \end{gathered}$ | $\begin{gathered} \text { First Half of } \\ \text { 2016 Cosh } \\ \text { Bons at } \\ \text { 3or of of } \\ \text { Target } \end{gathered}$ |  | Second Half 2016 Cash Bonus at $70 \%$ of Target | Second Half of 2016 Cash $\xrightarrow{\text { Payonut }}$ with Achieventer of $69 \%$ | Full Year Cash Bonus Payout as Bonus rayout as Determined by Compensation Committee 2 ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $100 \%$ of base salary of $\$ 600,000$ | \$180,000 | 527,000 | \$420,000 | 5289,800 | 559,8 |
| $30 \%$ of base salary | \$20,250 | \$30,400 | \$47,250 | \$32,600 | \$63,000(3) |
| $75 \%$ of base salary of $\$ 355,000$ | \$77,125 | \$109,700 | \$170,625 | \$117,800 | \$227,50 |
| $75 \%$ of base salary of $\$ 350,000$ | \$78,750 | \$118,150 | \$183,750 | \$126,800 | \$244, |
| $75 \%$ of base salary of $\$ 375,000$ | \$84,375 | \$126,600 | \$196,875 | \$135,900 | \$262,500 |

(1) Mark Greenquist stepped down as our Chief Financial Officer, effective June 15, 2016, and therefore was not eligible to receive any cash bonus with respect to 2016. Anthony Scarfo stepped down as our 2016, and remained with the Company in an advisory role to assist in the transition of his duties until October 3, 2016. Following his departure, he was not eligible for a 2016 bonus for the second half of the year under the SMCIP. Pursuant to the terms of his employment agreement, in connection with his departure, Mr. Scarfo received a lump sum bonus payment of $\$ 300,000$, representing his target bonus of $75 \%$ of his annual base salary.
(2) Represents approximately $93 \%$ of each NEO's bonus eligibility under the SMCIP at target.
(3) In addition, Ms. Villare received $\$ 60,000$ in fixed cash bonuses in connection with her additional responsibilities as interim CFO, comprised of three $\$ 20,000$ cash payments after the completion of the reporting of our financial results for each of the second, third and fourth quarters of 2016. These payments are reported in the "Bonus" column of the Summary Compensation Table, as described below.
Equity-based Incentives. Equity-based incentives are provided to executives whose decisions and actions have a direct impact upon our performance and success. Stock options and restricted stock wards are granted to our executive officers in order to tie their compensation directly to our long-ter direct compensation should be made in believes that a significant portion due to its strong long-tern alignment with stockholder interests. In determining the size of the stock option and/or restricted stock awards granted to each executive officer, the Compensation Committee takes into account the executive officer's role, past performance, anticipated contribution to our long-term goals and mark data for executive officers in similar roles at peer companies. Equity granted in prior years and existing evels of stock ownership are also taken into consideration While the Compensation Committee
 prticular percentile for the total compensation of our NEOs or for any component thereof. The size a
the awards is not determined by application of any formula, but rather reflects the Compensation Committee's subjective desire to encourage and reward high levels of performance.

A description of the types of equity awards that were granted in 2016 to our NEOs under the Amended Plan follows:

Restricted Stock Grants; PSUs. On April 1, 2016, we issued annual grants to our CEO and his direct reports, $75 \%$ of which were in the form of time-vested restricted shares and $25 \%$ of which were in the form of PSUs. These time-vested restricted shares vest and become exercisable over a three-year period, whereby one-third of the shares will vest on the first anniversary of the grant date and the remaining two-thirds of the shares will vest in four equal increments semi-annually thereafter through the third anniversary of the grant date, contingent upon the individual's continued employment with the Company.

In response to stockholder concerns, the Compensation Committee re-introduced the granting of PSUs to our executives starting in 2015 and continued this practice in 2016 as well as in 2017. PSU direct reports. In each of March 2015 and April 2016, the Compensation Committee granted PSUs under the Amended Plan to our CEO and certain of his direct reports. The PSUs will vest, if at all, in annual installments over three years, based on the Company's TSR relative to the TSR of each of the companies for each year included in the NASDAQ Telecommunications Index at the time of grant (the "Relative TSR"), measured by the Compensation Committee at the end of each of the one-year periods ending on December $31^{\text {st }}$ on a linear sliding scale rounded to the nearest whole percentile, as follows:

| March 2015 PSU Award - Tranche II |  | April 2016 PSU Award - Tranche I |  |
| :---: | :---: | :---: | :---: |
| Achievement | Payout | Achievement | Payout |
| Under $25^{\text {th }}$ Percentile | 0\% | Under $25^{\text {th }}$ Percentile | 0\% |
| $25^{\text {th }}$ Percentile | 80\% | $25^{\text {th }}$ Percentile | 50\% |
| $50^{\text {th }}$ Percentile | 100\% | $50^{\text {th }}$ Percentile | 100\% |
| $75^{\text {th }}$ Percentile | 120\% | $75^{\text {th }}$ Percentile | 150\% |
| Above $75^{\text {th }}$ Percentile | 120\% | Above 75 ${ }^{\text {th }}$ Percentile | 200\% |

The Compensation Committee chose to use annual, as opposed to three-year cumulative, metrics for the grant of its PSUs for two principal reasons. The first was that the PSUs were granted in response to stockholder feedback, and were granted in lieu of, not in addition to, time-vesting restricted shares. Because the PSUs are generally perceived to be more rigorous and therefore less likely to vest, they provide less motivation and retention value to our executives. To mitigate this diminution while still responding to shareholder concerns, the Compensation Committee determined to permit partial vesting of the PSUs on an annual basis. The second reason the Compensation Committee used annual vesting for the grant of PSUs was because each of our industry and our business is changing so rapidly that the Compensation Committee concluded that annual incentives provided better alignment between effort and incentive than three-year metrics. Simply put, with so much fundamental change, the Compensation Committee believed it was difficult to put a stake in the
ground three years in the future and expect PSUs to provide our executive officers with much incentive to march to it.

For the same reasons that the Compensation Committee chose to use annual, as opposed to three-year cumulative, metrics for the grant of its PSUs, the Compensation Committee elected to grant $25 \%$ performance-based equity awards as opposed to $50 \%$ or more. The Compensation Committee determined that $25 \%$ performance-based equity awards would provide a balance that would be responsive to stockholder concerns while motivating our executive officers to remain with the Company and work to overcome industry and Company-specific challenges.

Additionally, the Compensation Committee changed the payout metrics relating to the PSU grants for 2016. This change was intended to achieve two goals. First, the Compensation Committee wanted to reduce the PSU payout if TSR achievement was below the $50^{\text {th }}$ percentile. In 2015, the achievement was would have received an $80 \%$ payout for a $25^{\text {th }}$ percentile TSR achiev. For 2016 the achievement was below the 25ercentile and the PSUs were forfeited for that year). For 2016, the $50 \%$ payout for achievement at the $25^{\text {th }}$ percentile. With a sliding scale in between the metrics, our executive officers would have received less of a payout at every percentile below the $50^{\text {th }}$ percentile. Second, to replace the incentive that was removed below the $50^{\text {th }}$ percentile, the Compensation Second, to replace the incentive that was removed below the $50^{01}$ percentile, the Compensation
Committee elected to provide greater payout opportunity above the $50^{\text {th }}$ percentile. In other words, our executive officers would only receive a better payout if the Company had better results. The payout scale above the $75^{\text {th }}$ percentile was designed to mirror the cliff function at the $25^{\text {th }}$ percentile, such that if the Company achieved in the top quartile, our executive officers would be rewarded for the same reason that they would receive no payout (such as in 2015) for performance in the bottom quartile.

The performance criteria for our PSUs is not based on the Company's TSR as a stand-alone metric, but is a relative metric. If the TSR of our industry is low or high, the performance of the Company, and therefore our executives, is judged accordingly. For the companies included in the NASDAQ Telecommunications Index in 2016, a TSR of $-20.3 \%$ would place a company in the would place a company in the $75^{\text {th }}$ percentile. Our TSR in 2016 was $-7.67 \%$. As a result, in February 2017, the Compensation Committee determined that the Company's TSR in 2016, even though negative, placed us at the $38^{\text {th }}$ percentile and, accordingly, (i) the performance metrics for the PSUs granted on March 16, 2015 were achieved for the 2016 performance period at the $90.4 \%$ achievement level; and (ii) the performance metrics for the PSUs granted on April 1, 2016 were achieved for the 2016 performance period at the $76.0 \%$ achievement level. Therefore, 47,856 PSUs in the aggregate for the 2016 performance period vested for our CEO and certain of his direct reports, while 10,060 shares in the aggregate were forfeited. The following chart provides a summary of the PSUs eligible for vesting as they relate to the 2016 performance period:

| PSU Grant Date | Performance Metrics Achievement Level for 2016 Performance Period | Aggregate Number of PSUs Eligible for Vesting* | Aggregate Number of PSUs Vested* | Aggregate Number of PSUs Forfeited* |
| :---: | :---: | :---: | :---: | :---: |
| March 16, 2015 | 90.4\% | 26,666 | 24,106 | 2,560 |
| April 1, 2016 | 76.0\% | 31,250 | 23,750 | 7,500 |
| Total |  | 57,916 | 47,856 | 10,060 |

* The eligible vesting date for the PSUS granted on March 16, 2015 relating to the 2016 performance the 2016 performance period was April 1, 2017.

Additionally, in connection with Mr. Riley's promotion to Chief Technology Officer and Senior Vice President of Engineering and Operations, on February 16, 2016, Mr. Riley received a restricted stock grant of 25,000 shares, of which $33 \%$ vested on February 16, 2017 and the remaining $67 \%$ will stock grant of 25,000 shares, of which $16 \%$ vested on February 16 , vencough the third anniversary of the grant date, subject to his continued employment with the Company.

In recognition of Ms. Villare's service and performance in 2016 as our interim Chief Financial Officer, on December 15, 2016, Ms. Villare received a restricted stock grant of 25,000 shares, of which $33 \%$ will vest on December 15, 2017 and the remaining $67 \%$ will vest in four equal increments of $16.75 \%$ semi-annually thereafter through the third anniversary of the grant date, subject to her continued employment with the Company.

## Stock Ownership Requirements

The Board believes that it is important to link the interests of our NEOs, among others, to those of our stockholders. Our stock ownership policy requires our directors, Chief Executive Officer and other Section 16 reporting officers to accumulate and hold a minimum number of shares of Company common stock within a certain number of years of joining the Board or the Company, respectively. As of the record date, each of our directors, Chief Executive Officer and the other Section 16 reporting officers of the Company has either satisfied these ownership guidelines or had time remaining to do so. The specific stock ownership requirements for our non-employee directors, Chief Executive Officer and other Section 16 reporting officers as a multiple of annual base salary are as follows:

| Title | Multiple of Annual Base Salary |
| :--- | :--- |
| Chief Executive Officer | 6 times annual base salary |
| Section 16 Reporting Officers | 1 times annual base salary |
| Non-Employee Directors | 5 times annual cash retainer |

Each individual that is subject to this policy must maintain the applicable minimum amount of stock ownership throughout his or her employment or tenure as a director of the Company. The value of each such individual's stock ownership will be measured quarterly by the Compensation Committee

## Benefits and Other Compensation

Benefit Plans. We have various broad-based employee benefit plans. We do not typically offer perquisites or employee benefits to executive officers that are not also made available to employees on a broad basis, with the exception of $\$ 16,585$ paid to Mr. Dolan in 2016 in connection with moving expenses he incurred in 2016. Our executive officers are eligible for the same benefits that are available to all employees, which include group health insurance, life and disability insurance, discretionary 401(k) matching contributions and paid holidays. With the exception of our CEO, who began to accrue four weeks of vacation per year upon his date of hire, all other employees begin accruing three weeks of vacation per year upon date of hire. We offer a $401(\mathrm{k})$ plan, which allows our employees to invest in
a wide array of funds, and the ability to purchase shares of our common stock under our Amended and a wide array of funds, and the ability to purchase shares of our common stock under our Amended and Restated 2000 Employee Stock Purchase Plan, as amended (the "ESPP"). We do not provide pension arrangements or post-retirement health coverage for our NEOs. We also enter into executive agreements with certain of our executive officers providing for certain severance benefits that may be
triggered as a result of the termination of such officer's employment under certain circumstances. We have entered into indemnification agreements with our executive officers and directors.

Severance Agreements. We have entered into severance agreements with each of our NEOs. The severance agreements generally provide that, upon termination of the executive officer's employment without cause, the NEO is entitled to severance payments equal to $100 \%$ of his or her employment without cause, the NEO is entitled to severance payments equal to $100 \%$ of his or
base salary and target cash bonus (or $150 \%$ for our CEO), and continued health plan premium payments for up to 12 months (or 18 months for our CEO). The severance agreements also generally provide that, upon an involuntary termination in connection with a change in control, or upon a provide that, upon an involuntary termination in connection with a change in control, or upon a
resignation for good reason in connection with a change in control (each as defined in the applicable resignation for good reason in connection with a change in control (each as defined in the applicable
severance agreement), the executive officer is entitled to $150 \%$ of his or her base salary and target cash severance agreement), the executive officer is entitled to $150 \%$ of his or her base salary and target cash
bonus (or $200 \%$ for our CEO), continued health plan premium payments for up to 18 months, and full vesting of all unvested restricted stock and stock options. The severance terms of our interim CFO did not change with her promotion and therefore she is entitled to $100 \%$ of her base salary and target cash bonus upon an involuntary termination in accordance with a change in control or upon a resignation for good reason in connection with a change in control. None of our severance agreements provide for tax gross-ups in connection with severance benefits following a change-in-control. The Compensation Committee believes that these provisions are consistent with executive severance arrangements that are customary for public companies at our stage of development and were necessary in order to hire and/or retain the executives.

## Transactions Involving Hedging, Monetization, Margin Accounts, Pledges, Puts, Calls and Other

 Derivative SecuritiesThe Company's insider trading policy contains stringent restrictions on transactions in Company common stock by directors and officers. All trades must be pre-approved by the Chief Financial Officer or the General Counsel. Our current insider trading policy discourages all employees, officers and directors from engaging in transactions involving hedging, monetization, margin accounts, pledges, puts, calls and other derivative securities, and requires those who wish to enter into such an arrangement to first pre-clear the proposed transaction with either the Chief Financial Officer or the General Counsel. To date, no such transaction has been requested or approved.

## Tax and Accounting Considerations

Accounting for Stock-Based Compensation. We account for stock-based compensation in accordance with ASC 718.

Policy on Deductibility of Executive Compensation. Section 162(m) of the Code generally disallows a tax deduction for compensation in excess of $\$ 1.0$ million paid to our CEO and to each other officer (other than the Chief Financial Officer) whose compensation is required to be reported to our stockholders pursuant to the Exchange Act by reason of being among our three most highly paid executive officers. The Compensation Committee reviews the potential effect of Section 162(m) of the Code periodically and uses its judgment to authorize compensation payments that may be subject to the limit when the Compensation Committee believes such payments are appropriate and in our best interests and our stockholders' best interests, after taking into consideration changing business conditions and the performance of our employees.

## Risk Management and Our Executive Compensation Program

The Compensation Committee monitors and manages our executive compensation program to help ensure that it does not encourage excessive risk taking. The Compensation Committee concluded that our programs do not encourage excessive or inappropriate risk taking by our executive officers for the following reasons, among others:

- we structure our pay to consist of both fixed and variable compensation, so that our executive officers' cash compensation is not entirely tied to financial results;
- the variable bonus compensation of our executive officers who are covered by the SMCIP is not tied to any individual metric;
- the stock ownership guidelines are applicable to our directors and executive officers to align their interests with those of our stockholders;
- our stock option and restricted stock awards generally vest over a period of three or four years and are only valuable if our stock price increases over time; and
- none of our incentive plans is based solely on bookings or revenue targets, which mitigates the risk of employees focusing exclusively on the short term.

The Compensation Committee believes that the Company's executive compensation program is market competitive and provides suitable incentives for the NEOs to achieve sustained value for the Company and its stockholders. The Compensation Committee remains committed to providing our NEOs with competitive compensation opportunities that allow for significant upside when the Company is performing well above its corporate objectives, and the Compensation Committee believes that the Company's executive compensation program and practices incorporate a pay-for-performance approach that also avoids compensation arrangements that encourage excessive risk taking. The Compensation Committee reviewed, analyzed and considered whether the Company's compensation policies and practices create risks that are reasonably likely to have a material adverse effect on us, and concluded that no such material risks exist.

## Compensation Decisions for 2017

In response to stockholder feedback that we received over the past few years, we are providing disclosure in this Proxy Statement of the prospective performance metrics that are being utilized to determine executive bonus compensation for 2017. For 2017, the Compensation Committee continued to implement two half-year bonus periods; provided, however, that $20 \%$ of the full year target payout will be attributable to performance in the first half of 2017 and $80 \%$ of the full year target payout will be attributable to the second half of 2017. Our Compensation Committee has established the construct and fixed the metrics relating to revenue and net income for the Company's executive bonus compensation program for the first half of the year. For the second half of 2017, the Compensation Committee will maintain the same construct for the executive bonus compensation program but will change the metrics relating to revenue and net income to align payout with the Company's actual performance, thereby reducing the possibility that the metrics are either too easy or too difficult to achieve.

Our annual equity incentive grant date for all of our employees has historically been March 15 of each year, or the next business day following March 15 if March 15 falls on a weekend or a holiday However, for 2017, the annual equity incentive grant date occurred on March 31, 2017, when we issued
annual grants to our Chief Executive Officer and certain of his direct reports, $75 \%$ of which were in the form of time-vested restricted shares and $25 \%$ of which were in the form of PSUs. The time-vested restricted shares vest and become exercisable over a three-year period, whereby one-third of the shares restricted shares vest and become exercisable over a three-year period, whereby one-third of the shares
will vest on the first anniversary of the grant date and the remaining two-thirds of the shares will vest will vest on the first anniversary of the grant date and the remaining two-thirds of the shares will vest
in four equal increments semi-annually thereafter through the third anniversary of the grant date. The PSUs granted on March 31, 2017, which constitute a meaningful portion of the long-term equity PSUs granted on March 31, 2017, which constitute a meaningful portion of the long-term equity
incentive compensation for our Chief Executive Officer and his direct reports, will vest, if at all, based on the Company's TSR for each of 2017, 2018 and 2019 relative to the TSR of each of the companies for the same comparable periods included in the NASDAQ Telecommunications Index at the time of grant, subject, in each case, to the continued employment of the executive. The aggregate number of the PSUs that vest may range from zero shares to $200 \%$ of such shares.

Our Compensation Committee believes that PSU grants tied directly to our stock price more closely align the interests of our Chief Executive Officer and his direct reports with those of our stockholders.

## Conclusion

We believe that we have designed an executive compensation program that effectively links pay and performance and is in the best long-term interests of our stockholders. We will continue to re-evaluate our executive compensation program to ensure future alignment in our compensation program and practices. Stockholder input will continue to be an important consideration in our annual executive compensation evaluation process.

## EXECUTIVE COMPENSATION TABLES

The following table sets forth, for the year ended December 31, 2016 and for the two years prior thereto, the compensation earned by our Chief Executive Officer, our interim Chief Financial Officer, the other three most highly compensated executive officers serving as executive officers at December 31, 2016 (collectively, the "active Named Executive Officers" or the "active NEOs"), as well as our former Chief Financial Officer and our former Executive Vice President, Services, Product Management and Corporate Development (collectively with the active NEOs, the "Named Executive Officers" or the "NEOs").

2016 Summary Compensation Table

| Name and Principal Position | Year | $\underset{(\$)}{\text { Salary }}$ | $\underset{(\$)(1)}{\text { Bonus }}$ | $\begin{aligned} & \text { Stock } \\ & \text { Awards } \\ & (\$)(2) \end{aligned}$ | Option (\$)(3) | Non-Equity <br> Incentive <br> Plan <br> Compensation <br> (\$)(4) | $\begin{array}{\|c} \text { All Other } \\ \text { Compensation } \\ (\$)(5) \end{array}$ | $\begin{gathered} \text { Total } \\ \text { (\$) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Raymond Dolan (6) President and Chief Executive Officer | $\begin{aligned} & 2016 \\ & 2015 \\ & 2014 \end{aligned}$ | $\begin{aligned} & \$ 600,000 \\ & \$ 600,000 \end{aligned}$ \$529,168 | $\begin{aligned} & \$- \\ & \$- \\ & \$- \end{aligned}$ | $\begin{array}{\|l\|} \hline \$ 1,230,500 \\ \$ 2,351,000 \\ \$ 3,162,797 \\ \hline \end{array}$ | $\begin{array}{r} \$- \\ \$ 1,659,680 \\ \$ 2,110,300 \end{array}$ | $\begin{array}{r} \$ 559,800 \\ \$ 750,000 \\ \$- \end{array}$ | $\begin{aligned} & \$ 35,134 \\ & \$ 16,263 \\ & \$ 21,000 \end{aligned}$ | $\begin{array}{\|l} \hline \$ 2,425,434 \\ \$ 5,376,943 \\ \$ 5,823,273 \\ \hline \end{array}$ |
| Susan Villare (7) Interim Chief Financial Officer, Treasurer and Vice President, Financial Planning and Analysis | 2016 | \$225,000 | \$60,000 | \$425,850 | \$- | \$63,000 | \$18,549 | \$792,399 |
| Kevin Riley (8) <br> Senior Vice President, Engineering and Operations and Chief Technology Officer | $\begin{aligned} & 2016 \\ & 2015 \end{aligned}$ | $\begin{aligned} & \hline \$ 320,833 \\ & \$ 275,000 \end{aligned}$ | $\begin{aligned} & \$- \\ & \$- \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline \$ 788,500 \\ \$ 1,123,500 \end{array}$ | $\begin{aligned} & \$- \\ & \$- \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 27,500 \\ & \$ 325,000 \end{aligned}$ | $\$ 16,845$ \$18,012 | $\begin{aligned} & \$ 1,353,678 \\ & \$ 1,741,512 \end{aligned}$ |
| Jeffrey Snider (9) <br> Senior Vice President, Chief Administrative Officer, General Counsel and Corporate Secretary | $\begin{array}{\|l\|l\|} \hline 2016 \\ 2015 \\ 2014 \\ 20 \end{array}$ | \$350,000 $\$ 350,000$ \$303,237 | $\begin{aligned} & \$- \\ & \$- \\ & \$- \end{aligned}$ | $\begin{aligned} & \$ 615,250 \\ & \$ 951,700 \\ & \$ 480,956 \end{aligned}$ | $\begin{gathered} \$- \\ \$- \\ \$ 486,510 \end{gathered}$ | $\begin{aligned} & \$ 244,950 \\ & \$ 351,563 \\ & \$- \end{aligned}$ | $\begin{aligned} & \$ 18,549 \\ & \$ 15,553 \\ & \$ 15,553 \end{aligned}$ | $\begin{array}{\|l\|} \hline \$ 1,228,750 \\ \$ 1,668,816 \\ \$ 1,286,256 \end{array}$ |
| Michael Swade (10) Senior Vice President, Worldwide Sales | $\begin{aligned} & 2016 \\ & 2015 \end{aligned}$ | $\begin{aligned} & \hline \$ 375,000 \\ & \$ 365,340 \end{aligned}$ | $\begin{aligned} & \$- \\ & \$- \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline \$ 615,250 \\ \$ 1,605,000 \end{array}$ | $\begin{aligned} & \$- \\ & \$- \end{aligned}$ | $\begin{aligned} & \$ 262,500 \\ & \$ 295,313 \end{aligned}$ | $\begin{aligned} & \hline \$ 18,549 \\ & \$ 16,263 \end{aligned}$ | $\begin{aligned} & \$ 1,271,299 \\ & \$ 2,281,916 \end{aligned}$ |
| Mark Greenquist (11) Former Chief Financial Officer | $\begin{array}{\|l\|} \hline 2016 \\ 2015 \\ 2014 \\ \hline \end{array}$ | \$165,000 \$360,000 \$360,000 | $\begin{gathered} \$- \\ \$- \\ \$ 50,000 \end{gathered}$ | $\begin{array}{\|r\|} \hline \$ 615,250 \\ \$ 1,155,150 \\ \$ 497,755 \\ \hline \end{array}$ | $\begin{array}{r} \hline \$- \\ \$- \\ \$ 162,170 \\ \hline \end{array}$ | $\begin{gathered} \$- \\ \$ 337,500 \\ \$- \\ \hline \end{gathered}$ | $\begin{aligned} & \$ 8,518 \\ & \$ 13,940 \\ & \$ 32,948 \end{aligned}$ | $\begin{array}{\|r} \hline \$ 788,768 \\ \$ 1,866,590 \\ \$ 1,102,873 \\ \hline \end{array}$ |
| Anthony Scarfo (12) <br> Former Executive Vice President, Services, Product Management and Corporate Development | $\begin{aligned} & 2016 \\ & 2015 \\ & 2015 \\ & 2014 \end{aligned}$ | \$301,539 $\$ 400,000$ \$400,000 | $\begin{aligned} & \$- \\ & \$- \\ & \$- \end{aligned}$ | $\left.\begin{array}{\|c} \hline \$ 615,250 \\ \$ 1,037,600 \\ \$ 553,060 \end{array} \right\rvert\,$ | $\begin{array}{r} \$- \\ \$- \\ \$ 80,850 \end{array}$ | $\begin{aligned} & \$ 135,000 \\ & \$ 375,000 \\ & \$- \end{aligned}$ | $\begin{gathered} \$ 723,990 \\ \$ 11,619 \\ \$ 15,553 \end{gathered}$ | $\begin{aligned} & \$ 1,775,779 \\ & \$ 1,824,219 \\ & \$ 1,779,463 \end{aligned}$ |

(1) The amount shown in this column for Ms. Villare for 2016 represents three fixed cash bonus payments in connection with her additional responsibilities as interim CFO, comprised of three $\$ 20,000$ cash payments after the completion of
the reporting of our financial results for each of the second, third and fourth quarters of 2016 . The amount shown in the reporting of our financial results for each of the second, third and fourth qu
this column for Mr. Greenquist for 2014 represents a fixed cash bonus payment.
(2) The amounts shown in this column do not reflect compensation actually received by the NEO. Instead, the amounts reflect the grant date fair value of each stock award granted to each NEO. The grant date fair values of stock awards were calculated in accordance with ASC 718. We use the Black-Scholes valuation model to calculate the grant date fair
value of stock options. The Black-Scholes valuation model incorporates assumptions regarding the risk-free rate of return, expected stock dividends, stock price volatility and the estimated life of options to calculate the grant date fair value of an option. For a discussion of the assumptions used in granting stock awards in 2014 and 2015, please see Note 15 of our Annual Report on Form 10-K for the year ended December 31, 2016. Generally, the grant date fair value of restricted stock awards is equal to the closing price of our stock on the date of grant. The PSUs we have granted to our NEO's have both service and market conditions. The inclusion of a market condition requires the use of
a Monte Carlo simulation approach to model future stock price movements based upon the risk-free rate of return, the volatility of each entity included in the market index and the pair-wise covariance between each entity. These results are then used to calculate the grant date fair values of the PSUs.
A portion of the amounts reported in 2014 for Mr. Dolan ( $\$ 1,092,797$ ) and all of the amounts reported in 2014 for Messrs. Greenquist and Scarfo represent the amounts payable under our SMCIP with respect to 2014, which were determined pursuant to a fixed formula based on a single financial metric, net income, and were calculated by
multiplying the percentage achievement of such performance metric by the bonus at target for each participant. In
early 2014, each NEO elected to receive his 2014 bonus, if any, under our SMCIP in the form of restricted stock. Payment based on the amount approved by the Compensation Committee was made in shares of restricted stock of the
Company on February 20 , 2015, which shares vested immediately. The amounts in the table above represent the fair values of the bonus shares as of the date that the grant date criteria were met for accounting purposes and according against which the number of shares granted to each NEO was calculated. The grant date fair values of these awards incorporated the one-year post-vest trading restriction. The number of shares actually issued to each NEO was based on an approximately $105 \%$ achievement level, and the number of such shares was increased by $50 \%$ as the result of the bonuses being paid in shares of restricted stock. The number of shares granted to each NEO was determined by dividing the total bonus amount by $\$ 15.40$, the closing price of our common stock on January 2 , 2014 , rounded up for
fractional shares. If the maximum level of performance conditions had been achieved under our SMCIP for 2014, the fair values of the bonus shares received by Messrs. Dolan, Greenquist and Scarfo would have been equal to $\$ 2,071,664$ $\$ 943,592$ and $\$ 1,048,461$, respectively.
The amounts shown in this column do not reflect compensation actually received by the NEO. Instead, the amounts reflect the grant date fair value of each option award granted to each NEO. The grant date fair values of option awards were estimated in accordance with ASC 718 using the Black-Scholes valuation model. The assumptions we use in calculating these amounts are discussed in Note 15 to our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016. Our NEOs did not receive any grants of stock
options in 2016.
(4) The amounts shown in this column represent the amounts earned under our SMCIP with respect to 2016. For 2016, the Compensation Committee elected to implement two half-year bonus periods such that $30 \%$ of the full year target payout was attributable to the first half of 2016 and $70 \%$ of the full year target payout was attributable to the second
half of 2016. The Compensation Committee determined the financial metrics upon which such bonus payments would be made on the same half-year basis. Accordingly, our eligible NEOs received their 2016 bonus payouts in August 2016 ( $30 \%$ of target based on achievement of the financial metrics for the first half of 2016) and in March 2017 ( $70 \%$ of target based on achievement of the financial metrics for the second half of 2016). Based on these fixed metrics, in July 2016, our Compensation Committee determined that the achievement level under the SMCIP for the first half of 2016
was at $164 \%$ of target. However, the Compensation Commitee determined to decrease the payout of cash bonses to was at $164 \%$ of target. However, the Compensation Committee determined to decrease the payout of cash bonuse
$150 \%$ of target. In February 2017, the Compensation Committee determined that the achievement level under the SMCIP for the second half of 2016 was at $69 \%$ of target. Based upon these achievement levels, the overall financia performance resulted in an aggregate cash bonus payout for 2016 of $93 \%$.
The amounts shown in this column for 2015 represent the amounts earned under our SMCIP with respect to 2015. O December 26,2014 , the NEOs elected to receive all of their 2015 bonus, if any was earned, in the form of restricted stock (the "2015 Bonus Shares"). The number of shares of the Company's common stock that would be granted to the NEOs would be calculated by dividing an amount equal to 1.5 times each NEO's 2015 Bonus earned by $\$ 20.55$, the Shares was met on July 2,2015 and accordingly, recorded stock-based compensation expense based on the grant date fair value of $\$ 6.79$ per share. In September 2015, the Compensation Committee considered the impact on employee retention and incentive compensation caused by the drop in price of our common stock since January 2, 2015, and indicated its intent to pay the NEOs their 2015 bonus, if any was earned, in cash. As a result, on September 25, 2015, we reclassified the stock-based compensation expense recorded through that date in connection with the 2015 Bonus Shares from Additional paid-in capital to Accrued expenses and recorded incremental bonus expense to properly
reflect the liability related to such cash payment of the 2015 bonus. We did not record any additional stock-based compensation expense in subsequent periods in connection with the 2015 Bonus Shares, but instead recorded bonus expense through December 31, 2015. The 2015 bonus was paid in cash to the NEOs on March 15 , 2016. With the exception of Mr. Riley, the amounts represent the bonus amounts payable based on a $125 \%$ achievement level. Mr. Riley's bonus achievement of $125 \%$ would have equaled $\$ 304,688$. However, in recognition of Mr. Riley's the Chief Executive Officer recommended and the Compensation Committee agreed to award Mr. Riley a bonus in the fixed amount of $\$ 325,000$.
(5) The Company portions of health insurance premiums and 401(k) matching contributions included in this column are also provided to all employees of the Company, with the amounts dependent upon the levels of health and group term also providec to all employecs of the Company, with the amounts dependent upon the levels of health and group tern
life insurance coverage selected by each individual. Accordingly, the Company portion of premiums paid and $401(\mathrm{k})$ matching contributions are not considered perquisites but are reported as income earned for each NEO
On January 2, 2014, Mr. Dolan elected to receive restricted shares of the Company's common stock in lieu of his base salary in cash for the period from January 1, 2014 through December 31, 2014 (the "2014 Dolan Salary Shares"). Mr. Dolan had previously not received any cash salary payments from the Company for this period. On January 2,
2014, the Company granted Mr. Dolan 48,701 shares of restricted common stock (having a total grant date fair value
$\$ 750,000$, equal to 1.5 times Mr. Dolan's base salary for the year ended December 31, 2014). The number of share was calculated by dividing an amount equal to 1.5 times Mr. Dolan's base salary for the period from January 1, 2014 through December 31, 2014 by $\$ 15.40$, the closing price of the Company's common stock on the date of grant, rounded up for fractional shares. The 2014 Dolan Salary Shares vested on December 31, 2014. In addition, effective pronted and paid in cash in an and $\$ 29167$ (the "Dolan Prorted Salary Cash Payment") purse to the Company's general payroll practices and was not subject to any stock-for-cash election. Accordingly, the amount reported for Mr. Dolan as "Salary" for 2014 in the table above represents the Dolan Prorated Salary Cash Payment plus the $\$ 500,000$ in salary foregone by Mr. Dolan in exchange for the 2014 Dolan Salary Shares. In addition, the amount reported for Mr. Dolan as "Stock Awards" Dolan Salary Shares.
Mr. Dolan's 2016 "All Other Compensation: of $\$ 35,134$ is comprised of $\$ 17,549$ for the Company's portion of his health insurance, $\$ 16,585$ for reimbursement of his moving costs and $\$ 1,000$ for the Company's matching contribution Mr. Dolan's 2014 "All Other Compensation" of $\$ 21,008$ is related to health insurance and comprised of $\$ 15,553$ for th Company's portion of his health insurance and $\$ 5,455$ for the employee portion of his health insurance, which the Company paid on his behalf, as Mr. Dolan did not receive a cash salary in 2014 with the exception of $\$ 29,167$ in cash

Ms. Villare's 2016 "All Other Compensation" of $\$ 18,549$ is comprised of $\$ 17,549$ for the Company's portion of her health insurance and $\$ 1,000$ for the Company's matching contribution to her $401(\mathrm{k})$ account. Mr. Riley's 2016 "All Other Compensation" of $\$ 16,845$ is comprised of $\$ 12,514$ for the Company's portion of his healt insurance, $\$ 3,331$ related to patents held by the Company and for which the granting of such patents is partially attributable to Mr. Riley and $\$ 1,000$ for the Company's matching contribution to his $401(\mathrm{k})$ account. Mr. Riley's 2015 All Other Compensation" of $\$ 18,012$ is comprised of $\$ 11,594$ related to health insurance and $\$ 6,418$ related to paten held by the Company and for which the granting of such patents is partially attributable to Mr. Rile.
(9) Mr. Snider's 2016 "All Other Compensation" of $\$ 18,549$ is comprised of $\$ 17,549$ for the Company's portion of his Other Compenstion" of $\$ 15,553$ relates to helth insurace. Mr. Snider's 2014 "All Other Compensatio" of $\$ 15,553$ relates to health insurance.
(10) Mr. Swade's 2016 "All Other Compensation" of $\$ 18,549$ is comprised of $\$ 17,549$ for the Company's portion of his Mr. Swade's 2016 "All Other Compensation" of $\$ 18,549$ is comprised of $\$ 17,549$ for the Company's portion of his
health insurance and $\$ 1,000$ for the Company's matching contribution to his $401(\mathrm{k})$ account. Mr. Swade's 2015 "Al Other Compensation" of $\$ 16,263$ relates to health insurance.
(11) Mr. Greenquist's 2016 "All Other Compensation" of $\$ 8,518$ is comprised of $\$ 7,518$ for the Company's portion of his health insurance through June 15,2016 and $\$ 1,000$ for the Company's matching contribution to his $401(\mathrm{k})$ account. Other Compensation" of $\$ 32,948$ is comprised of $\$ 17,395$ related to lodging expenses and $\$ 15,553$ related to health insurance.
(12) Mr. Scarfo's 2016 "All Other Compensation" of $\$ 723,990$ is comprised of $\$ 700,000$ of cash payments representing 12 months of salary and bonus and $\$ 12,540$ for continued health insurance in connection with Mr. Scarfo's separation from the Company effective October 3, 2016, $\$ 10,450$ for the Company's portion of his health insurance throug October 3,2016 and $\$ 1,000$ for the Company's matching contribution to his $401(\mathrm{k})$.Mr. Scarfo's 2015 "All Other
Compensation" of $\$ 11,619$ relates to health insurance. Mr. Scarfo's 2014 "All Other Compensation" of $\$ 15,553$ relate to health insurance.

## Grants of Plan-Based Awards in 2016

The following table sets forth information about incentive plan awards made to the NEOs during the year ended December 31, 2016:

2016 GRANTS OF PLAN-BASED AWARDS

| Name | $\begin{aligned} & \text { Grant } \\ & \text { Date } \end{aligned}$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \substack{\text { Cocion(1) }} \end{array}$ | Estimated Future PayoutsUnder Non-Equity Incentiv Plan Award |  |  | Estimated Future PayoutsUnder Equity IncentivePlan Awards |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \substack{\text { Threshold } \\ (S)(2)} \end{gathered}$ | $\begin{aligned} & \text { Target } \\ & (S) \end{aligned}$ | $\underset{\substack{\text { Maximum } \\(\mathbf{s}(2)}}{\substack{\text { arum }}}$ | $\begin{aligned} & \text { Threshold } \\ & (\#)(3) \end{aligned}$ | ${ }_{(1)}^{\text {Target }}$ (3) | $\begin{gathered} \text { Maximum } \\ (\neq 1)(3) \end{gathered}$ |  |  |  |  |
| Raymond Dolan | $\begin{gathered} 411 / 166 \\ 41 / 1 / 6 \\ = \end{gathered}$ | $\begin{array}{\|l\|} \hline 3 / 288 / 16 \\ 3 / 2 / 16 \\ 2 / 8 / 16 \\ 9 / 13 / 16 \end{array}$ | ${ }_{s}^{\text {s- }}$ | \$180,000 | $\$ 360,000$ | - | 37,500 | 75,00 | 112,500 |  |  | ¢ |
| Susan Villare | $\begin{array}{\|c} \hline 4 / 1 / 1 / 16 \\ 12 / 15 / 6 \\ = \end{array}$ | $\begin{aligned} & 3 / 281616 \\ & 121816 \\ & .1816 \\ & 2 / 1 / 16 \end{aligned}$ | $\begin{aligned} & \substack{s-\\ s-\\ \hline} \end{aligned}$ | $\begin{aligned} & 520,20250 \\ & \hline 44,250 \end{aligned}$ | $\begin{aligned} & 540,500 \\ & 594,500 \end{aligned}$ |  |  |  | 30,000 25,000 |  |  | Stive, |
| Kevin Riley |  |  | $\begin{aligned} & \substack{s-\\ s-\\ \hline} \end{aligned}$ | $\begin{aligned} & 57,125 \\ & \text { si70,625 } \end{aligned}$ | S14,, 50 <br> $\$ 341,250$ | - | 18,750 | 37,500 |  |  |  | (177,250 $\begin{aligned} & \text { sin),20 } \\ & \text { S423,000 }\end{aligned}$ |
| Jeffrey Snider | $\begin{array}{r}4 / 1 / 166 \\ 4 / 1 / 16 \\ - \\ - \\ \hline\end{array}$ | $\begin{aligned} & 3 / 281616 \\ & \begin{array}{l} 32816 \\ \text { alk } \\ 9 / 1316 \end{array} \\ & 9 \end{aligned}$ | $\underset{s-}{s-}$ | $\begin{aligned} & \$ 78,750 \\ & \mathbf{y} 183,750 \end{aligned}$ | $\underset{\substack{\$ 157,500 \\ \$ 36,500}}{ }$ | - | 18,750 | 37,500 | 56,250 |  |  |  |
| Michael Swade | $\begin{gathered} 41 / 1166 \\ 41 / 16 \\ = \\ \hline \end{gathered}$ | $\begin{aligned} & 3 / 281616 \\ & 38216 \\ & \begin{array}{l} 281616 \\ 9,1316 \end{array} \end{aligned}$ | $\begin{aligned} & s- \\ & s- \\ & \hline \end{aligned}$ | $\begin{array}{\|c} 58,475 \\ \text { si9, } 875 \end{array}$ | $\begin{gathered} 8168,750 \\ 5393,750 \\ \hline \end{gathered}$ | - | 18,750 | 37,500 | 56,250 |  |  | ( |
| Mark Greenquist (5) | ${ }_{4}^{4 / 1 / 1 / 16}$ | $\begin{aligned} & \begin{array}{l} 328816 \\ 32816 \\ 281616 \end{array} \end{aligned}$ | s- | \$81,000 | \$182,000 | - | 18,750 | 37,500 | 56,250 |  |  | ( |
| Anthony Scarto (6) | $\begin{aligned} & 411 / 1 / 6 \\ & 41 / 1 / 6 \\ & -6 \end{aligned}$ | $\begin{aligned} & 328816 \\ & \begin{array}{l} 32816 \\ 281816 \end{array} \end{aligned}$ | \$- | \$90,000 | \$180,000 | - | 18,750 | 37,500 | 56,250 |  |  |  |

(1) Date on which the Compensation Committee took action to approve the award or the performance metrics for achievement of such award, as applicable.
(2) The amounts shown in this column represent the bonus amounts potentially payable under our SMCIP with respect to 2016. For 2016, the Compensation Committee elected to implement two half-year bonus periods such that $30 \%$ of the full year target payout was attributable to the first half of 2016 and $70 \%$ of the full year target payout was attributable to the second half of 2016. On February 8, 2016 and September 13, 2016, the Compensation Committee determined the financial metrics upon which such bonus payments would be mad for the first and second halves of 2016, respectively. Accordingly, our eligible NEOs received their 2016 bonus payouts in August 2016 ( $30 \%$ of target based on achievement of the financial metrics for the first half of 2016) and in March 2017 ( $70 \%$ of target based on achievement of the financial metrics for the second half of 2016). Based on these fixed metrics, on July 20, 2016, our Compensation Committee determined that the achievement level under the SMCIP for the first half of 2016 was at $164 \%$ of target. However, the Compensation Committee determined to decrease the payout of cash bonuses to $150 \%$ of arget. On February 8, 2017, the Compensation Committee determined that the achievement level under the SMCIP for the second half of 2016 was at $69 \%$ of target. Based upon these achievement levels, the overall financial performance resulted in an aggregate cash bonus payout for 2016 of $93 \%$.
(3) On April 1, 2016, we granted an aggregate of 131,250 PSUs under the Amended Plan with both market and service conditions to our NEOs. The terms of the PSUs are such that up to one-third of the shares subject to the PSUs will vest on each of the first, second and third anniversaries of the date of grant to the extent of achievement of our TSR compared to the TSR of the companies included in the NASDAQ Telecommunications Index for the same Performance Period, measured by the Compensation Committee at the end of the one yea periods ending on December 31, 2016, 2017 and 2018, respectively (each, a "Performance Period"). The shares determined to be earned will vest on the anniversary of the grant date following each Performance Period. Shares subject to the PSUs that fail to be earned will be forfeited. The PSUs include a market condition that required the use of a Monte Carlo simulation approach to model future stock movements based upon the risk-free rate of return, the volatility of each entity and the pair-wise covariance between each entity. These results were then used to calculate the grant date fair values of the PSUs. Under ASC 718, we are required to record expense related to the PSUs regardless of whether the market conditions are satisfied and the shares ultimately vest. In February 2017, the Compensation Committee determined that the performance metrics for the PSUs granted on April 1, 2016 were achieved for the 2016 performance period at the $76.0 \%$ achievement level for Relative TSR at the $38^{\text {th }}$ percentile and accordingly, the related PSUs held by our Named Executive Officers aggregating 24,106 units were released to the respective grant-holders and the remaining 2,560 forfeited.
(4) Amounts reflect the grant date fair values of the restricted stock awards and units and stock option grants estimated in accordance with ASC 718 as of the respective grant dates.
(5) Mr. Greenquist resigned his position with the Company effective June 15, 2016 and accordingly, did not receive his cash bonus under the SMCIP for the first half of 2016. Due to the date of his resignation, he was not included in the metrics for the SMCIP for the second half of 2016 and accordingly, there is only one grant in the table above for "Estimated Future Payments Under Non-Equity Incentive Plan Awards" related to Mr. Greenquist.
(6) Mr. Scarfo received his bonus payment under the SMCIP for the first half of 2016. On July 27, 2016, we announced that Mr. Scarfo was stepping down as Executive Vice President Services, Product Management and Corporate Development, effective immediately, but would remain with the Company in an advisory role to assist in the transition of his duties until October 3, 2016. As a result, Mr. Scarfo was not included in the metrics for the SMCIP fo he second half of 2016 and accordingly, there is only one grant in the table above for "Estimated Future Payments Under Non-Equity Incentive Plan Awards" related to
Mr. Scarfo. However, Mr. Scarfo received certain payments in connection with his separation from the Company, including payment of a full year's target bonus under SMCIP. These payments are included in the "All Other Compensation" column of the "Summary Compensation Table".

## Outstanding Equity Awards at Fiscal Year End

The following table sets forth information concerning stock options and unvested stock awards held by the NEOs as of December 31, 2016:

OUTSTANDING EQUITY AWARDS AT 2016 FISCAL YEAR-END

| Name | Option Awards |  |  |  |  | Stock Awards |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Securtites Underting Unexrised Option sifl Exercisable |  |  | $\begin{gathered} \text { Option } \\ \substack{\text { Exercise } \\ \text { Price } \\ \text { (\$) }} \end{gathered}$ | $\underset{\substack{\text { Option } \\ \text { Exation } \\ \text { Date }}}{ }$ | Number of Shanes or Sto Stoct of that Have thot Vested (\#) | Market Salae of Shares or Unit or Stock That Have Not Vested (s) $(2)$ |  |  |
| Raymond P. Dolan | $\begin{aligned} & 200,000 \\ & 125,000 \\ & 84,35 \\ & 78,75 \\ & 137,500 \\ & 116,389 \end{aligned}$ | $\begin{array}{r} \hline- \\ 5,625 \\ 11,25 \\ 1,2,500 \\ 6, \\ 83,611 \end{array}$ |  | $\begin{aligned} & \hline \$ 16.90 \\ & \$ 14.60 \\ & \$ 12.55 \\ & \$ 16.50 \\ & \$ 18.10 \\ & \$ 16.05 \end{aligned}$ |  | $\begin{gathered} 50,000 \\ 37,499 \\ 66,66 \\ 612,500 \\ 112 \end{gathered}$ | \$236,244 \$419,996 \$708,750 | $\begin{aligned} & 16,667 \\ & 37,500 \end{aligned}$ | $\begin{aligned} & \hline \$ 105,002 \\ & \$ 236,250 \end{aligned}$ |
| Susan Villare | $\begin{aligned} & 12,134 \\ & 3,500 \\ & 5,250 \\ & 6,193 \\ & 6, \end{aligned}$ | 375 750 2,815 |  | $\begin{aligned} & \$ 14.45 \\ & \$ 12.55 \\ & \$ 16.50 \\ & \$ 18.10 \end{aligned}$ | $\begin{aligned} & 3 / 15 / 22 \\ & 3 / 15 / 23 \\ & 6 / 17 / 23 \\ & 3 / 17 / 24 \end{aligned}$ | $\begin{array}{r} 10,000 \\ 3,333 \\ 30,000 \\ 25,000 \end{array}$ | $\begin{aligned} & \$ 63,000 \\ & \$ 20,998 \\ & \$ 189,000 \\ & \$ 157,500 \end{aligned}$ |  |  |
| Kevin Riley | $\begin{array}{r} 7,000 \\ 1,300 \\ 15,000 \\ 1,625 \\ 1,3,125 \\ 1,50 \\ 20,625 \\ \hline 2025 \end{array}$ | $\begin{array}{r} - \\ - \\ \begin{array}{c} 3,855 \\ 1,875 \\ 1,300 \\ 9,375 \end{array} \\ \hline \end{array}$ |  | $\begin{aligned} & \$ 14.75 \\ & \$ 14.45 \\ & \$ 8.80 \\ & \$ 12.55 \\ & \$ 16.50 \\ & \$ 15.40 \\ & \$ 18.10 \end{aligned}$ |  | $\begin{array}{r} 5,000 \\ 26,249 \\ 25,000 \\ 5,250 \end{array}$ | $\begin{aligned} & \$ 31,500 \\ & \$ 13,36 \\ & \$ 157,50 \\ & \$ 374,575 \end{aligned}$ | $\begin{aligned} & 11,667 \\ & 18,750 \end{aligned}$ | $\begin{aligned} & \$ 73,502 \\ & \$ 118,125 \end{aligned}$ |
| Jeffrey Snider | $\begin{aligned} & 29,750 \\ & 25,000 \\ & 10,46 \\ & 28,125 \\ & 30,625 \\ & 41,250 \end{aligned}$ | $\begin{array}{r} - \\ \overline{1,875} \\ 4,375 \\ 18,750 \end{array}$ |  | $\begin{aligned} & \$ 9.70 \\ & \$ 11.40 \\ & \$ 14.45 \\ & \$ 12.55 \\ & \$ 16.50 \\ & \$ 18.10 \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline 6 / 15 / 19 \\ 10 / 17 / 21 \\ 3 / 15 / 22 \\ 3 / 15 / 23 \\ 6 / 17723 \\ 3 / 17 / 24 \end{array}$ | $\begin{array}{r} 3,125 \\ 1,749 \\ 1,3,33 \\ 56,250 \end{array}$ | $\begin{aligned} & \$ 1,688 \\ & \$ 112,8119 \\ & \$ 83,998 \\ & \$ 35,375 \end{aligned}$ | $\begin{aligned} & 8,334 \\ & 18,750 \\ & 1 \end{aligned}$ | $\begin{array}{r} \$ 52,504 \\ \$ 118,125 \end{array}$ |
| Michael Swade | 19,375 | 10,625 |  | \$16.10 | 5/15/24 | $\begin{gathered} 3,750 \\ 5,500 \\ 37,49 \\ 5,250 \end{gathered}$ | $\begin{aligned} & \$ 23,255 \\ & \$ 33,500 \\ & \$ 23,644 \\ & \$ 354,375 \end{aligned}$ | $\begin{aligned} & 16,667 \\ & 18,750 \end{aligned}$ | \$105,002 \$118,125 |
| Mark T. Greenquist | - | - |  | s- |  | - | S- | - | \$- |
| Anthony Scarfo | 30,000 20,00 50,00 4,000 55,00 37,500 87,500 | - - - $=$ $=$ - |  | $\begin{aligned} & \hline \$ 1.90 \\ & \$ 1.45 \\ & \$ 11.25 \\ & \$ 12.55 \\ & \$ 16.50 \\ & \$ 14.55 \\ & \$ 8.10 \\ & \hline \end{aligned}$ | $101 / 2 / 19$ $10 / 19$ $10 / 2 / 19$ $10 / 2 / 19$ $10 / 2 / 9$ $101 / 2 / 19$ $10 / 2 / 19$ |  |  |  |  |

(1) Of Mr. Dolan's 5,625 unvested stock options, 1,875 vested on the $15^{\text {th }}$ of each month through March 15, 2017. Of Mr. Dolan's 11,250 unvested stock options, 1,875 will vest on the $17^{\text {th }}$ of each month through June 17, 2017. Of Mr. Dolan's 62,500 unvested stock options, 4,167 will
vest on the $17^{\text {th }}$ of each month through March 17, 2018. Of Mr. Dolan's 83,611 unvested stock options, 5,574 will vest on the $16^{\text {th }}$ of each month through March 16, 2018.
Of Ms. Villare's 375 unvested stock options, 125 vested on the $15^{\text {th }}$ of each month through March 15, 2017. Of Ms. Villare's 750 unvested stock options, 125 will vest on the $17^{\text {th }}$ of each month through June 17, 2017. Of Ms. Villare's 2,815 unvested stock options, 188 will vest on the $17^{\text {th }}$ of each month through March 17, 2018.
Of Mr. Riley's 375 unvested stock options, 125 vested on the $15^{\text {th }}$ of each month through March 15, 2017. Of Mr. Riley's 1,875 unvested stock options, 313 will vest on the $17^{\text {th }}$ of each month through June 17, 2017. Of Mr. Riley's 1,300 unvested stock options, 100 will vest on the $15^{\text {th }}$ of each month through January 15, 2018. Of Mr. Riley's 9,375 unvested stock options, 625 will vest on the $17^{\text {th }}$ of each month through March 17, 2018.
Of Mr. Snider's 1,875 unvested stock options, 625 vested on the $15^{\text {th }}$ of each month through March 15, 2017. Of Mr. Snider's 4,375 unvested stock options, 729 will vest on the $17^{\text {th }}$ of each month through June 17, 2017. Of Mr. Snider's 18,750 stock options, 1,250 will vest on the $17^{\text {th }}$ of each month through March $17,2018$.
Of Mr. Swade's 10,625 unvested stock options, 625 will vest on the $5^{\text {th }}$ of each month through May 5, 2018.
Mr. Greenquist resigned his position with the Company effective June 15, 2016 and accordingly, forfeited his unvested stock options and stock awards.
In connection with Mr. Scarfo's separation from the Company effective October 3, 2016, the vesting of certain of his outstanding stock options, shares of restricted stock and performancebased stock units was accelerated to October 3, 2016, and any remaining unvested stock options, shares of restricted stock and performance-based stock units were forfeited. Additionally, the exercise period for his exercisable stock options was extended to October 2, 2019.
(2) In accordance with SEC rules, the market value of unvested shares of restricted stock is determined by multiplying the number of such shares by $\$ 6.30$, the closing market price of our common stock on December 30, 2016 .

## Option Exercises and Stock Vested

The following table summarizes for the NEOs in 2016 the number of shares acquired upon the exercise or vesting, as applicable, of stock options and stock awards and the value realized, before payout of any applicable withholding tax. None of our current executives exercised stock options during 2016.

## 2016 OPTION EXERCISES AND STOCK VESTED

## Name

Raymond P. Dolan
Susan Villare
Kevin Riley
Jeffrey Snider
Michael Swade
Michael Swade
Mark T. Greenquis
Mark T. Greenq
Anthony Scarfo

| Option Awards |  | Stock Awards |  |
| :---: | :---: | :---: | :---: |
| Number of <br> Shares Acquired <br> on Exercise <br> (\#) | Value Realized (\$) | Number of <br> Shares A Acquired <br> on Vesting <br> (\#)(1) | Value Realized on Vesting (\$)(2) |
| - | - | 95,835 | \$781,638 |
| - | - | 12,917 | \$101,127 |
| - | - | 28,751 | \$222,570 |
| - | - | 31,668 | \$247,785 |
| - | - | 42,501 | \$327,895 |
| - | - | 22,501 | \$171,120 |
| - | - | 101,981 | \$790,029 |

(1) Of the 95,835 shares that vested and were released to Mr. Dolan in 2016, 45,136 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares. Of the 12,917 shares that vested and were released to Ms. Villare in 2016, 4,125 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares. Of the 28,751 shares that vested and were released to Mr. Riley in 2016, 9,342 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares.
Of the 31,668 shares that vested and were released to Mr. Snider in 2016, 10,455 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares. Of the 42,501 shares that vested and were released to Mr. Swade in 2016, 12,896 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares. Of the 22,501 shares that vested and were released to Mr. Greenquist in 2016, 7,312 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares.
Of the 101,981 shares that vested and were released to Mr. Scarfo in 2016, 50,203 shares were returned to us to satisfy the tax withholding obligation associated with the vesting of the shares.
(2) In accordance with SEC rules, the aggregate dollar amount realized upon vesting of shares of restricted stock was determined by multiplying the number of shares by the closing market price of our common stock on the date of vesting.

## EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2016 with respect to the shares of our common stock that may be issued under our existing equity compensation plans:

| Plan Category | (A) <br> Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights | (B) <br> Weighted Average Exercise Price of Outstanding Options Warrants and Rights | (C) <br> Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflecte in Column (A)) |
| :---: | :---: | :---: | :---: |
| Equity Compensation Plans Approved by Stockholders | 5,340,396(1) | \$15.92(2) | 3,399,885(3) |
| Equity Compensation Plans Not Approved by Stockholders . | 527,014(4) | \$13.84(5) | -(6) |
| Total | 5,867,410(7) |  | 3,399,885 |

(1) Consists of 5,083,092 options to purchase common stock of the Company, 110,219 RSUs and 147,085 PSUs, all of which do not have voting or other rights of ownership, under the Amended Plan or the Amended and Restated 1997 Stock Incentive Plan (the "1997 Plan"). Excludes purchase rights accruing under the ESPP.
(2) Represents the weighted average exercise price for the 4,846,879 outstanding options to purchase the Company's common stock under the Amended Plan and 236,213 outstanding options to purchase the Company's common stock under the 1997 Plan. The RSUs and PSUs that have been issued under our equity compensation plans do not require a payment by the recipient to us at the time of vesting. As such, the weighted average exercise price does not take these awards into account.
(3) Consists of shares available for future issuance under the Amended Plan and the ESPP. As of December 31, 2016, $1,718,751$ shares of common stock were available for issuance under the December 31, 2016, 1,718 , 51 shares of common stock were available for issuance under the ESPP. In addition to being available for future issuance upon exercise of options that may be ESPP. In addition to being available for future issuance upon exercise of options that may be
granted after December 31, 2016, the shares available under the Amended Plan may also be issued in the form of restricted stock, RSUs, SARs, performance-based awards or other equitybased awards. However, shares granted under the Amended Plan in the form of awards other than options or SARs reduce the remaining available pool of shares at a ratio of 1:1.50 (or 1:1 if Proposal 2, approving the amendment and restatement of the Amended Plan, is approved by our stockholders at our 2017 Annual Meeting).
(4) In connection with the Company's August 24, 2012 acquisition of NET, the Company assumed NET's 2008 Equity Incentive Plan and renamed it the 2008 Stock Incentive Plan (the "2008 Plan"). In connection with the Company's February 19, 2014 acquisition of PT, the Company assumed PT's 2001 Stock Option Plan (the "2001 Plan"), 2003 Omnibus Incentive Plan (the 2003 Plan") and 2012 Stock Incentive Plan (the "2012 Plan"). The amount reported here is comprised of options to purchase an aggregate of 442,937 shares of common stock under the 2008 Plan and options to purchase 84,077 shares of common stock in the aggregate und outstanding as of the respective dates of acquisition of NET and PT and assumed by the Company or granted under either the 2008 Plan or the 2012 Plan since the respective acquisition dates. At the time of the acquisition of PT, no future awards could be granted under either the 2001 Plan or the 2003 Plan. As of December 2, 2014, no future awards could be granted under either the 2008 Plan or 2012 Plan.
(5) Represents the weighted average exercise price for all options to purchase the Company's common stock outstanding under the 2008 Plan, 2001 Plan, 2003 Plan and 2012 Plan (see Note 4 above).
(6) At the Company's special meeting of stockholders on December 2, 2014, our stockholders approved amendments to the Amended Plan that, among other matters, transferred all shares available for future issuance from each of the 2008 Plan and 2012 Plan to the Amended Plan and provided that any outstanding awards under the 2008 Plan and 2012 Plan that expire, are
terminated, cancelled, surrendered or forfeited, or are repurchased by the Company at their original issuance price pursuant to a contractual repurchase right under the 2008 Plan or 2012 Plan will be returned to the Amended Plan.
(7) Represents 5,610,106 options outstanding, in the aggregate, under both approved and unapproved Sonus Plans (as defined under the heading "Stock Option and Restricted Stock Grant Policy"); 110,219 outstanding RSUs under approved Sonus Plans; and 147,085 outstanding PSUs under approved Sonus Plans. This number excludes $2,030,028$ outstanding RSAs, as the RSAs carry all rights of ownership with the exception of the ability to trade the shares until such shares are released, if at all, to the award recipients.

## 2008 Plan

No new awards have been granted under the 2008 Plan since December 2, 2014, the date of the Company's special meeting of stockholders when our stockholders approved amendments to the Amended Plan that, among other matters, transferred all shares available for grant at the time from the 2008 Plan to the Amended Plan; however, awards previously granted under
the 2008 Plan remained outstanding. Any outstanding awards under the 2008 Plan that expire, are terminated, cancelled, surrendered or forfeited, or are repurchased by us at their original issuance price pursuant to a contractual repurchase right under the 2008 Plan will be returned to the Amended Plan.

The 2008 Plan is administered by our Board, by a committee appointed by our Board, and/or by other delegates approved by our Board consistent with applicable law (the "Plan Administrator"). Subject to the provisions of the 2008 Plan, the Plan Administrator has exclusive authority, with the ability to delegate such authority, to determine the terms of the awards. The Plan Administrator has the authority to establish rules and regulations for proper plan administration.

Stock Options: The exercise price of any option granted under the 2008 Plan may not be less than fair market value of the common stock on the date of grant. The Plan Administrator cannot cancel outstanding options and grant replacement options at a lower exercise price for (except in connection with a change of capitalization). The maximum period during whic option may remain outstanding may not exceed seven years. Generally, if an optionee's service to the Company terminates other than by reason of death or disability, vested options will remain exercisable for a period of three months following the optionee's termination. If an remain exercisable for a period of three months following the optionee s termination. If
optionee dies or becomes disabled while an employee or director of, or a consultant or independent contractor to, the Company, or dies within three months following termination, the optionee's vested options will be exercisable for one year following death or disability, or if earlier, the expiration of the term of the option. The Plan Administrator may, in its discretion, either extend the exercise period for any option, but not beyond the expiration date, or accelerate the vesting of the option. Incentive stock options are not assignable or transferable other than by will or by the laws of inheritance and, during the optionee's lifetime, the option may be exercised only by the optionee. Other options are generally not assignable or
transferable other than by will or by the laws of inheritance, though the Plan Administrator may in its discretion permit transfers that are not for consideration.

Adjustments Upon Changes in Capitalization: In the event of any stock split, reverse stock split, stock dividend, combination or reclassification of our common stock or any other change to the capital structure of the Company (effected without receipt of consideration by the Company) common stock covered by each outstanding award and (2) the price per share of common stock covered by each such outstanding award under the 2008 Plan.

Corporate Transactions: In the event of certain "Corporate Transactions" that constitute a "Change in Control" of Sonus (each as defined in the 2008 Plan), if outstanding options or stock awards are not assumed by the successor corporation or parent thereof or replaced by an equivalent option or stock award for the stock of the successor corporation, then, subject to any limitations imposed at the time of grant, the vesting of such awards will accelerate and become fully exercisable. In addition, the Plan Administrator has discretion, either in advance
of or at the time of such a "Change in Control", to provide for the automatic acceleration of of or at the time of such a "Change in Contro, to provide for the automatic acceleration of be automatically accelerated if the officer is terminated in conjunction with, or within one ye be automatically accelerated the officer is terminated in conjuction with, or within one year after, the Change in Control.

Hostile Takeovers: Upon the occurrence of a Hostile Take-Over, each option in effect for at least six months will automatically be canceled and the optionee will be entitled to a cash payment as determined under the 2008 Plan

## 2012 Plan

No new awards have been granted under the 2012 Plan since December 2, 2014, the date of the Company's special meeting of stockholders when our stockholders approved amendments to the Amended Plan that, among other matters, transferred all shares available for grant at the time from the 2012 Plan to the Amended Plan; however, awards previously granted under the 2012 Plan remained outstanding. Any outstanding awards under the 2012 Plan that expire, are terminated, cancelled, surrendered or forfeited, or are repurchased by us at their original issuance price pursuant to a contractual repurchase right under the 2012 Plan will be returned to the Amended Plan.
Subject to the limitations in the 2012 Plan, our Board may at any time unilaterally amend any unexercised, unearned or unpaid award, including, but not by way of limitation, awards earned but not yet paid, to the extent it deems appropriate; provided, however, that (i) any such amendment which, in the opinion of our Board, materially impairs the rights or materially consent of the participant (or, upon the participant's death, the person having the right to exercise the award), except that amendments to implement administrative changes to the 2012 Plan that are deemed necessary or advisable by our Board for compliance with laws will not require participant consent, and (ii) no such amendment will cause a violation of Section 409A require partic
of the Code.

Stock Options: All stock options under the 2012 Plan, except under certain circumstances contemplated in the 2012 Plan, have a vesting schedule not less than one year from the date of grant. The 2012 Plan requires all options to have an exercise price of not less than $100 \%$ of the fair market value of the shares subject to the option on the date of grant, as determined by our Board and specified in the applicable option agreement. The duration of the option is set forth in the applicable option agreement. The 2012 Plan requires that no option be granted with a
term in excess of 10 years. Upon exercise, the exercise price of a stock option under the 2012 Plan may, at our Board's discretion, be paid in cash (or equivalents), or by tendering, by eithe actual delivery of shares or by attestation, shares of common stock, by withholding shares otherwise issuable in connection with the exercise of the option (but only for non-qualified stock options issued under the 2012 Plan), a combination of the foregoing, or such other consideration as our Board may deem appropriate.

Restricted Stock Awards: Our Board may modify or accelerate the delivery of the restricted stock award under such circumstances as it deems would be in the best interest of Sonus; provided, however, that such action would not cause a violation of Section 409A of the Code. Except as otherwise provided in the 2012 Plan, the period to achieve full vesting for freestanding restricted stock awards granted to participants is not shorter than three years. Notwithstanding the foregoing, restricted stock awards subject to performance vesting may have a minimum vesting period of one year.
Major Corporate Events: If there is any change in the number of outstanding shares of common stock through the declaration of stock dividends, stock splits or the like, the number of shares available for awards, the shares subject to any award and the option prices or exercis prices of awards will be automatically adjusted. If there is any change in the number of merger, consolidation, separation (including a spin-off or other distribution of stock or merger, consolidation, separation (including a spin-off or other distribution of stock or property), reorganization (whether or not such reorganization comes within the meaning of
such term in Section 368(a) of the Code) or partial or complete liquidation, our Board will make appropriate adjustments and/or modifications to outstanding awards under the 2012 Plan as it, in its sole discretion, deems equitable. In the event of any other change in our capital structure or our common stock (including through payment of an extraordinary cash dividend), our Board will also make such appropriate adjustments and/or modifications to outstanding awards under the 2012 Plan as it, in its sole discretion, deems equitable.

Termination. The consequences of a termination of a participant's status with Sonus with respect to an award under the 2012 Plan depends upon the type of award granted and the circumstances of such termination. Our Board has the authority to issue rules and regulations to determine the treatment of a participant under the 2012 Plan in the event of such participant's death, disability, retirement, termination for an approved reason and other termination.

## Stock Option and Restricted Stock Grant Policy

We have six stock incentive plans-the 1997 Plan, the Amended Plan, the 2008 Plan, the 2001 Plan, the 2003 Plan and the 2012 Plan (collectively, the "Sonus Plans"). At the Company's specia meeting of stockholders on December 2, 2014, our stockholders approved amendments to the Amended Plan that, among other matters, transferred all shares available for grant at the time from un or the 2008 Plan 2012 Plan Amended Plan and provided and and under each of the 208 Plan and 2012 Plan that expire, are terminated, canceled, surrendered or forfeited, or are repurchased by us at their original issuance price pursuant to a contractual repurchase right under either the 2008 Plan or 2012 Plan will be returned to the Amended Plan.

We issued stock options and restricted stock pursuant to the 1997 Plan through November 2007, when the 1997 Plan expired. No shares are available for future issuance under the 1997 Plan due to the 1997 Plan's expiration; however, outstanding options are still being administered under this plan.

We assumed the 2008 Plan in connection with the acquisition of NET in August 2012. Pursuan to such NET acquisition, RSUs and in-the-money options issued under the 2008 Plan that were outstanding on August 24, 2012 were assumed by Sonus, together with the 2008 Plan. These outstanding on August 24,
outstanding awards continue to be subject to and governed by the 2008 Plan and have all the same outstanding awards continue to be subject to and governed by the 2008 Plan and have all the same
terms and conditions, except that the awards became awards with respect to our common stock and the number of shares subject to the awards and the exercise prices (in the case of options) were adjusted to number of shares subject to the awards and the exercise prices (in the case of options) were adjusted to the August 24, 2012 acquisition date were required to be issued only to employees of NET who subsequently become employees of Sonus or other persons who were not performing services for us at the time of the merger, such as new employee hires after August 24, 2012. At the December 2, 2014 special meeting of stockholders, our stockholders approved the transfer of all shares available for grant at the time under the 2008 Plan to the Amended Plan and provided that any outstanding awards under the 2008 Plan that expire, are terminated, cancelled, surrendered or forfeited, or are repurchased by us at their original issuance price pursuant to a contractual repurchase right under the 2008 Plan will be returned to the Amended Plan. No future awards will be granted under the 2008 Plan.

We assumed the 2001 Plan, the 2003 Plan and the 2012 Plan (collectively, the "PT Plans") in connection with the acquisition of PT in February 2014. The 2001 Plan had expired for purposes of new options by its terms in May 2011 but was assumed by us solely for the purpose of administering any outstanding options under this plan. The 2003 Plan was also assumed by us solely for the purpose of administering any outstanding awards under such plan as of the PT acquisition date. The only awards assumed from the 2001 Plan and the 2003 Plan were non-qualified stock options, which outstanding options are subject to the terms and conditions of the plan under which they were granted. No future awards will be granted under either the 2001 Plan or the 2003 Plan. Pursuant to the PT merger, options issued under the 2012 Plan that were outstanding at the closing of the merger were assumed by us, along with the 2012 Plan. These outstanding awards continue to be subject to and governed by the 2012 Plan, and have all the same terms and conditions, except that the number of shares subject to the award and the exercise price were adjusted to reflect the equity award exchange ratio in the merger. Outstanding awards under the PT Plans continue to be subject to and governed by the applicable PT Plan and have all the same terms and conditions, except that the awards became awards with respect to our common stock and the number of shares subject to the awards and the exercise prices (in the case of options) were adjusted to reflect the equity award exchange ratio in the acquisition. Any awards issued under the 2012 Plan since the February 19, 2014 acquisition date were required to be issued only to employees of PT who subsequently become employees of Sonus or other persons who were not performing services for us at the time of the merger, such as new employee hires after February 19, 2014. At the December 2, 2014 special meeting of stockholders, our stockholders approved the transfer of all shares available for grant at the time under the 2012 Plan to the Amended Plan and provided that any outstanding awards under the 2012 Plan that expire, are terminated, cancelled, surrendered or forfeited, or are repurchased by us at their original issuance price pursuant to a contractual repurchase right under the 2008 Plan will be returned to the Amended Plan. No future awards will be granted under the 2012 Plan.

We have granted stock options under the Sonus Plans as a means of promoting the long-term success of our business because we believe that sharing ownership with our employees aligns thei interests with our interests and the interests of our stockholders and encourages our employees to devote the best of their abilities and efforts to our company. Each stock option award specifies the exercise price that employee must pay to purchase shares of common stock when the option is exercised. The exercise price per share is set at the closing market price of a share of our common stock on the date the option is granted. Employees receive value from their options only if the value of our shares has increased above their value on the date of grant of the options.

New Hire, Promotion and Adjustment Equity Grants. The Compensation Committee has delegated authority to our Chief Executive Officer, our Chief Administrative Officer and our Vice President of Human Resources to award new hire, promotion and adjustment stock option, restricted President of Human Resources to award new hire, promotion and adjustment stock option, restricted
stock and RSU grants within certain established guidelines for the type and seniority of the position stock and Reld grants within certain established guidelines for the type and seniority of the position held by the recipient; provided, however, that only the Compensation Committee may approve: (i) any
equity grants to any officer or executive officer of the Company; (ii) new hire equity grants with respect to more than 20,000 shares per person; (iii) new hire, promotion and adjustment stock option, to more than 20,000 shares per person; (iii) new hire, promotion and adjustment stock option,
restricted stock and RSU grants outside of established guidelines for the type and seniority of the restricted stock and RSU grants outside of established guidelines for the type and seniority of the
position held by the recipient; (iv) any equity grants to consultants; and (v) all other types of equity grants other than stock option, restricted stock and RSU grants. The Compensation Committee review all grants issued under the delegation of authority and, if appropriate, approves the grants of equity at all grants issued under the delegation of authority and, if appropriate, approves the grants of equity
a Compensation Committee meeting or by written consent. The actions taken at the meetings are documented in meeting minutes subsequently approved by the Compensation Committee. The list of proposed individual grants is provided in advance of the Compensation Committee meeting and is included in the meeting minutes.

Annual Equity Incentive Grants. The Compensation Committee annually considers an equity incentive grant for certain of our key employees, including executives, in connection with its annual review of employee and executive compensation. Typically, employee eligibility is based upon hire date with a required minimum of one year of service. Among the eligible employees, awards are allocated to employees based upon management's evaluation of employee performance and other business criteria, with a weighting towards the Company's strongest performers.

The proposed plan for each year includes overall parameters of the plan and a pool of shares to be allocated under the plan. The Compensation Committee discusses the plan with management and then requests that management provide the Compensation Committee with a specific list of individual rants for employees consistent with the Compensation Committee's guidance. The Compensation Committee determines specific grants for executives. Management then prepares a list of individual grants for employees and executives and submits to the Compensation Committee the list of individual grants for employees and executives. The Compensation Committee reviews and, if appropriate, approves the list of individual grants at a Compensation Committee meeting or by written consent. The actions taken at the meetings are documented in meeting minutes subsequently approved by the Compensation Committee.

The annual equity incentive grant date has historically been March 15 of each year, or the next business day following March 15 if March 15 falls on a weekend or a holiday. However, our annual equity incentive grant date for fiscal 2016 was April 1, 2016, on which date we granted a total of 1,164,080 shares of restricted stock, including 423,750 shares of restricted stock granted to our NEOs. On April 1, 2016, we also granted 50,900 restricted stock units and 131,250 PSUs; all of the PSUs were ranted to our NEOs. The Compensation Committee retains the right to change the annual equity ncentive grant date based on business events that might warrant using another date. For 2017, our annual equity incentive grant date for our active NEOs was March 31, 2017, on which date we granted a total of 495,000 shares of restricted stock to our NEOs and 165,000 PSUs. We did not make any other stock grants on March 31, 2017.

Promotion and Achievement Grants. From time to time, our management recommends to the Compensation Committee promotion or achievement grants to our employees, including our executives. If the proposed grants are outside the standing delegated authority granted by the Compensation Committee, the Compensation Committee must approve them at a Compensation Committee meeting or, if necessary, by written consent. The actions taken at the meetings are documented in meeting minutes, including approvals of stock option grants, restricted stock awards and performance awards

Promotion and achievement grants typically have a grant date of the $15^{\text {th }}$ day of the month following the Compensation Committee's approval of the grant, or the next business day if such $15^{\text {th }}$ day of the month is a weekend or a holiday.

Performance Award Grants-Generally. Under the Amended Plan, the Compensation Committee has the authority to approve grants of performance awards to our employees and executives. The Compensation Committee, in its sole discretion, establishes the metrics and the vesting schedule underlying such shares. To date, the Compensation Conmittee has only granted performance wards to certain executive officers. Any performance awards that do not vest are forfeited and the hares of common stock underlying the forfeited performance awards will again become available for he grant of awards pursuant to the terms of the Amended Plan unless the Compensation Committee, in its sole discretion, elects to subject any unearned performance awards to further performance- and ime-vesting conditions.

In each of March 2015 and April 2016, the Compensation Committee granted PSUs under the Amended Plan to our CEO and certain of his direct reports. The PSUs will vest, if at all, in annual installments over three years, based on the Company's TSR relative to the TSR each year of each of
 2017 , the Compensation Committee determined that the Company's TSR in 2016 was at the $8^{\text {th }}$, M 162015 were achieved for the 2016 performance period the $90.4 \%$ for the PSU evel• and (ii) the performance metrics for the PSUs granted on April 1, 2016 were achieved for the 2016 performance period at the $76.0 \%$ achievement level. Therefore, 47,856 PSUs in the aggegate for 2016 performance period vested for our Chef Exec. T Officer and certain of his direct reports, the 2016 performance period vested for our Chief
while 10,060 shares in the aggregate were forfeited.

General Vesting of Stock Options and Restricted Stock. Under the Sonus Plans, provided that an employee continues his or her employment with us, on the applicable vesting date, (i) options will generally vest and become exercisable as follows: $25 \%$ of the shares underlying the options vest on the first anniversary of the grant date or the employee's commencement date (as defined in the applicable otice of grant of stock options and option agreement) and the remaining $75 \%$ of the shares underlying ent or ach date; and (ii) restricted stock grants generally vest as follows: $25 \%$ of the shares vest on the first mniversary of the grant date or the employee's commencement date and the remaining $75 \%$ vest either in equal increments of $12.5 \%$ semi-annually through the fourth anniversary of such date or equal increments of $25 \%$ annually through the fourth anniversary of such date.

For our executive officers beginning in 2015, under the Sonus Plans and provided that such executive officer continues his or her employment with us, on the applicable vesting date, (i) option will generally vest and become exercisable as follows: one-third of the shares underlying the options
 f the shares underlying the options vest in monthly increments thereafter through the third hiversary of such date; and (ii) restricted stock grants genally vest as follows; one third of the hares vest on the first aniverary of the grant date or the empers coment the remaining two-thirds of the shares vest in four equal increments semi-annually thereafter through the hird anniversary of such date. The equity vesting schedule for non-executive employees was modified our Compensation Committee from a four-year vesting schedule to a three-year vesting schedule in une 2016. Additionally, at our 2015 annual meeting of stockholders, our stockholders approved a une 2016. Additionally, at our 2015 annual meeting of stockholders, our stockholders approved a however, that such minimum vesting requirement does not apply to an aggregate of up to $5 \%$ of the maximum number of shares of our common stock authorized for issuance under the Amended Plan.

Termination. Under the 1997 Plan and the Amended Plan, options typically expire on the tenth anniversary of the grant date (or the fifth anniversary of the grant date, if the optionee owns more than $10 \%$ of our common stock); provided that if an employee's employment relationship with us more than
terminates, the option termination date is typically determined based upon the reason for employment termination as follows: (i) death or total and permanent disability of optionee (as defined in Section 22(e)(3) of the Code)-180 days thereafter; or (ii) termination for any other reason- 30 days thereafter under the 1997 Plan or 90 days thereafter under the Amended Plan, unless otherwise extended.

Under the 2008 Plan, options typically expire on the seventh anniversary of the grant date (or the fifth anniversary of the grant date, if the optionee owns more than $10 \%$ of our common stock); provided that if an employee's employment relationship with us terminates, the option termination date is typically based upon the reason for employment termination as follows: (a) death or disability12 months following the termination of employment (or such other period as specified in the applicable option agreement), or (b) termination for any other reason-30 days following the termination of employment.

Under the 2012 Plan, options typically expire on the tenth anniversary of the grant date; provided, that if an employee's employment relationship with us terminates, the option termination date is typically based upon the reason for employment termination as follows: (a) death or disability12 months following the termination of employment, (b) "retirement" (through a voluntary termination of employment at or after age 60 ) or for an approved reason- 12 months following the termination of employment, (c) termination for any other reason- 30 days thereafter or (d) termination for causethe right to exercise the option terminates immediately and is forfeited without consideration.

Under the 2003 Plan, options typically expire on the tenth anniversary of the grant date; provided, that if an employee's employment relationship with us terminates, the option termination date is typically based upon the reason for employment termination as follows: (a) death or disability12 months following the termination of employment, (b) "retirement" (through a voluntary termination of employment at or after age 60) or for an approved reason- 12 months following the termination of employment or (c) termination for any other reason- 30 days thereafter.

Under the 2001 Plan, options typically expire on the tenth anniversary of the grant date; provided, that if an employee's employment relationship with us terminates, the option termination date is typically based upon the reason for employment termination as follows: (a) death or disability12 months following the termination of employment or (b) termination for any other reason- 30 days thereafter.

Shares of restricted stock granted before June 2016 under the Sonus Plans generally vest through the fourth anniversary of the grant date or the employee's commencement date, as applicable. Shares of restricted stock granted since June 2016 under the Amended Plan generally vest through the third anniversary of the grant date or the employee's commencement date, as applicable. If an employee's employment relationship with us terminates for any reason prior to the fourth anniversary or third anniversary of such date, as applicable, then effective upon the cessation of his or her employment, the employee will automatically forfeit, without any action required on the part of the employee, all the unvested shares that the employee received under the award without the payment of any consideration by the Company. The forfeited shares of restricted stock revert back to the Company

We have entered into agreements with certain executives providing for extended terms for stock option grants under the Sonus Plans following the executive's termination, as described under the section entitled "Executive, Severance and Change of Control Benefits" below.

Acceleration. Except as otherwise noted in an employment agreement, in the event of an acquisition of the Company as defined in the 2001 Plan and the Amended Plan (an "Acquisition") or a acquisition of the Company as defined in the 2001 Plan and the Amended Plan (an "Acquisition") or
Change in Control as defined in the 2008 Plan, our stock plan documents provide a pre-determined Change in Control as defined in the 2008 Plan, our stock plan documents provide a pre-determin
vesting schedule for such awards. Except as otherwise noted in an employment agreement or as vesting schedule for such awards. Except as otherwise noted in an employment agreement or as
otherwise provided under either the 2008 Plan with respect to awards granted under the 2008 Plan prior to our acquisition of NET or the 2012 Plan with respect to awards granted under the 2012 Plan prior to our acquisition of PT, effective immediately prior to the occurrence of an Acquisition or Change in Control, for equity grants prior to June 2016: (i) the lesser of the number of then unvested shares subject to a stock option award or $25 \%$ of the total number of shares subject to that stock option award will become vested, with the balance of the unvested shares subject to the award option award will become vested, with the balance of the unvested shares subject to the award
continuing to vest pursuant to the vesting schedule set forth in the award, except that the vesting schedule will be shortened by 12 months and (ii) an additional $25 \%$ of the number of shares covered by the restricted stock award will become vested and the remaining unvested shares subject to the restricted stock award continuing to vest pursuant to the vesting schedule set forth in the award, except that the vesting schedule will be shortened by 12 months. Except as otherwise noted in an employment agreement, for equity grants since June 2016, (x) the lesser of the number of then unvested shares subject to a stock option award or one-third of the total number of shares subject to that stock option award will become vested, with the balance of the unvested shares subject to the award continuing to vest pursuant to the vesting schedule set forth in the award, except that the vesting schedule will be shortened by 12 months and (y) an additional one-third of the number of shares covered by the restricted stock award will become vested and the remaining unvested shares subject to the restricted stock award continuing to vest pursuant to the vesting schedule set forth in the award, except that the vesting schedule will be shortened by 12 months.

We have entered into agreements with certain executives providing for acceleration of the vesting of stock options, restricted stock and, in certain cases, performance awards, upon a change of control as described under the section entitled "Executive, Severance and Change of Control Benefits" below.

## Executive, Severance and Change of Control Benefits

To attract and retain key executive officers, the Company has entered into executive agreements that include severance and change of control benefits. In the event, or threat, of a change of control transaction, these agreements reduce uncertainty and provide compensation for the significant levels of executive engagement and support required during an ownership transition that results in the termination of their employment. The severance agreements described in the "Compensation Discussion and Analysis" section of this Proxy Statement generally provide that, upon termination of the executive officer's employment without cause, the executive officer is entitled to severance payments and continued health plan premium payments. The receipt of the severance benefits discussed below is contingent upon the execution of a release of all claims of any kind or nature in favor of the Company. The severance agreements, as amended, contain the following provisions:

|  | Mr. Dolan | Mr. Snider | Mr. Riley | Mr. Swade | Ms. Villare |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Basic Severance Benefit |  |  |  |  |  |
| Severance Payment (Multiple of Base Salary and Target Bonus) | 1.5x | 1.0x |  |  |  |
| Accelerated Vesting of Equity | 24 months for restricted stock and options(1) | 12 months for restricted stock and options(2) |  |  |  |
| Health Benefit Continuation | 18 months | 12 months |  |  |  |
| Change of Control(3) Benefit |  |  |  |  |  |
| Accelerated Vesting of Equity | $50 \%$ of unvested options and $50 \%$ of unvested restricted stock(4) | 100\%(4) | $\begin{aligned} & 50 \% \text { of unves } \\ & \text { unvested } \end{aligned}$ | ns and $50 \%$ of stock(4) | $\begin{gathered} 25 \% \text { to } 33 \%, \\ \text { depending on the } \\ \text { grant } \end{gathered}$ grant |
| Severance Following Change of Control(3) Benefit |  |  |  |  |  |
| Severance Payment (Multiple of Base Salary and Target Bonus) | 2.0x |  | 1.5x |  | 1.0x |
| Accelerated Vesting of Equity | $100 \%$ for options and restricted stock(5) |  |  |  | 12 months |
| Health Benefit Continuation | 18 months |  |  |  | 12 months |
| Other Agreement Provisions |  |  |  |  |  |
| Non-Compete(6) | 1 year |  |  |  |  |
| Non-Solicitation(7) | 1 year |  |  |  |  |
| Non-Disclosure(8) | Indefinitely |  |  |  |  |

(1) With respect to performance awards held by Mr. Dolan, in the event of his termination all remaining performance criteria for such awards would be deemed achieved at the target performance level, and, of the resulting performance awards that could then time vest, vesting would be accelerated by 24 months.
(2) With respect to performance awards held by Messrs. Snider, Riley and Swade, there will be accelerated vesting to the extent provided for in an individual grant agreement.
(3) "Change in Control" or "Acquisition," as used in the employment agreements signed by the Named Executive Officers, means, in summary: (i) an acquisition of $50 \%$ or more of either the then-outstanding shares of common stock or the combined voting power of the
then-outstanding voting securities excluding certain specified acquisitions; (ii) a change in the composition of the Board such that the individuals who constitute the Board at that point in time cease to constitute a majority of the Board; (iii) consummation of a reorganization, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company or the acquisition of shares or assets of another Company excluding certain specified transactions; or (iv) the approval by the stockholders of the Company of a complete liquidation or dissolution of the Company.
(4) If a "Change in Control" or "Acquisition," as used in the employment agreements signed by the Named Executive Officers, occurs, with respect to performance awards held by Mr. Dolan, all performance criteria for such awards would be deemed achieved at the target performance level, and $50 \%$ of all unvested performance awards will vest immediately and the rest of the
unvested performance awards will continue to time vest according to their terms, and with respect to performance awards held by Messrs. Riley and Swade, there will be accelerated vesting to the extent provided for in an individual grant agreement. With respect to performance awards held by Mr. Snider, there will be $100 \%$ acceleration of all unvested performance awards will vest immediately
(5) With respect to performance awards held by Mr. Dolan, if termination occurs, all performance criteria for such awards would be deemed achieved at the target performance level and all of the resulting performance awards would vest immediately. With respect to performance award held by Messrs. Riley, Snider and Swade and Ms. Villare, if termination occurs, there will be accelerated vesting to the extent provided for in an individual grant agreement.
(6) To the extent not provided in a Noncompetition and Confidentiality Agreement previously entered into by the applicable Named Executive Officer with us, each of the employment agreements signed by the NEOs contains a provision that restricts the executive from performing any acts that advance the interests of any existing or prospective competitors of the Company during the period specified in the agreement.
(7) To the extent not provided in a Noncompetition and Confidentiality Agreement previously entered into by the applicable NEO with us, each of the employment agreements signed by the NEOs contains a provision that restricts the executive from soliciting employees to terminate
their relationship with the Company. their relationship with the Company
(8) To the extent not provided in a Noncompetition and Confidentiality Agreement previously entered into by the applicable NEO with us, each of the employment agreements signed by the NEOs contains a provision that restricts the executive from disclosing confidential information as defined in the agreement.

## POTENTIAL PAYMENTS UPON TERMINATION OR UPON CHANGE IN CONTROL

The table below shows potential payments to the NEOs with severance or change in contro arrangements upon termination or upon a change in control of our Company. The amounts shown assume that termination and/or change in control was effective as of December 31, 2016, the last day of our fiscal year, and are estimates of the amounts that would have been paid to or realized by the NEOs upon such a termination or change in control on such date. The actual amounts to be paid or realized can only be determined at the time of an NEO's termination or following a change in control. Mr. Greenquist is not included in the table below, as he resigned his position from the Company and accordingly, was not entitled to any separation payments. Mr. Scarfo stepped down as our Executive Vice President of Services, Product Management and Corporate Development, effective July 27, 2016, and remained with the Company in an advisory role to assist in the transition of his duties until

October 3, 2016; therefore, the full amount of his separation cash payments is included in the table below as it was earned in 2016.

|  | $\begin{gathered} \text { Termination } \\ \text { without Cause or } \\ \text { for Good Reason(1) } \end{gathered}$ | Change in Control(2) | Termination without Cause or following Change in Control |
| :---: | :---: | :---: | :---: |
| Raymond P. Dolan |  |  |  |
| Cash Severance(3). | \$1,800,000 | \$- | \$2,400,000 |
| Stock Options(4) | - | - | - |
| Stock Awards(5) | 1,843,267 | 1,010,621 | 2,021,242 |
| Health Benefits | 26,324 | - | 26,324 |
|  | \$3,669,501 | \$1,010,621 | \$4,447,566 |
| Susan Villare |  |  |  |
| Cash Severance(3) . | \$292,500 | \$- | \$292,500 |
| Stock Options(4) | - | - | - |
| Stock Awards(6) | 199,515 | \$142,064 | 199,515 |
| Health Benefits. | 17,549 | - | 17,549 |
|  | \$509,564 | \$142,064 | \$509,564 |
| Kevin Riley |  |  |  |
| Cash Severance(3). | \$568,750 | \$- | \$853.125 |
| Stock Options(4) | - | - | - |
| Stock Awards(7) | 505,976 | 450,185 | 900,371 |
| Health Benefits | 12,514 | - | 18,771 |
|  | \$1,087,240 | \$450,185 | \$1,772,267 |
| Jeffrey Snider |  |  |  |
| Cash Severance(3) . | \$612,500 | \$- | \$918,750 |
| Stock Options(4) | - | - | - |
| Stock Awards(8) | 426,224 | 747,123 | 747,123 |
| Health Benefits . | 17,549 | - | 26,324 |
|  | \$1,056,273 | \$747,123 | \$1,692,197 |
| Michael Swade |  |  |  |
| Cash Severance(3) . | \$656,250 | \$- | \$984,375 |
| Stock Options(4) | - | - | - |
| Stock Awards(9) | 513,844 | 434,435 | 868,871 |
| Health Benefits | 17,549 | - | 26,324 |
|  | \$1,187,643 | \$434,435 | \$1,879,570 |
| Anthony Scarfo(10) |  |  |  |
| Cash Severance | \$700,000 |  |  |
| Stock Options | 300 |  |  |
| Stock Awards | 461,301 |  |  |
| Health Benefits | 12,540 |  |  |
|  | \$1,174,141 |  |  |

[^2]arbitration agreement, as applicable, signed by the NEOs, means, in summary: (i) an acquisition of $50 \%$ or more of either the then-outstanding shares of common stock or the acquisition of combined voting power of the then-outstanding voting securities excluding certain specified combined voting power of the then-outstanding voting securities excluding certain specified
acquisitions; (ii) a change in the composition of the Board such that the individuals who acquisitions; (iii) a change in the composition of the Board such that the individuals who
constitute the Board at that point in time cease to constitute a majority of the Board; (iii) consummation of a reorganization, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company or the acquisition of shares or assets of all or substantially all of the assets of the Company or the acquisition of shares or ass
another Company excluding certain specified transactions; or (iv) the approval by the stockholders of the Company of a complete liquidation or dissolution of the Company
(2) If the Company is acquired, (i) $50 \%$ of all unvested stock options and $50 \%$ of unvested shares of restricted stock will vest immediately and the rest of the unvested stock options and shares of restricted stock will vest according to their terms and (ii) with respect to performance awards held by Mr. Dolan, all performance criteria for such awards would be deemed achieved at the target performance level, and $50 \%$ of all unvested performance awards will vest immediately and the rest of the unvested performance awards will continue to time vest according to their terms. With respect to performance awards held by Messrs. Snider, Riley or Swade, if the Company is acquired, there will be accelerated vesting to the extent provided fo in an individual grant agreement.
(3) Pursuant to Mr. Dolan's agreement, as amended, Mr. Dolan would be entitled to lump sum cash severance payments equal to 1.5 times his then-current base salary, less applicable state and federal withholdings, payable at the time of termination (or 2.0 times his then-current base salary if his termination follows an acquisition) and 1.5 times his then-target bonus, less applicable state and federal withholdings, payable at the time of termination (or 2.0 times his then-target bonus if a termination follows an acquisition).
Pursuant to the terms of their respective agreements, as amended, Messrs. Snider, Riley and Swade and Ms. Villare would be entitled to cash severance payments equal to their thencurrent base salary, less applicable state and federal withholdings, paid by the Company eithe
 an Swade and Ms. Villare their then-current annual target bonus at $100 \%$ of applicable state and federal withholdings, in a lump sum.

Each of Messrs. Dolan, Snider, Riley and Swade and Ms. Villare must sign a release of all claims of any kind or nature in favor of the Company before receipt of any such severance payments.
(4) These amounts represent the gains that would be realized on the stock options held by each of our NEOs that were in the money on December 31, 2016 related to the accelerated vesting of their stock options.
(5) Under Mr. Dolan's agreement, as amended, in the event of his termination without Cause or for Good Reason (as such terms are defined in his agreement), the vesting of his restricted stock would be accelerated by 24 months, except that if such termination occurs in connection with a change of control the vesting of his restricted stock would be fully accelerated. With respect to performance awards held by Mr. Dolan, in the event of his termination all remaining performance criteria for such award would be deemed achieved at the target performance level, and, of the resulting performance awards that could then time vest, vesting would be accelerated by 24 months, except that if such termination occurs in connection with a change of control the vesting of his performance awards would be fully accelerated.
(6) Under Ms. Villare's agreement, as amended, in the event of her termination without Cause or for Good Reason (as such terms are defined in her agreement), or without Cause or for Good Reason following a change in control, the vesting of her restricted stock (and performance awards to the extent specifically provided for in an individual grant agreement) would be accelerated by 12 months.
(7) Under Mr. Riley's agreement, as amended, in the event of his termination without Cause or for Good Reason (as such terms are defined in his agreement), the vesting of his restricted stock (and performance awards to the extent specifically provided for in an individual grant agreement) would be accelerated by 12 months, except that if such termination occurs in connection with a change of control the vesting of his restricted stock (and performance awards to the extent specifically provided for in an individual grant agreement) would be fully accelerated.
(8) Under Mr. Snider's agreement, as amended, in the event of his termination without Cause or for Good Reason (as such terms are defined in his agreement), the vesting of his restricted stock would be accelerated by 12 months, except that if such termination occurs in connection with a change of control the vesting of his restricted stock (and performance awards to the extent specifically provided for in an individual grant agreement) would be fully accelerated.
(9) Under Mr. Swade's agreement, as amended, in the event of his termination without Cause or for Good Reason (as such terms are defined in his agreement), the vesting of his restricted stock (and performance awards to the extent specifically provided for in an individual grant agreement) would be accelerated by 12 months, except that if such termination occurs in connection with a change of control the vesting of his restricted stock (and performance awards to the extent specifically provided for in an individual grant agreement) would be fully
accelerated.
(10) Mr. Scarfo stepped down as our Executive Vice President of Services, Product Management and Corporate Development, effective July 27, 2016, and remained with the Company in an advisory role to assist in the transition of his duties until October 3, 2016. In connection with his separation from the Company, Mr. Scarfo received a lump sum payment equal to $100 \%$ of his target bonus, salary continuation at $100 \%$ of his base salary through October 3, 2017, accelerated vesting of 50,312 unvested stock options, 50,208 unvested restricted shares and 18,438 PSUs, and one year of health benefits. The full amount of his separation cash payments is included here as it was earned in 2016.

## STOCKHOLDER PROPOSALS FOR INCLUSION IN 2018 PROXY STATEMENT

To be considered for inclusion in the proxy statement relating to our annual meeting of stockholders to be held in 2018, stockholder proposals must be received at our principal executive offices no later than December 29, 2017, which is not less than 120 calendar days before the date of our proxy statement released to our stockholders in connection with the prior year's annual meeting of stockholders, and must otherwise comply with the rules promulgated by the SEC. If the date of next year's annual meeting is changed by more than 30 days from the anniversary date of this year's annual meeting on June 9, 2017, then the deadline is a reasonable time before we begin to print and mail proxy materials.

## STOCKHOLDER PROPOSALS FOR PRESENTATION AT 2018 ANNUAL MEETING

According to our by-laws, we must receive other proposals of stockholders (including director According to our by-laws, we must receive other proposals of stockholders (including director
nominations) intended to be presented at the 2018 annual meeting of stockholders but not included in the proxy statement by the close of business on March 11, 2018, but not before February 9, 2018, which
is not later than the ninetieth $\left(90^{\text {th }}\right)$ day nor earlier than the one hundred twentieth $\left(120^{\text {th }}\right)$ day prior to the first anniversary of the date of the 2017 Annual Meeting. Such proposals must be delivered to the Secretary of the Company at our principal executive office. However, in the event the 2018 annual Secretary of the Company at our principal executive office. However, in the event the 2018 annual
meeting of stockholders is scheduled to be held on a date before May 10, 2018, or after August 18, 2018, which are dates 30 days before or 70 days after the first anniversary of our 2017 annual meeting of stockholders, then your notice must be received by us at our principal executive office not earlier of stockholders, then your notice must be received by us at our principal executive office not earlier
than the close of business on the $120^{\text {th }}$ day prior to such annual meeting and not later than the close of business on the later of the $90^{\text {th }}$ day before the scheduled date of such annual meeting or the $10^{\text {th }}$ day after the day on which we first make a public announcement of the date of such annual meeting. Any proposals that are not made in accordance with the above standards may not be presented at the 2018 annual meeting of stockholders.

## STOCKHOLDERS SHARING THE SAME ADDRESS

We have adopted a procedure called "householding." Under this procedure, we are delivering only one copy of the annual report and Proxy Statement to multiple stockholders who share the same address and have the same last name, unless we have received contrary instructions from an affected stockholder. Stockholders who participate in householding will continue to receive separate proxy cards.

We will deliver promptly upon written or oral request a separate copy of the annual report and the Proxy Statement to any stockholder at a shared address to which a single copy of either of those documents was delivered. To receive a separate copy of the annual report or Proxy Statement, please submit your request to Broadridge Financial Solutions by calling 1-800-579-1639 or by following the instructions on your notice of Internet availability of proxy materials to request delivery of paper copies through the Internet or by e-mail, or in writing addressed to Sonus Networks, Inc., 4 Technology Park Drive, Westford, MA 01886 Attn: Investor Relations.

If you are a holder of record and would like to revoke your householding consent and receive a separate copy of the annual report or Proxy Statement in the future, please contact Broadridge Householding Department, 51 Mercedes Way, Edgewood, NY 11717 or by calling 1-800-542-1061. You will be removed from the householding program within 30 days of receipt of the revocation of your consent.

Any stockholders of record who share the same address and currently receive multiple copies of our annual report and Proxy Statement who wish to receive only one copy of these materials per household in the future please contact Broadridge Householding Department at the contact information listed above to participate in the householding program.

A number of brokerage firms have instituted householding. If you hold your shares in "street name," please contact your bank, broker or other holder of record to request information about householding.

Our Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with he SEC on February 27, 2017, is being delivered to stockholders in connection with this proxy solicitation. With the payment of an appropriate processing fee, we will provide copies of the exhibits to our Annual Report on Form 10-K. Please address all such requests to the Investor Relations department at our principal executive offices at 4 Technology Park Drive, Westford, MA 01886

## OTHER MATTERS

Our Board knows of no other matters to be submitted at the meeting and the deadline under our by-laws for submission of matters by stockholders has passed. If any other matters properly come before the meeting, it is the intention of the persons named in the enclosed form of proxy to vote the shares they represent as our Board may recommend.

We will pay the costs of soliciting proxies from stockholders. We have engaged Georgeson LLC s our proxy solicitor to help us solicit proxies from brokers, bank nominees and other institutions for a fee of $\$ 10,000$, plus reasonable out-of-pocket expenses. In addition to soliciting proxies by mail, by elephone and via the Internet, our directors, executive officers and other employees may solicit proxies, either personally or by other electronic means, on our behalf, without additional compensation, other than the time expended and communications charges in making such solicitations. We will also equest brokerage houses, custodians, nominees and fiduciaries to forward copies of the proxy materia to those persons for whom they hold shares and request instructions for voting the proxies. We will eimburse such brokerage houses and other persons for their reasonable expenses in connection with this distribution.

Westford, Massachusetts
April 28, 2017

By Order of the Board of Directors,


Jeffrey Snider
Senior Vice President, Chief Administrative
Officer, General Counsel and Corporate Secretary

## SONUS NETWORKS, INC.

## Discussion of Non-GAAP Financial Measure

Sonus management uses several different financial measures, both GAAP and non-GAAP, in analyzing and assessing the overall performance of the business, making operating decisions, planning and forecasting future periods, and determining payments under compensation programs. Our annual plan is approved by our board of directors. Continuous budgeting and forecasting for revenue and expenses are conducted on a non-GAAP basis (in addition to GAAP) and actual results on a non-GAAP basis are assessed against the annual financial plan. We consider the use of non-GAAP financial measures helpful in assessing the core performance of our continuing operations and liquidity, and when planning and forecasting future periods. By continuing operations, we mean the ongoing results of the business excluding certain expenses and credits, including, but not limited to: stock-based compensation, amortization of intangible assets, patent litigation settlement expense, depreciation expense for an abandoned facility, acquisition-related expense, restructuring and certain gains included in other income (expense). We consider the use of non-GAAP earnings (loss) per share helpful in assessing the performance of the continuing operations of our business. While our management use non-GAAP financial measures as a tool to enhance their understanding of certain aspects of our financial performance, our management does not consider these measures to be a substitute for, or uperior to, GAAP measures. In addition, our presentations of these measures may not be comparable o similarly titled measures used by other companies. These non-GAAP financial measures should not e considered alternatives for, or in isolation from, the financial information prepared and presented in accordance with GAAP.
nvestors are cautioned that there are material limitations associated with the use of non-GAAP inancial measures as an analytical tool. In particular, many of the adjustments to Sonus' financial easures reflect the exclusion of items that are recurring and will be reflected in our financial results for the foreseeable future

Stock-based compensation is different from other forms of compensation, as it is a non-cash expense For example, a cash salary generally has a fixed and unvarying cash cost. In contrast, the expense associated with an equity-based award is generally unrelated to the amount of cash ultimately received the employee, and the cost to us is based on a stock-based compensation valuation methodology and underlying assumptions that may vary over time. We believe that excluding non-cash stock-based compensation expense from our operating results facilitates the comparison of our financial statement to our historical operating results and to other companies in our industry.

We exclude the amortization of acquired intangible assets from non-GAAP expense and income measures. These amortization amounts are inconsistent in frequency and amount and are significantly mpacted by the timing and size of acquisitions. Although we exclude amortization of acquired tangible assets from our non-GAAP expenses, we believe that it is important for investors to nderstand that intangible assets contribute to revenue generation. We believe that excluding the on-cash amortization of intangible assets facilitates the comparison of our financial results to our historical operating results and to other companies in our industry as if the acquired intangible assets had been developed internally rather than acquired.

In June 2016, we recorded $\$ 0.6$ million of patent litigation settlement costs. This amount is included a a component of General and administrative expense; however, we believe that such patent litigation settlement costs are not part of our core business or ongoing operations. Accordingly, we believe that excluding this patent litigation settlement expense facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

During the second quarter of 2015, we reached an agreement with the landlord of one of our previously restructured facilities to vacate the facility without penalty or future payments. As a result, we were able to vacate the facility earlier than originally planned. In connection with this settlement, we recorded incremental depreciation expense to account for the change in estimated life of the fixed assets related to this facility. We believe that excluding this incremental depreciation expense facilitates the comparison of our financial results to our historical operating results and to other companies in our industry, as such incremental depreciation expense is not related to our ongoing operations or our core business activities.

We consider certain transition, integration and other acquisition-related costs to be unpredictable and dependent on a significant number of factors that may be outside of our control. We do not consider these acquisition-related costs to be related to the continuing operations of the acquired business or the Company. In addition, the size, complexity and/or volume of an acquisition, which often drives the magnitude of acquisition-related costs, may not be indicative of such future costs. We believe that excluding acquisition-related costs facilitates the comparison of our financial results to our historical operating results and to other companies in our industry
We have recorded restructuring expense to streamline operations and reduce operating costs by closing and consolidating certain facilities and reducing our worldwide workforce. Additionally, as previously announced, we expect to record restructuring expense in connection with new restructuring initiatives (both expense and credits) to these estimates as required. We believe that excluding restructuring
 to ther companies in our industry, as there are no future revenue streams or other benefits associated with these costs.

In July 2016, we sold the Network Equipment Technologies, Inc. domain name to a third party and recognized a gain, net of commission and fees, of $\$ 0.8$ million, and in October 2016, we sold a block of IP addresses which we had acquired in connection with our acquisition of PT and recognized a gain, net of commission and fees, of $\$ 0.5$ million. In October 2015, we sold the PT domain name and recognized a gain, net of commission and fees, of $\$ 0.9$ million. These amounts are included as components of Other Income, net in the respective fiscal years. We believe that such gains are not part of our core business or ongoing operations. Accordingly, we believe that excluding the other income arising from this sale facilitates the comparison of our financial results to our historical results and to other companies in our industry.

We believe that providing non-GAAP information to investors, in addition to the GAAP presentation, will allow investors to view the financial results in the way management views the operating results. We further believe that providing this information helps investors to better understand our financial performance and evaluate the efficacy of the methodology and information used by our management to evaluate and measure such performance.

## GAAP loss per share

Stock-based compensation expense
Amortization of intangible assets
Patent litigation settlement expense
Depreciation expense for abandoned facility
Acquisition-related expense

FY15 FY16
FY15
\$ (0.64) \$ (0.28)
0.40
0.15 0.01 0.02
$\begin{array}{r}0.06 \\ (0.03) \\ \hline 0.33\end{array}$
0.04
$\qquad$

Restructuring
Gains on sales of domain names and IP address blocks
Non-GAAP diluted earnings (loss) per share

* Less than $\$ 0.01$ impact on loss per share

SONUS NETWORKS, INC. AMENDED AND RESTATED
STOCK INCENTIVE PLAN

## 1. Purpose.

The purpose of this Amended and Restated Stock Incentive Plan (as amended from time to time, the "Plan") of Sonus Networks, Inc., a Delaware corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to align their interests with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the "Board"). The Plan is amended and restated effective as of and conditioned upon the approval of the Company's stockholders at its 20162017 annual meeting of stockholders (with the effective date of the Plan as amended being the "20162017 Effective Date").

## 2. Eligibility

All of the Company's employees, officers, and directors, as well as consultants and advisors to the Company (as the terms consultants and advisors are defined and interpreted for purposes of Form S-8 under the Securities Act of 1933, as amended (the "Securities Act"), or any successor form) ee eligible to receive options, stok apprecia "Award") (SARs", restick stock, resticted stock units and other stock unit awards (each, an "Award") under the Plan. Ean Award under the Plan is deemed a "Participant".

## 3. Administration and Delegation.

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award. No director or person acting pursuant to the authority delegated by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.
(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or officers.
(c) Delegation to Officers. Subject to any requirements of applicable law (including as applicable Sections 152 and 157 (c) of the General Corporation Law of the State of Delaware), the Board may delegate to one or more officers of the Company the power to grant Awards (subject to any limitations under the Plan) to employees or officers of the Company or any of its present or future
subsidiary corporations and to exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the terms of the Awards to be granted by such officers, the maximu number of shares subject to Awards that the officers may grant, and the time period in which the Awards may be granted; and provided further, that no officer shall be authorized to grant Awards Awards "executive officer" of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) or to any "officer" of the Company (as defined by Rule 16a-1(f) under the Exchange Act).

## 4. Stock Available for Awards.

(a) Number of Shares. Subject to adjustment under Section 9, the aggregate number of shares of common stock, $\$ 0.001$ par value per share, of the Company (the "Common Stock") reserved for Awards under the Plan is equal to $16,47617,376,713$, which amount includes the $1,096,173$ shares of Common Stock (i) previously reserved for issuance under the Company's 2008 Stock Incentive Plan and the Company's 2012 Amended Performance Technologies, Incorporated Omnibus Incentive Plan (the "Acquired Plans") that remained available for grant under the Acquired Plans as of December 2, 2014 and (ii) subject to awards granted under the Acquired Plans, which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options (as hereinafter defined) to any limitations of the Code). No more than $16,47617,376,713$ share of Common Stock may be issued as Incentive Stock Options under the Plan. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.
(b) Share Count. Shares issued pursuant to Awards of Restricted Stock or Restricted Stock Units or Other Stock Unit Awards (each as hereinafter defined) will count against the shares of Common Stock available for issuance under the Plan as one ( 1.50 shares) $\qquad$ hare for every on 1) share issued in connection with the Award. Shares issued pursuan exercise of Options (as ereinater defined) will count against the shares available for issuander the Plan as one (1) share e sttled in shares shall be counted in full againt the number of shares avilable for issuance under Plad in 1 Pettled in the shares that would have been delivered had there been no cash settlement shall ot be counted against the shares available for issuance under the Plan. Shares of Common Stock
 ball not increase the number of shares available for the future grant of Awards. If any Award expires or is terminated surrendered or canceled without having been fully exercised is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by he Company at the original issuance price pursuant to a contractual repurchase right) then the shares f Common Stock covered by such Award shall again become available for the grant of Awards under
 Unit Award or Other Stock Unit Award that is forfeited or terminated shall be eredited as 1.50 share
 Shares that are exchanged by a Participant or witheld by the Company as full or partial payment in onnection with any Award under the Plan, as well as any shares exchanged by a Participant o withheld by the Company to saticfy the tax withholding obligations related to any Award, shall not ailable for subsequent Awards under the Plan. In the case of Incentive Stock Options, the foregoin provisions shall be subject to any limitations under the Code.

Provided, however, that the shares subject to awards that were outstanding (i) as of June 9, 2017 (but not as of June 9, 2016, Provided, however, that the shares subject to awards that were outstanding (i) as of June 9, 2017 (but not as of June 9, 2016,
une 11, 2015 or December 2, 2014) and that expire, terminate, are cancelled or otherwise result in shares not being issued and become available for future grant hereunder would return hereunder at a ratio of 1.5 for every share awarded, (ii) as of June 9 ,
2016 (but not as of June 11,2015 or December 2,2014 ) and that expire, terminate, are cancelled or otherwise result in shares 2016 (but not as of June 11,2015 or December 2, , go14) and that expirie, terminate, are cancelied or otherwise result in share not being issued and become available for future grant hereunder would return hereunder at a ratio of 1.01 for every share In shares not being issued and become available for future grant hereunder would return hereunder at a ratio of 1.57 for every hare awarded, and (iv) as of December 2, 2014 and that expire, terminate, are cancelled or otherwise result in shares not being
sued and become available for future grant hereunder would return hereunder at a ratio of 1.5 for every share awarded.
(c) Sub-limits. Subject to adjustment under Section 9, the following sub-limits on the number of shares subject to Awards shall apply:
(1) Section 162(m) Per-Participant Limit. The maximum number of shares of Common Stock with respect to which Awards may be granted to any Participant under the Plan shall be 1,000,000 per calendar year. For purposes of the foregoing limit, the combinatio of an Option in tandem with a SAR shall be treated as a single Award. The per Participan imit described in this Section 4(c)(1) shall be construed and applied consistently with Section $162(\mathrm{~m})$ of the Code or any successor provision thereto, and the regulations thereunde "Section $162(\mathrm{~m})$ "). The fungible share counting rules in Section 4(b) shall not apply for purposes of this Seetion 4(e)(1) and instead, each share subject to any type of Award shall be counted as one share for purposes of this Seetion $4(e)(1)$.
(2) Limit on Awards to Directors. The maximum number of shares with respect to which Awards may be granted to any director who is not an employee of the Company at the ime of grant shall be 100,000 per calendar year. The fungible share counting rules in (b) shall解 Section 4(e)(2).
(d) Substitute Awards. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards in substitution for any options or other stock or stock-based awards granted by such entity or anfiliate thereof. Substitute Awards may be granted on such terms as the Bo Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4(a) or any sub-limits contained in the Plan, except as may be required by reason of Section 422 and related provisions of the Code.
5. Stock Options.
(a) General. The Board may grant options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise rice of each Option and the conditions and limitations applicable to the exercise of each Option, cluding conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. An Option that is not an Incentive Stock Option shall be designated a "Nonstatutory Stock Option."
(b) Incentive Stock Options. An Option that the Board intends to be an "incentive stock option" as defined in Section 422 of the Code (an "Incentive Stock Option") shall only be granted to mployees of Sonus Networks, Inc., any of Sonus Networks, Inc.'s present or future parent or ubsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the mployees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject and shall be construed consistently with the requirements of Section 422 of the Code. The Company hall have no liability to a Participant, or any other party, if an Option (or any part thereof) that is intended to be an Incentive Stock Option is not an Incentive Stock Option or for any action taken by he Board, including without limitation the conversion of an Incentive Stock Option to a Nonstatutory Stock Option.
(c) Exercise Price. The Board shall establish the exercise price of each Option and specify such exercise price in the applicable option agreement. The exercise price shall be not less than $100 \%$ f the fair market value (as defined below) on the date the Option is granted; provided that if the Board approves the grant of an Option with an exercise price to be determined on a future date, the exercise price shall be not less than $100 \%$ of the fair market value on such future date.
(d) Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement, provided, however, terms and conditions as the Board may specify in the applicable
that no Option will be granted with a term in excess of 10 years.
(e) Exercise of Option. Options may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Company, together with payment in full as specified in Section 5(f) for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.
(f) Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:
(1) in cash or by check, payable to the order of the Company;
(2) except as may otherwise be provided in the applicable option agreement, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;
(3) to the extent provided for in the applicable option agreement or approved by the Board, in its sole discretion, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued in the manner determined by (or in a manne approved by) the Board, provided (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by
the Participant for such minimum period of time, if any, as may be established by the Board the Participant for such minimum period of time, if any, as may be established by the Board
in its sole discretion and (iii) such Common Stock is not subject to any repurchase, forfeiture in its sole discretion and (iii) such Common Stock is not subject to any repurchase, forfeiture unfulfilled vesting or other similar requirements;
(4) to the extent permitted by applicable law and provided for in the applicable option agreement or approved by the Board, in its sole discretion, by payment of such other lawful consideration as the Board may determine; or
(5) by any combination of the above permitted forms of payment.
(g) Fair Market Value. Fair market value of a share of Common Stock for purposes of establishing the exercise price of each Option under Section 5(c) and the exercise price of each SAR under Section 6(c) will be determined as follows:
(1) if the Common Stock trades on a national securities exchange, the closing sale price (for the primary trading session) on the date of grant; or
(2) if the Common Stock does not trade on any such exchange, the average of the closing bid and asked prices for the date of grant as reported by the principal market on which the Common Stock is then traded; or
(3) if there are no such closing bid and asked prices, the average of the bid and asked prices as reported by any other commercial service for the date of grant.
For any date that is not a trading day, the fair market value of a share of Common Stock for such date will be determined by using the closing sale price or average of the bid and asked prices, as appropriate, for the immediately following trading day and with the timing in the formulas above adjusted accordingly. The Board can substitute a particular time of day or other measure of "closing sale price" or "bid and asked prices" if appropriate because of exchange or market procedures or can,
in its sole discretion, use weighted averages either on a daily basis or such longer period as complies with Code Section 409A.
(h) Limitation on Repricing. Unless such action is approved by the Company's stockholders: (1) no outstanding Option granted under the Plan may be amended to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option (other than adjustments pursuant to Section 9), (2) the Board may not cancel any outstanding option (whether or not granted under the Plan) and grant in substitution therefore new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option, and (3) no outstanding Option granted under the Plan may be purchased by the Company for cash.
(i) No Reload Options. No Option granted under the Plan shall contain any provision entitling the Participant to the automatic grant of additional Options in connection with the exercise of the original Option.
(j) No Dividend Equivalents. No Option shall provide for the payment or accrual of dividend equivalents.
6. Stock Appreciation Rights.
(a) General. The Board may grant Awards consisting of a SAR entitling the holder, upon exercise, to receive an amount in Common Stock or cash or a combination thereof (such form to be determined by the Board) determined in whole or in part by reference to appreciation, from and after the date of grant, in the fair market value of a share of Common Stock over the exercise price
established pursuant to Section 6 (c). The date as of which such appreciation or other measure is established pursuant to Section 6(c). The date as of which such appreciation or other measure is determined shall be the exercise date.
(b) Grants. SARs may be granted in tandem with, or independently of, Options granted under the Plan.
(1) Tandem Awards. When SARs are expressly granted in tandem with Options, (i) the SAR will be exercisable only at such time or times, and to the extent, that the related Option is exercisable (except to the extent designated by the Board in connection with a Reorganization Event (as hereinafter defined)) and will be exercisable in accordance with the procedure required for exercise of the related Option; (ii) the SAR will terminate and no onger be exercisable upon the termination or exercise of the related Option, except to the extent designated by the Board in connection with a Reorganization Event and except that a SAR granted with respect to less than the full number of shares covered by an Option will not be reduced until the number of shares as to which the related Option has been exercised or has terminated exceeds the number of shares not covered by the SAR; (iii) the Option will terminate and no longer be exercisable upon the exercise of the related SAR; and (iv) the SAR will be transferable only with the related Option.
(2) Independent SARs. A SAR not expressly granted in tandem with an Option will become exercisable at such time or times, and on such conditions, as the Board may specify in the SAR Award.
(c) Exercise Price. The Board shall establish the exercise price of each SAR and specify it in the applicable SAR agreement. The exercise price shall not be less than $100 \%$ of the fair market value on the date the SAR is granted; provided that if the Board approves the grant of a SAR with an exercise price to be determined on a future date, the exercise price shall be not less than $100 \%$ of the fair market value on such future date.
(d) Term. The term of a SAR shall not be more than 10 years from the date of grant.
(e) Exercise. SARs may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Company, together with any other documents required by the Board.
(f) Limitation of Repricing. Unless such action is approved by the Company's stockholders: (1) no outstanding SAR granted under the Plan may be amended to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding SAR (other than adjustments pursuant to Section 9), (2) the Board may not cancel any outstanding SAR (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share low
than the then-current exercise price per share of the cancelled SAR, and (3) no outstanding SAR than the then-current exercise price per share of the cancelled SAR, and (3) no outstanding SAR granted under the Plan may be purchased by the Company for cash.
(g) No Reload Rights. No SAR granted under the Plan shall contain any provision entitling the grantee to the automatic grant of additional SARs in connection with the exercise of the original SAR.
(h) No Dividend Equivalents. No SAR shall provide for the payment or accrual of dividend equivalents.
7. Restricted Stock; Restricted Stock Units
(a) General. The Board may grant Awards entitling recipients to acquire shares of Common Stock ("Restricted Stock"), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award no cost) from the recipient in the event that conditions specified by the Board in the applicable Avar
are not satisfied prior to the end of the applicable restriction period or periods established by the are not satisfied prior to the end of the applicable restriction period or periods established by the
Board for such Award. Instead of granting Awards for Restricted Stock, the Board may grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered at the time such Award vests ("Restricted Stock Units") (Restricted Stock and Restricted Stock Units are each referred to herein as a "Restricted Stock Award").
(b) Terms and Conditions for all Restricted Stock Awards. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.
(c) Additional Provisions Relating to Restricted Stock.
(1) Dividends. Partieipants holding shares of Restrieted Stock will be entitled to all ordinary cash dividends paid with respeet to such shares, unless otherwise provided by the Board, provided, however, that dividends on Restrieted Stoek will either be aeeumulated or reinvested and paid upon vesting of the underlying Restrieted Stock. Unless otherwise provided by the Board, if any dividends or distributions are paid in shares, or consist of a dividend or distribution to holders of Common Stock other than an ordinary eash dividend, the shares, eash or other property will be subjeet to the same restrietions on transferability and forfeitability as the shares of Restrieted Stoek with respect to which they were paid. Each dividend paymentAny dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock ("Unvested Dividends") shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Unvested Dividends will be made no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the datelapsing of the dividends are paid restrictions on transferability and the forfeitability provisions applicable to stockholders of that elassthe underlying shares of stoekRestricted Stock. No interest will be paid on Unvested Dividends.
(2) Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock, as well as dividends or distributions paid on such Restricted Stock, shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the "Designated Beneficiary"). In the absence of an effective designation by a Participant, "Designated Beneficiary" shall mean the Participant's estate.
(d) Additional Provisions Relating to Restricted Stock Units.
(1) Settlement. Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company such number of shares of Common Stock or an amount of cash equal to the value determined by (or in a manner approved by) the Board of such number of shares of Common Stock, as provided in the applicable Award agreement. The Board may, in its sole discretion, provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant.
(2) Voting Rights. A Participant shall have no voting rights with respect to any Restricted Stock Units.
(3) Dividend Equivalents. To the extent provided by the Board, in its sole diseretion, a grant of The Award agreement for Restricted Stock Units may provide Participants with the right to receive an amount, in cash and/or shares of Common Stock, equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock ("Dividend Equivalents"); provided, however,except that any such Dividend Equivalents on Restrieted Stoek Units will either we aeeumulated or reinvested and paid upon vesting of the underlying Restrieted Stoek Unit. Dividend Equivalents may be settled in eash and/or shares of Common Stoek and will be shall be subject to the same vesting conditions and restrictions on transfer and forfeitability asapplicable to the underlying Restricted Stock UnitsUnit with respect to which they are paid. No interest will be paid, as determined by the Board in its sole diseretion, subject in each ease to such terms and conditions as the Board shall establish, in each ease to be set forth in the applieable Award agreement. on Dividend Equivalents.
8. Other Stock Unit Awards.

Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereuncer to Participants ( Other Stock Unit Awards '), including without imitation Awards entitling recipients to receive shares of Common Stock to be delivered in the future. Such Other Stock Unit Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock Unit Awards may be paid in shares of Common Stock or cash, as the Board shall determine. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock Unit Award, including any purchase price applicable thereto. Any dividend
equivalents granted with respeet to an Other Stoek Unit Award shall be subjeet to the same vesting and forfeiture provisions as the underlying Award.Any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Common Stock granted under an Other Stock Unit Award shall be paid to the Participant only if and when such shares become free from the estrictions on transferability and forfeitability that apply to such shares and will be paid no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if
later, the $15^{\text {th }}$ day of the third month following the lapsing of the restrictions on transferability and the later, the $15^{11}$ day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the underlying Other Stock Unit Award. Any Dividend Equivalen
provided in an Award agreement with respect to an Other Stock Unit Award shall be subject to the $\frac{\text { provided in an Award agreement with respect to an Other Stock Unit Award shall be subject to the }}{\text { same vesting conditions and restrictions on transfer and forfeitability applicable to the Other Stock }}$ Unit Award with respect to which paid. No interest will be paid on any such dividends or Dividen Equivalents.
9. Adjustments for Changes in Common Stock and Certain Other Events.
(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the sub-limits set forth in Section 4(c), (iii) the number and class of securities and exercise price per share of each outstanding Option, (iv) the share- and per-share provisions and the exercise price of each SAR, (v) the number of shares subject to and the repurchase price per share subject to each outstanding Restricted Stock Award and (vi) the share- and per-share-related provisions and the purchase price, if any, of each outstanding Other Stock Unit Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.
(b) Reorganization Events.
(1) Definition. A "Reorganization Event" shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction or (c) any liquidation or dissolution of the Company.
(2) Consequences of a Reorganization Event on Awards Other than Restricted Stock Awards. In connection with a Reorganization Event, the Board may take any one or more of the following actions as to all or any (or any portion of) outstanding Awards other than Restricted Stock Awards on such terms as the Board determines: (i) provide that Awards shall be assumed, or substantially equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to a Participant, provide that the Participant's unexercised Awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the Participant within a specified period following the date of such notice, (iii) provide that outstanding Awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an Award shall lapse, in whole or in part prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the "Acquisition Price"), make or provide for a cash payment to a Participant equal to the excess, if any, of (A) the Acquisition Price times the number of shares of Common Stock subject to the Participant's Awards (to the extent the exercise price does not exceed the Acquisition Price) over (B) the aggregate exercise price of all such outstanding Awards and any applicable tax withholdings, in exchange for the termination of such Awards, (v) provide
that, in connection with a liquidation or dissolution of the Company, Awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise price thereof and any applicable tax withholdings) and (vi) any combination of the foregoing. In taking any of the actions permitted under this Section $9(b)$, the Board shall not be obligated by the Plan to treat all Awards, all Awards held by a Participant, or all Awards of the same type, identically.

For purposes of clause (i) above, an Option shall be considered assumed if, following consummation of the Reorganization Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of common stock of the acquiring o succeeding corporation (or an affiliate thereof) equivalent in value (as determined by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.
(3) Consequences of a Reorganization Event on Restricted Stock Awards. Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company under each outstanding Restricted Stock Award shall inure to the benefit of the Company's successor and shall, unless the Board determines otherwise, apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the sam manner and to the same extent as they applied to the Common Stock subject to such Restricted Stock Award. Upon the occurrence of a Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock Award or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock Awards then outstanding shall automatically be deemed terminated or satisfied.
(c) Acquisition. An "Acquisition" shall mean any (i) merger or consolidation in which the Company is a constituent party or a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, which results in the voting securities of the Company outstanding immediately prior thereto representing immediately thereafter (either by remaining outstanding or by being converted into voting securities of the surviving or acquiring entity (the "Acquiror")) less than a majority of the combined voting power of the voting securities of the Company or the Acquiror outstanding immediately after such merger or consolidation or (ii) sale, transfer or other disposition of all or substantially all of the assets of the Company. The effect of an Acquisition on any Award granted under the Plan shall be specified in the agreement evidencing such Award
10. General Provisions Applicable to Awards.
(a) Transferability of Awards. Awards (other than vested Restricted Stock Awards) shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an Incentive Stock Option, pursuant to a qualified domestic relations order, and, during the life of the Participant, shall be exercisable only by the Participant; provided, however, that the Board may permit or provide in an Award for the gratuitous transfer of the Award by the Participant to or for the benefit of any immediate family member, family trust or other entity
established for the benefit of the Participant and/or an immediate family member thereof if, with respect to such proposed transferee, the Company would be eligible to use a Form S-8 for the registration of the sale of the Common Stock subject to such Award under the Securities Act; provided, further, that the Company shall not be required to recognize any such transfer until such time as the Participant and such permitted transferee shall, as a condition to such transfer, deliver to the Company written instrument in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees. For the avoidance of doubt, nothing contained in this Section 10(a) shall be deemed to restrict a transfer to the Company.
(b) Documentation. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.
(c) Board Discretion. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical and the Board need not treat Participants uniformly.
(d) Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.
(e) Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may decide to satisfy the withholding obligations through additional withholding on salary or wages. If the Company lects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise or release from forfeiture of an Award or, if the Company so requires, at the same time as is payment of the exercise price unless the Company determines otherwise. If provided for in n Award or approved by the Board in its sole discretion, a Participant may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued in the manner determined by (or in a manner approved by) the Board; provided, however, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income), except that to the extent that the Company is able to retain shares of Common Stock having a value that exceeds the statutory minimum applicable withholding tax without attracting financial accounting charges or the Company is withholding in a jurisdiction that does not have a statutory minimum
withholding tax, the Company may retain such number of shares of Common Stock (up to the number of shares having a value equal to the highest marginal applicable rate of tax) as the Company shall determine in its sole discretion to satisfy the tax liability associated with any Award. Shares surrendered to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.
(f) Amendment of Award. Subject to Sections 5(h), $6(\mathrm{f})$ and $10(\mathrm{~h})$, the Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided either (i) that the Participant's consent to such action shall be required unless the Board determines that the action, taking into
account any related action, would not materially and adversely affect the Participant or (ii) that the change is permitted under Section 9 hereof.
(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any share of Common Stock pursuant to the Plan or to remove restrictions from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.
(h) Acceleration. The Board may, at any time, provide that any Award shall become immediately exercisable in full or in part, free from some or all of the restrictions or conditions applicable to such Award or otherwise realizable in full or in part, as the case may be, including, without limitation, (A) upon the death or disability of the Participant or (B) in connection with an Acquisition.
(i) Performance Awards.
(1) Grants. Restricted Stock Awards and Other Stock Unit Awards under the Plan may be made subject to the achievement of performance goals pursuant to this Section 10(i) "Performance Awards"), subject to the limit in Section 4(c)(1) on shares covered by such grants.
(2) Committee. Grants of Performance Awards to any Covered Employee (a hereinafter defined) intended to qualify as "performance-based compensation" under Section $162(\mathrm{~m})$ ("Performance-Based Compensation") shall be made only by a Committee (or subcommittee of a Committee) comprised solely of two or more directors eligible to serve on committee making Awards qualifying as "performance-based compensation" under Section $162(\mathrm{~m})$. In the case of such Awards granted to Covered Employees, references to the Board or to a Committee shall be deemed to be references to such Committee or subcommittee. "Covered Employee" shall mean any person who is a "covered employee" under Section $162(\mathrm{~m})(3)$ of the Code.
(3) Performance Measures. For any Award that is intended to qualify as Performance-Based Compensation, the Committee shall specify that the degree of granting esting and/or payout shall be subject to the achievement of one or more objective performance measures established by the Committee, which shall be based on the relative or absolute attainment of specified levels of one or any combination of the following: (a) net ncome, (b) earnings before or after discontinued operations, interest, taxes, depreciation and/or amortization, (c) operating profit before or after discontinued operations and/or taxes, (d) sales, (e) sales growth, (f) earnings growth, (g) cash flow or cash position, (h) gross margins, (i) stock price, ( j ) market share, (k) return on sales, assets, equity or investment, (1) improvement of financial ratings, (m) achievement of balance sheet or income statemen objectives, or ( n ) total stockholder return, and may be absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated. The Committee may specify that such performance measures shall be adjusted to exclude any one or more of (i) extraordinary, nonrecurring or unusual items, (ii) gains or losses on the dispositions of discontinued operations, (iii) the cumulative effects of changes in accounting principles, (iv) the writedown of any asset, and (v) charges for restructuring and rationalization programs. Such performance measures: (ix) may vary by Participant and may be different for different Awards; (iity) may be particular to a Participant or the department branch, line of business, subsidiary or other unit in which the Participant works and may cove such period as may be specified by the Committee; and (iiizz) shall be set by the Committee
within the time period prescribed by, and shall otherwise comply with the requirements of, Section 162(m). Awards that are not intended to qualify as Performance-Based Compensatio may be based on these or such other performance measures as the Board may determine.
(4) Adjustments. Notwithstanding any provision of the Plan, with respect to any Performance Award that is intended to qualify as Performance-Based Compensation, the Committee may adjust downwards, but not upwards, the cash or number of Shares payable pursuant to such Award, and the Committee may not waive the achievement of the applicable performance measures except in the case of the death or disability of the Participant or a change in control of the Company.
(5) Other. The Committee shall have the power to impose such other restrictions on Performance Awards as it may deem necessary or appropriate to ensure that such Awards satisfy all requirements for Performance-Based Compensation.
(j) Limitations on Vesting. Subject to Section $10(\mathrm{~h})$ and notwithstanding anything to the contrary in the Plan, no Award shall vest earlier than the first anniversary of its date of grant. The foregoing sentence shall not apply to an aggregate of up to $5 \%$ of the maximum number of authorized shares set forth in Section 4(a)
11. Miscellaneous.
(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award by virtue of adoption or amendment of the Plan, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.
(b) No Rights As Stockholder; Clawback. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributedissued with respect to an Award until becoming the record holder of such shares. In accepting an Award under the Plan on or after the 2017 Effective Date, the Participant agrees to be bound by any clawback policy that the Company has in effect or may adopt in the future.
(c) Effective Date and Term of Plan. The Plan as amended shall become effective on the 20162017 Effective Date. No Awards shall be granted under the Plan after eompletion of 10 years from the 2016 Effective DateJune 9, 2026, but Awards previously granted may extend beyond that date.
(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time provided that (i) to the extent required by Section 162(m), no Award granted to a Participant that is intended to comply with Section $162(\mathrm{~m})$ after the date of such mendment shall become exercisable, realizable or vested, as applicable to such Award, unless and until such amendment shall have been approved by the Company's stockholders if required by俍 ("NASDAQ") would ade effective unless and until such amendment shall have been approved by the Company's made effective (iii) if the NASDAQ apped its tocker require stockholder approval of "material amendments" to equity compensation plans, the from and after the effective date of such amendment to the NASDAQ rules no amendment to the Plan (A) materially increasing the number of shares authorized under the Plan (other than pursuant Section 9), (B) expanding the types of Awards that may be granted under the Plan or (C) materially expanding the class of participts eligible to participate in the Plan shall be effective unless tockholder approval is obtained. In addition, if at any time the approval of the Company's
tockholders is required as to any other modification or amendment under Section 422 of the Code or any successor provision with respect to Incentive Stock Options, the Board may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 11(d) shall apply to, and be binding o the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment does not materially and adversely affect the rights of Participants under the Plan. No Award shall be made that is conditioned upon stockholder approval of any amendment to the Plan.
(e) Provisions for Foreign Participants. The Board may modify Awards or Options granted to Participants who are foreign nationals or employed outside the United States or establish subplans or procedures under the Plan to recognize differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.
(f) Compliance With Code Section 409A. Except as provided in individual Award agreement initially or by amendment, if and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes "nonqualified deferred compensation" within the meaning of Section 409A and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of "separation from service" (as determined under Section 409A) (the "New Payment Date"), except as Section 409A may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A but do not to satisfy the conditions of that section.
(g) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than such state

## Sonus

# UNITED STATES 

## SECURITIES AND EXCHANGE COMMISSION

WASHINGTON，D．C． 20549

## FORM 10－K

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

For the fiscal year ended December 31， 2016
$\square$ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15（d）OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 001－34115 SONUS NETWORKS，INC．
（Exact name of Registrant as specified in its charter）

## DELAWARE

（State or other jurisdiction of
incorporation or organization） incorporation or organization

Technology Park Drive，Westford，Massachusetts 01886
（Address of principal executive offices，including zip code）

## （978）614－8100

（Registrant＇s telephone number，including area code）
Securities registered pursuant to Section 12（b）of the Act

Com Title of each class
Common Stock，par value $\$ 0.001$
Securities registered pursuant to Section 12（g）of the Act：None
Indicate by check mark if the registrant is a well－known seasoned issuer，as defined in Rule 405 of the Securities Act．Yes $\square$ No $\begin{gathered}\text { ® }\end{gathered}$

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

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 $\boxtimes$ No $\square$

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 区 No प

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

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

Large accelerated filer
Accelerated filer 区

$$
\begin{aligned}
& \text { Non-accelerated filer } \square \\
& \text { (Donot check if a amaller } \\
& \text { reporting company) }
\end{aligned}
$$



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

The aggregate market value of the common stock held by non－affiliates of the Registrant was approximately $\$ 371,600,000$ based on the closing price for the Common Stock on the NASDAQ Global Select Market on June 30，2016．As of February 20,2017 ，there were $49,067,648$ shares of common stock，$\$ 0.001$ par value，outstanding．

DOCUMENTS INCORPORATED BY REFERENCE
Portions of the definitive Proxy Statement to be delivered to stockholders in connection with the Registrant＇s 2017 Annual Meeting of Stockholders are incorporated by reference into Part III of this report．

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## Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical facts contained in this Annual Report on Form $10-\mathrm{K}$, including statements regarding our future results of operations and financial position, business strategy, plans and objectives of management for future operations and plans fo future product development and manufacturing are forward-looking statements. Without limiting the foregoing, the word "anticipates", "believes", "could", "estimates", "expects", "intends", "may", "plans", "seeks" and other similar language whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward looking statements contain these identifying words. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We therefore caution you against relying on any of these forward-looking statements. Important factors that could cause actual results to differ materially from those in these forward-looking statements are discussed in Item 1A., "Risk Factors" of Part I and Items 7 and 7A., "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Quantitative and Qualitative Disclosures About Market Risk," respectively, of Part II of this Annual Report on Form 10-K. Also, any forward-looking statement made by us in this Annual Report on Form 10-K speaks only as of the date on which this Annual Report on Form 10-K was first filed. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

References in this Annual Report on Form 10-K to "Sonus," "Sonus Networks," "Company," "we," "us" and "our" are to Sonus Networks, Inc. and its subsidiaries, collectively, unless the context requires otherwise

## Overview

Sonus helps the world's leading communications service providers and enterprises embrace the next generation of Session Initiation Protocol ("SIP") and 4G/LTE (Long Term Evolution)-based solutions, including Voice over Internet Protocol ("VoIP"), Voice over WiFi ("VoWiFi"), video and Unified Communications ("UC") by securing and enabling reliable and scalable Internet Protocol ("IP") networks. With customers around the globe and 20 years of experience transforming networks to IP, Sonus enables service providers and enterprises to capture and retain users and generate significant related return on investment. Sonus products include session border controllers ("SBCs"), diameter signaling controllers ("DSCs"), and VoWiFi solutions, which are supported by a global services team with experience in design, deployment and maintenance of some of the world's largest IP networks.

Our solutions enable the delivery of real-time communication applications over wireline and wireless IP infrastructure with the same performance and quality level historically delivered from legacy voice time-division multiplexing ("TDM") technologies. Our original flagship product, the GSX9000 VoIP softswitch, helped usher in the VoIP revolution by providing a carrier-class IP telephony switch that would support the transition from circuit-switched to IP-based network communications. Other products soon followed, such as the Sonus Element Management Server and the Sonus PSX Centralized Routing \& Policy Server, which allowed communications service providers to replace high-cost circuit-based and space-consuming network equipment with smaller and more cost-efficient IP-based servers. We leveraged this expertise in managing and scaling large VoIP networks and introduced one of the industry's first SBCs to address the growing need for secure interconnection between private communications networks and the public Internet. Our SBC products are the fastest-growing segment of our business,
addressing the needs of mid- to large-sized enterprises from core infrastructures to branch offices, as well as the full spe addressing the needs of mid- to large-sized enterprises from core infrastructures to branch offices, as well as the full spectrum of communications service providers, both large and small.
Today Sonus provides communication solutions to service providers and enterprises that enable them to secure and unify their real-time communications infrastructures. Our solutions provide a secure way for our customers to link and leverage multivendor, multiprotocol communications systems and applications across their networks, around the world and in a rapidly changing ecosystem of IP-enabled devices such as smartphones and tablets. Our solutions help realize the intended value an benefits of UC platforms by enabling disparate communications environments, commonplace in most enterprises today, to work seamlessly together. Likewise, Sonus solutions secure the evolution to cloud-based delivery of UC solutions - both for service providers transforming to a cloud-based network and for enterprises using cloud-based UC. In 2016, we announced our comprehensive cloud portfolio, delivering a secure solution with elastic policy control and session management, automated scaling, innovative load balancing and high availability.

Our service provider customers include AT\&T Inc., BICS (formerly known as Belgacom ICS), BT Group plc, CenturyLink, Inc., Colt Technology Services, Deutsche Telekom AG, KDDI Corporation, Level 3 Communications, Inc. (which announced that it will be acquired by CenturyLink, Inc.), Orange Business Services, Softbank Group Corp., TalkTalk Telecom Group PLC, Tata Communications Lta., Verizon Communications Inc., Vonage Holdings Corp. and XO Communications, LLC (which w recently acquired by Verizon Communications Inc.). We have traditionally sold our products through a global direct sales
force, with additional sales support from regional channel partners throughout the world. Our channel partner program, So force, with additional sales support from regional channel partners throughout the world Partner Assure, expands our coverage of the service provider and enterprise markets.

In 2012, in concert with Sonus Partner Assure, we enhanced our SBC 5200 to be more enterprise- and channel-centric and launched the SBC 5100 to address the requirements for smaller offices as a result of their VoIP and SIP deployments. The acquisition of Network Equipment Technologies, Inc. ("NET") in 2012 also provided us with the SBC 1000 and SBC 2000 along with strong expertise in the Microsoft Skype for Business and Lync market and a presence in the U.S. federal government market. Today, Sonus has more Skype for Business and Lync-qualified SBCs than any other vendor. In 2013, we introduced the industry's first software-based SBC architected to deliver unlimited scalability and designed with advanced features, the Sonus SBC SWe (Software edition). In 2016, this product was named a "Cloud Computing Security Excellence Award" winner by Cloud Computing magazine and Miercom, an independent certification company, verified the performance of the SBC SWe in network function virtualization ("NFV") environments through extensive testing.

In 2014, with the acquisition of Performance Technologies, Incorporated ("PT"), we expanded and diversified our portfolio with an integrated Diameter and SS7 signaling solution and have delivered strategic value to service providers seeking to offer new multimedia services through mobile, cloud-based, real-time communications. Also in 2014, we announced our Sonus SBC

7000 ("SBC 7000"), which is designed to address scalability requirements for real-time, multimedia communications with the capability to license up to 150,000 sessions. The SBC 7000 is purpose-built to support emerging services such as high definition ("HD") voice and video, Voice over Long-Term Evolution ("VoLTE") and Rich Communications Services ("RCS")

In 2014, we announced our software-based DSC and software-based policy and routing engine ("PSX"). By the end of 2014, we had virtualized our SBC, DSC and PSX products, leading this aspect of the market as evolving network architectures transition to leveraging virtualized network functions as part of software-based, programmable networks

In 2015, we acquired from Treq Labs, Inc. ("Treq") certain assets related to its software-defined networking ("SDN") business, which provides solutions that optimize networks for voice, video and UC for both enterprise and service provider customers.

On September 26, 2016, we acquired Taqua, LLC ("Taqua"), an early leader in next-generation IP switch technology with more than 400 installed systems and over four million subscribers worldwide. Taqua's Virtualized Mobile Core ("VMC") solution expected to bolster our product offerings in the mobile communications space by providing an alternative to full also expected to expand our fixed portfolio by adding a Class 5 Softswitch (T7000) for network transformation projects. The acquisition is aligned with our growth strategy and network transformation initiatives.

## Industry Background

The single greatest capital cost for telecommunications service providers has been and continues to be their infrastructure. In order to leverage these capital investments and deliver new services such as triple-play (voice, television and Internet) bundles, service providers must consolidate their infrastructure from the costly, legacy Public Switched Telephone Network ("PSTN") infrastructures into the more efficient and flexible IP-based network models, which we believe are driving their revenue-growth objectives. Migrating from the PSTN to IP reduces costs by enabling the consolidation of voice, video and data within a single IP-based networking infrastructure. In an effort to further leverage service providers' capital investments and deliver new IPbased services, we believe the telecommunications industry is undergoing another major transformation from hardware-centric IP-based networks toward software-centric programmable IP-based networks.

The shift from PSTN- to IP-based communications began around 1996 and was driven by the desire of communications service providers to deliver new IP data services to grow their revenue. For most telecommunications service providers, the move to IP-based network communications presumed a strategic, phased migration. This strategy often involved deploying VoIP-based network equipment to enable the inter-networking between legacy TDM infrastructures and the new IP-based infrastructures. As a result, service providers typically found themselves operating hybrid networks that featured a mix of old (TDM) and new (IP/SIP) technology. The interoperability of these technologies introduced several issues, such as security, call control and quality of service requirements, which had to be addressed over a converged IP network that now carried not just data, but voice and multimedia data streams as well. Our original solution portfolio focused almost exclusively on helping telecommunications service providers successfully transition from TDM to all-IP communications while reducing costs and increasing revenue opportunities. As IP-to-IP communications have become more common, our product focus has naturally shifted from core network switching to SBCs and securing those communications. As 4G/LTE networks displace 3G and older wireless networks, creating additional security risks and network congestion, our product focus has shifted to DSCs and mobility solutions as well

While we anticipate that TDM-to-IP interoperability will remain a core requirement of communications networks for many years to come, communications service providers and enterprises face a new generation of potentially disruptive market trends, including cloud-based communications, UC, mobility/applications and NFV. Although hosted communications have bee available for years, hosting them in the cloud represents a unique opportunity for service providers. This is a key trend currently affecting both enterprises and service providers. Local and long-distance voice, video, Interactive Voice Response ("IVR") systems and call recording are just a few examples of applications that are beginning to be delivered in this manner Another key trend affecting enterprises and service providers is the demand by users for the unification of communication modalities such as voice, instant messaging ("IM"), short message service, video and web-sharing. A third key trend, which primarily impacts enterprises, is the move to mobility and secure applications as service providers are evolving their mobile networks to VoLTE and VoWiFi. Enterprises need to support the explosion of communications devices (e.g., tablets, smartphones, laptops) and third-party applications in their communications infrastructure. A fourth key trend, NFV, is the virtualization of certain products to enable network functionality, such as the SBC, PSX (and its derivatives) and DSC to run as software on commercial, off-the-shelf platforms to be hosted in public cloud infrastructure or within other network elements. The primary benefit of NFV for service providers is the ability to more rapidly innovate and deploy new cloud-based applications, service and infrastructure to meet their customers' evolving needs. We believe our software-based SBC, DSC VMC and policy solutions are designed to help customers effectively address these trends as they migrate to the cloud.

## Network Requirements and the Sonus Solutions

The introduction of the Sonus GSX9000 Open Services Switch helped to change the perception that VoIP was an inferior alternative to the PSTN. That original commitment to quality, found in all of our solutions today, can be summed up in five solution attributes: Security, Reliability, Scalability, Interoperability and Simplicity.

Security. IP communications networks must be secure against both internal and external attacks. Our SBCs and other networking products provide robust network security through a variety of methods including endpoint authentication, signaling and media encryption, prevention of denial-of-service ("DoS") and distributed DoS ("DDoS") attacks, Network Address Translation firewall support and user-defined security policies such as whitelisting and blacklisting.

Reliability. Communications service providers and enterprises operate complex, mission-critical networks. Our products are designed to offer the highest levels of quality and reliability, including:

- Full redundancy, designed for 5-nine's ( $99.999 \%$ ) availability;
- Quality of service equal or superior to the PSTN
- System hardware designed to comply with Network Equipment Building System Standards Level 3;
- Interworking between numerous signaling and media formats to support multivendor, global networks; and
- Sophisticated security, network monitoring and analytics capabilities.

Scalability. Communications service providers and enterprises face challenging scalability requirements, with communications networks that may support tens or even hundreds of thousands of simultaneous sessions. To be economically attractive, new infrastructure investments must compare favorably with existing networks in terms of performance, cost per port, space occupation, power consumption and cooling requirements. Our software products are architected to scale simply and cost effectively from a handful of sessions to a virtually unlimited number of simultaneous sessions in either hybrid or public cloud deployments. In addition, our hardware platforms offer unparalleled density and require significantly less space, power and cooling compared to legacy systems that do not scale. Our higher capacity platforms are designed to be more cost-efficient to operate and minimize management overhead.

Interoperability. New network infrastructure equipment and software must often sustain the full range of network communications standards, supporting both data networking protocols as well as telephony protocols. Infrastructure solutions must also integrate seamlessly with existing operations support systems. Our products are designed to be compatible with a wide range of voice and data networking standards and interfaces, including:

- SS7 and other telephony signaling protocols, including numerous country variants, number translations (e.g., ENUM and DNS) and intelligent services routing;
- Call signaling standards such as SST/SIGTRAN, SIP and its variants: BICC, MGCP and H.323;
- Narrowband and Wideband media encoding/decoding formats and standards such as G. 711 and G.722;
- All bearer interfaces over both packet- and circuit-based bearers such as IDM, Optical and Ethernet;
- Management and accounting interfaces such as Radius, Diameter, SNMP and AMA;
- Interoperability with enterprise systems including Private Branch eXchanges ("PBXs"), IVR applications and Microsoft Lync Server; and
- Interoperability between $2 \mathrm{G} / 3 \mathrm{G}$ networks and $4 \mathrm{G} / \mathrm{LTE}$ networks.

Simplicity. Our products are built on the idea of a simple, flexible architecture that allows communications service providers and enterprises to quickly deploy them individually in specific roles (e.g., as a standalone SBC) or collectively in broader solutions, such as international gateways, IP-based networks and 4G/LTE networks. This is accomplished through our unique centralized SIP architecture as well as our commitment to third-party interoperability testing and certification, adherence to industry standards and our industry-leading global services organization.

## Sonus Products

At December 31, 2016, our products included the following

## Sonus Session Border Controller

Our portfolio of SBCs addresses security and interworking requirements for small, medium and large businesses as well as regional and global communications service providers. SBCs are the fastest-growing segment of our business and we offer a
broad range of SBCs that scale from a handful of SIP sessions to hundreds of thousands of sessions and collectively represent the largest number of Skype for Business and Lync-certified SBCs than any other vendor on the market.

We currently offer the following unique SBC products:

- Sonus SBC 1000 for small businesses and branch offices that require performance of up to 160 concurrent SIP sessions in a standalone SBC;
- Sonus SBC 2000 for mid-size enterprises, branch offices and regional Points of Presence that require performance of up to 600 concurrent SIP sessions in a standalone SBC;
- Sonus SBC 5110 for enterprises and service providers that require performance of up to 10,000 concurrent SIP sessions in a standalone SBC;
- Sonus SBC 5210 for enterprises and large national/global service providers that require performance of up to 64,000 concurrent SIP sessions in a standalone SBC;
- Sonus SBC 5400 for enterprises and large national/global service providers that require performance of up to 75,000 concurrent SIP sessions in a standalone SBC;
- Sonus SBC 7000 for real-time, multimedia communications that require performance of up to 150,000 sessions in a standalone SBC;
- Sonus SBC 9000 for large enterprises and service providers that require a hybrid gateway/SBC solution for a mix of TDM and IP voice traffic;
- Sonus SBC SWe (Software edition), a software-based SBC for virtual environments, remote deployments and instances where virtualized software-based implementations are required.

In 2016, the Sonus SBC 5110, SBC 5210 and SBC 7000 were Federal Information Processing Standard (FIPS) 140-2 validated, enabling U.S. government and other regulated customers to utilize these SBCs to secure mission-critical communications. This program is operated jointly by the United States National Institute of Standards and Technology and the Communications Security Establishment of Canada to specify the level of security needed to protect sensitive government data in computer and telecommunication systems.

## Sonus GSX9000 Open Services Switch

The Sonus GSX9000 Open Services Switch (the "GSX9000") bridges IP and TDM networks by converting any type of voice signal into IP packets and transmitting those IP packets over a data network. It then converts whatever type of signal is necessary to be deposited back onto non-IP networks and delivers such signal to its intended destination. The GSX9000 is designed to deliver voice quality that is equal or superior to that of the legacy circuit-switched public network. Further, it supports multiple voice encoding schemes used in circuit switches and delivers a number of other voice compression algorithms. The GSX9000 scales to very large configurations, such as those required by large national service providers. A single GSX 9000 shelf is designed to support up to 22,000 simultaneous calls, while a single GSX9000 in a multiple-shelf configuration is architected to support 100,000 or more simultaneous calls. The GSX9000 also operates with our PSX Policy \& Routing Server and with softswitches and network products offered by other vendors.

## Sonus T7000 Intelligent Switching System

The Sonus T7000 is a Class 5 end-office softswitch that provides residential and business voice services and is a nex generation IP-IP Multimedia Processing Engine. Using the T7000, operators can transform their networks from older Norte DMS, Lucent SESS and other switches to an IP-based Class 5 softswitch. The T7000 allows operators to meet regulatory requirements, satisfy the demand for new triple-play services, migrate to VoIP, lower operating costs, and generate new revenues with the RUS-listed, carrier-class Class 5 switching gateway.

## Sonus Diameter Signaling Controllers

The trend toward $4 \mathrm{G} /$ LTE networks and increasingly mobile-centric communications is expected to result in a significant rise in Diameter traffic in service provider networks. To address the anticipated growth of Diameter traffic in the network, Sonus offers its Diameter Signaling Controller, the Sonus DSC 8000 . The DSC 8000 is designed to provide high performance, capacity, scalability and interoperability for 4G/LTE networks. The Sonus DSC solution is also available as a software-only product, DSC SWe, which can be run on common-off-the-shelf hardware and in virtual instances for superior price/ performance. In 2016, Sonus made new SS7 security enhancements to its DSC 8000 products that are designed to discourage mobile device hacking.

## Sonus Signal Transfer Points

The Sonus Signal Transfer Point ("STP") acts as the switch/router in an SS7 signaling network, managing and controlling all signaling traffic. The STP's vast array of network interfaces provide network planners the ability to design and implement SS7
network architectures that meet both the physical and business requirements of their companies. These interfaces include TDM SS7 Links, Asynchronous Transfer Mode SS7 Links, High Speed "HSL" Annex "A" SS7 Links and the IP-based SISGTR AN Links.

## Sonus PSX Policy \& Routing Server

The Sonus PSX Policy \& Routing Server (the "PSX") is the central routing and policy engine for our softswitch and distributed SBC solutions. The PSX plays an integral role in many of our network deployments, and provides both the call routing intelligence and policy intelligence for SIP sessions across the network. The PSX is unique in that it can act as a central control and provisioning point for hundreds of switches or SBCs, resulting in significant operational savings for our customers. The PSX is based upon a modular architecture that is designed for high performance and scalability, as well as interoperability with third-party gateways, devices and services. The PSX is an all-IP component and can perform most IP-based database lookup natively. The core PSX platform is also extensible through applications to address solutions such as Least Cost Routing,列 also be deployed in virtualized environments as a software-only instance via the Sonus Virtualized PSX (SWe) product.

## Sonus WebRTC Services Solution

Web Real-Time Communications ("WebRTC") is a technology that enables web browsers to participate in audio, video and data communications, without any kind of additional plug-ins or application downloads. A WebRTC-enabled browser or mobile application allows users to place a call, participate in multi-party video and audio conferencing, and engage in screen sharing collaboration. Any device that supports a WebRTC-enabled browser can be used to communicate with another WebRTC-enabled application over the Internet. WebRTC facilitates interoperability between different communication system and helps enable UC by allowing users, servers and applications to connect the world of web communications to the world of UC. With the Sonus WebRTC Services Solution, customers can write WebRTC-enabled applications that securely interoperate with other WebRTC-enabled devices or with SIP endpoints.

The Sonus WebRTC Services Solution includes

- Sonus WebRTC Gateway (WRTC), which enables interworking from WebRTC to SIP, as well as signaling from WebRTC to WebRTC solutions; and
- Sonus WebRTC Software Development Kit (WRTC SDK), which provides application program interfaces for voice, video, IM, desktop share, session management, presence and conferencing.

Sonus Network Management Solutions
We offer our customers a variety of products to help manage and integrate our networked solutions with internal provisioning and billing systems, including:

- Sonus NetScore network performance analysis tool, which provides a real-time assessment of the state of a service provider's or enterprise's network, including quality of service, call delay, network effectiveness, congestion and efficiency;
- Sonus Element Management System for centralized management and provisioning of Sonus network elements; and - Sonus DataStream Integrator for integration of call data records with back-office billing and accounting systems.


## Virtualized Mobile Core Solution

Sonus' VMC is a virtualized IMS services core that enables rapid deployment of next-generation voice and messaging services, including VoWiFi and VoLTE. Deployed in numerous mobile operator networks today, the VMC is a carrier-grade product that combines a number of standard IMS functions into one virtualized software solution, including:

- Telephony Application Server (TAS);
- IP Short Message Gateway (IP-SM-GW);
- Service Centralization and Continuity Application Server (SCC-AS);
- IP Multimedia Service Switching Function (IM-SSF);
- Media Resource Function (MRF); and
- Serving Call Session Control Function (S-CSCF)


## Sonus Global Service

Sonus Global Services offers professional consulting and services that support our industry-leading IP communications solutions. Through a wide range of service offerings, our consultants provide the skill and expertise to help communications service providers and enterprises transform their communications networks, from network engineering and design through network integration and commissioning to network operations. We believe our service offerings accelerate our customers'
return on investment, optimize their operational capability, enhance their network's performance and health, and help them generate new revenue. In addition to end-to-end design, integration and deployment services, our Global Services team offer customized engagements, training workshops, interoperability/verification testing and around-the-clock technical support worldwide.

The Sonus Global Services team provides our customers with:

- A full-service portfolio including consulting, integration, deployment, migration, operation support, monitoring and managed services;
- Global reach through our worldwide service organization and partner presence in all major global markets;
- Program managers who use a disciplined methodology for all deployment and integration projects; and
- Consistent execution in the design, deployment and support of the world's largest and most advanced networks.

In addition to global support teams, as of December 31, 2016, Sonus Global Services maintained regional service desks located in Westford, Massachusetts (United States), Tokyo (Japan), Prague (Czech Republic), Ottawa (Canada), Mexico City (Mexico) and Kuala Lumpur (Malaysia), and both a service desk and customer test center in Richardson, Texas (United States).

## Sonus Market Strategy

We see opportunity for securing real-time communications in the cloud for both communication service providers and enterprises. Communication service providers are transitioning their networks from hardware to NFV. In parallel, enterprise based UC infrastructures are moving to cloud-based delivery systems. The trend toward cloud-based communications require infrastructure investment by the enterprises who buy cloud services as well as the communications service providers that deliver cloud services. Our SBCs (whether virtual- or hardware-based) that are installed in service provider and enterprise networks enable these customers to deliver and secure real time communication services across and between multiple infrastructures and heterogeneous IP-PBX corporate environments. Additionally, when installed at the edge of service providers' and enterprises' networks, our SBCs allow service providers to securely and seamlessly deliver consolidated voice and data services to enterprises through SIP trunking services.

We expect that communications service providers will continue to modernize their TDM peering and access networks to SIP, and to monetize their existing SIP trunking services by offering new cloud services, including hosted and managed UC infrastructure and applications that drive the need for more SBC sessions. We also anticipate that service providers will expand their cloud-based real time communication services, further driving a need for SIP and Diameter-based infrastructure equipment. To that end, we are partnered with companies such as BroadSoft, Inc., whose products allow service providers to increase their cloud application offerings, while using our SBCs and policy solutions to facilitate the integration of their networks and offerings.

We currently sell our SBCs to enterprise customers for use at both the core and the edge of their networks, which allows them to set up a secure IP network with their service providers, consolidate dial plans and routing services and evolve from their legacy PBX infrastructures. In adopting cloud-based services, we expect that enterprises will continue to leverage their premise-based assets (e.g., PBXs) and, as such, will continue to need strong interworking and policy management to enabl these cloud- and premise-based components to work together seamlessly. We believe that enterprises want UC solutions in their networks, and expect Microsoft's UC platform to play a key role in their communications productivity. We currently offer the broadest portfolio of Microsoft Skype for Business and Lync-qualified SBCs to enable enterprises to integrate Skype for Business with existing PBXs or facilitate their migration from a PBX to Skype for Business. Additionally, we have strong certified channel partners that continue to support customers' migrations to Skype for Business.

As mobile networks continue to adopt LTE and deployments of the Internet of Things ("IoT") accelerate, our DSCs, along with our SBCs, provide the critical edge interconnection for deployment in these networks. Providing both security for and interoperability between carriers and service providers, we believe our single vendor solution for data, voice, media and authentication are well positioned for this high-growth area. In addition to the Diameter Edge function, our scalable DSC also can be used in the core of the network, providing Diameter Routing and load balancing to handle congestion management and reduce network complexity as traffic generated by mobile devices and the IoT increases.
In addition to the adoption of LTE, we also anticipate a parallel adoption of VoWiFi. With a more congested radio access network ("RAN") comes a need to expand coverage using WiFi. We believe our VoWiFi solution is well positioned to assist carriers in alternate coverage paradigms for their mobile subscribers

We also plan to continue developing new solutions internally and through partnerships that allow our customers to stay ahead of the rapid technology shifts in the communications industry. Following are some key principles driving our product evolution:

Expand our solutions to secure IP-based communications markets. The transformation from legacy TDM networks to all-IP Expworks has created new requirements for security, UC and media manipulation as well as an opportunity for creating IP-to-IP services at the network edge. The requirements for security go far beyond the legacy functionality of SBCs and include the services at the network edge. The requirements for security go far beyond the legacy functionality of SBCs and include the
operator's requirements for a border gateway to other IP networks as well as a wide variety of requirements associated with the need for enterprises to secure their own IP networks. The UC or multimedia nature of emerging services provides an opportunity for us to create innovative compliance and security solutions, both individually and with the help of partners.

Expand and broaden our customer base by targeting specific market segments, such as enterprises and wireless operators. We plan to penetrate additional customer segments and believe that new and incumbent service providers will build out their VoIP infrastructures at different rates. The next-generation communications service providers, who are relatively unencumbered by legacy equipment, have been initial purchasers of our equipment and software. Other newer entrants, including wireless operators, cable operators and Internet service providers ("ISPs"), have also been early adopters of our products. Moreover, incumbents, including interexchange carriers, regional Bell operating companies and international operators, are adopting packet-voice technologies. Large enterprises are often operating voice networks that can be as complex as a small to mid-sized service provider, and we believe that our products are a good match for their needs for secure, reliable and scalable communications. We also continue to expand our SBC portfolio with the needs of the small and medium business customers in mind.

Expand our global sales, marketing, support and distribution capabilities. As a primary supplier of network infrastructure solutions to Tier 1 service providers (a service provider that can reach every other network on the Internet without purchasing IP transit), we require a strong worldwide presence. We have an established sales presence throughout North America, Europe, Asia/Pacific, the Middle East, Africa, and Central/South America. We augment our global direct sales force by working with international partners in key markets around the world. Our expanded channel partner program was designed as a two-tiered structure to better support our growing and diverse community of SBC channel resellers.

Leverage our technology leadership to attract and retain key communications service providers. As one of the first companies to offer carrier-class IP network solutions, we have worked with many of the world's leading communications service providers to help them develop their next-generation, IP-based multimedia networks. We expect service providers to select vendors that deliver leading technology and can maintain that technology leadership. We believe that our solutions are an integral part of our customers' network architectures, and we will continue to help these customers move forward as their networks grow and evolve. By working closely with leading service providers, we gain valuable knowledge about their requirements, and we will continue to use this knowledge to enhance our existing products and create new products that address the most important requirements of network operators globally.

## Sonus Customers

Our solutions are deployed in many of the world's leading service provider and enterprise networks, including AT\&T Inc., BICS (formerly known as Belgacom ICS), BT Group plc, CenturyLink, Inc., CITIC Telecom 1616 LTD., Deutsche Telekom AG, Inteliquent, Inc., Kellogg Company, KDDI Corporation, Level 3 Communications, Inc. (which announced that it is being acquired by CenturyLink, Inc.), NTT Communications Corp., Orange Business Services, RELX Group ple, Royal Dutch Shell plc, SoftBank Group Corp., State Street Corporation, TalkTalk Telecom Group PLC, Tata Communications Ltd., TeliaSonera AB, Telstra Corporation Limited, Verizon Communications Inc., and Vonage Holdings Corp. In recent years, we have seen a significant increase in the number of enterprise customers purchasing our SBC product portfolio as a result of our overall channel partner program.

The table below provides information regarding our customer who accounted for $10 \%$ or more of our revenue for the years ended December 31, 2016, 2015 and 2014:

## Year ended December 31,

$\qquad$
13\% $19{ }^{\circ}$

## Sales and Marketing

We sell our products through both direct sales and indirect channels globally, leveraging the assistance of resellers such as Verizon Communications Inc. and distributors such as ScanSource, Inc. and Westcon Group Inc. Sonus Partner Assure, our channel partner program, was designed to serve particular markets and provide our customers with opportunities to purchase our products in combination with related services and products.

## Product Research and Development

We believe that strong product development capabilities are essential to our strategy of enhancing our core technology, developing additional applications, incorporating that technology into new products and maintaining comprehensive product and service offerings. Our research and development process leverages innovative technology in response to market data and customer feedback. We have introduced differentiated products to address market and customer needs, including the Sonus SBC 5100. In addition, with the acquisition of NET in 2012, we incorporated its SBC products into our product SBC porfolio as the Sonus SBC 1000 and the Sonus SBC 2000. Both the Sonus SBC 1000 and Sonus SBC 2000 received enher 2016 that offer more cloud functionality and support for third-party
resulting in more features and more power at a lower price point

In 2013, we introduced the first software-based SBC that was designed to feature advanced capabilities and unlimited scalability, the Sonus SBC SWe (Software edition). In 2014, we announced software-only versions of our PSX policy server and DSC products, as well as our most powerful SBC to date, the SBC 7000. In 2015, we introduced the Sonus WebRTC Services Solution and expanded our virtual product portfolio with virtual versions of Sonus NetScore and Sonus Element versions of our PSX and EMS, a microservices architecture for our SBC SWe and innovative integrated analytics.

We have assembled a team of highly skilled engineers with significant telecommunications and networking industry experience. Our engineers have deep experience in and with leading wireline and wireless telecommunications equipment suppliers, computer data networking and multimedia companies. Our engineering effort is focused on SBC and DSC product development, new applications and network access features for enterprises, solutions to support Unified and cloud-based communications services and next-generation wireless technologies. At December 31, 2016, we maintained research and development offices in Massachusetts, California, Illinois, Texas, New York and New Jersey in the United States; Kanata, Ontario Canada; Bangalore, India and Swindon, United Kingdom. We have made, and intend to continue to make, a substantial investment in research and development.

Our research and development expenses were $\$ 72.8$ million for the year ended December 31, 2016, $\$ 77.9$ million for the year ended December 31, 2015 and $\$ 79.4$ million for the year ended December 31, 2014.

## Competition

The market for voice and multimedia network equipment remains competitive worldwide, but there are historical regional differences in services, regulations and business practices among sub-markets that can benefit individual vendors. Regardles of the region, the overall market is subject to rapid technological change, affected by new product introductions, changing customer demands, industry consolidation and other market activities of industry participants. To compete effectively, we must deliver innovative products that provide extremely high reliability and quality, deploy and scale easily and efficiently, interoperate with existing network infrastructures and multivendor solutions, provide effective network management, are accompanied by comprehensive customer support and professional services, provide a cost-effective and space-efficient solution for enterprises and service providers, meet price competition from low-cost equipment providers and offer solutions that are timely for the market and support where the industry is heading. We expect competition to persist and intensify in the future. Our primary sources of competition include vendors of networking and telecommunications equipment, such as ADTRAN, Inc., ALOE Systems Inc., AudioCodes Ltd., Avaya Inc., Cisco Systems, Inc., Dialogic Inc., Ericsson LM Telephone Company, F5 Networks, Inc., GENBAND Inc., Huawei Technologies Co. Ltd., Metaswitch Networks Corporation, Mitel Networks Corporation, Nokia Corporation, Oracle Corporation, Sansay, Inc., Technicolor SA, Xura, Inc. and ZTE Corporation.

Although we believe we compete favorably because our solutions are widely deployed, highly scalable and cost-effective for our customers, some of our competitors have broader product portfolios than we have and are able to devote greater resources to the development, promotion, sale and support of their products. In addition, some of our competitors have more extensive customer bases and broader customer relationships than we have, including relationships with our potential customers and established relationships with distribution partners. Other smaller private and public companies are also focusing on similar market opportunities.

Please see generally the risks that are more fully discussed in Item 1A. Risk Factors for risks related to competition in our industry.

## Intellectual Property

Intellectual property is fundamental to our business and our success, and we depend upon our ability to develop, maintain and protect our technology. Therefore, we seek to safeguard our investments in technology and rely on a combination of United States and foreign patent, trademark, trade secret and copyright law and contractual restrictions to protect the proprietary aspects of our technology and to defend us against claims from others. Our general policy has been to seek to patent those patentable inventions that we expect to incorporate in our products or that we expect will be valuab and in specific foreign countries where we believe filing for such protection is appropriate.

At December 31, 2016, we held 221 U.S. patents with expiration dates ranging from February 2017 through March 2025, and had 39 patent applications pending in the United States. While we have 9 patents that are set to expire within the next two years, the expiration of these patents is not expected to have a material effect on our financial position or future operations since these patents do not relate to our current business strategy and therefore are not of material value to us. In addition, at December 31, 2016, we held 50 foreign patents with expiration dates ranging from June 2019 through October 2027, and had logo, NetAssure, NetEng, NetScore, Promina and Tenor, and had two pending trademark applications in the United States at December 31, 2016. In addition to the protections described above, we seek to safeguard our intellectual property by:

- Protecting the source and object code for our software, documentation and other written materials under copyright laws and trade secret;
- Licensing our software pursuant to signed license agreements, which impose restrictions on others' ability to use our software; and
- Seeking to limit disclosure of our intellectual property by requiring employees and consultants with access to our proprietary information to execute confidentiality agreements.

We have incorporated third-party licensed technology into certain of our current products. From time to time, we may be required to license additional technology from third parties to develop new products or to enhance existing products. Based on experience and standard industry practice, we believe that licenses to use third-party technology generally can be obtained on commercially reasonable terms. Nonetheless, there can be no assurance that necessary third-party licenses will be available or continue to be available to us on commercially reasonable terms. As a result, the inability to maintain, license or re-license any third-party licenses required in our current products, or to obtain any new third-party licenses to develop new products and enhance existing products could require us to obtain substitute technology of lower quality or performance standards or at greater cost. This could delay or prevent us from making these products or enhancements, any of which could seriously harm our business, financial condition and operating results.

Please see generally the risks that are more fully discussed in Item 1A. Risk Factors for risks related to our intellectual property.

## Manufacturing

As of December 31, 2016, we outsourced the manufacturing of our products to four manufacturers, one of which is primarily relied upon. Our contract manufacturers provide comprehensive manufacturing services, including assembly and testing of our products and procurement of component materials on our behalf. We believe that outsourcing our manufacturing enables us to preserve working capital, allows for greater flexibility in meeting changes in demand and enables us to be more responsive in delivering products to our customers. At present, we purchase products from our contract manufacturers on a purchase order basis.

We and our contract manufacturers currently purchase several key components of our products, including commercial digital signal processors, from single or limited sources. We purchase these components on a purchase order basis.
Please see generally the risks that are more fully discussed in Item 1A. Risk Factors for risks related to our manufacturing operations.

## Backlog

We sell products and services pursuant to purchase orders issued under master agreements that provide standard terms and conditions that govern the general commercial terms and conditions of the sale. These agreements typically do not obligate customers to purchase any minimum or guaranteed quantities, nor do they generally require upfront cash deposits. At any given time, we have orders for products that have not yet been shipped and for services (including our customer support obligations) that have not yet been performed. We also have orders relating to products that have been delivered and service that have been performed but have not yet been accepted by the customer under the applicable purchase terms. We include both of these situations in our calculation of backlog. A backlogged order may not result in revenue in the quarter in which it was booked, and the actual revenue recognized in a quarter may not equal the total amount of related backlog. Therefore, we do not believe that our backlog, as of any particular date, is necessarily indicative of actual revenue for any future period. In addition, we expect to derive a greater percentage of our revenue in the future from the enterprise market and through sales channels where speed of fulfillment is essential to winning business. Consequently, we expect to derive a lower percentage of our business from large service provider orders that are delivered over multiple quarters and years and we expect our backlog to decrease as a result. Our backlog was approximately $\$ 123$ million at December 31, 2016 and approximately $\$ 114$ million at December 31, 2015.

## Employee

At December 31, 2016, we had a total of 1,152 employees. Except for our employees in France, our employees are not represented by any collective bargaining agreement. We believe our relations with our employees are good.

## Geographic and Segment Information

We operate in a single segment. Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker in making decisions regarding resource allocation and assessing performance. To date, our chief operating decision maker has made such decisions and assessed performance at the company level, as one segment. Our chief operating decision maker is our President and Chief Executive Officer.

Our classification of revenue by geographic area is determined by the ship-to location of our customers. The following table summarizes revenue by geographic area as a percentage of total revenue:

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| United States | 69\% | 71\% | $71 \%$ |
| Europe, Middle East and Africa | 13 | 13 | 13 |
| Japan | 10 | 10 | 9 |
| Other Asia Pacific | 5 | 4 | 5 |
| Other | 3 | 2 | 2 |
|  | 100\% | 100\% | 100\% |

Information regarding the geographic components of our property and equipment is provided in Note 8 of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

## Additional Information

We were incorporated in August 1997 as a Delaware corporation. Our principal executive offices are located at 4 Technology Park Drive, Westford, MA 01886. Our telephone number at our principal executive office is 978-614-8100.

This Annual Report on Form 10-K, as well as all other reports filed with or furnished to the United States Securities and This Annual Report on Form 10-K, as well as all other reports filed with or furnished to the United States Securities and
Exchange Commission (the "SEC"), are available free of charge through our Internet site (http://www.sonus.net) as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Information found on our website is not part of this report or any other report we file with or furnish to the SEC. The public may read and copy any
 may obtain infornet (htp:/1/ maintains an Internet site (http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

## Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below before buying our common stock. If any of the following risks actually occurs, our business, financial condition, results of operations and cash flows could be materially adversely affected, the trading price of our common stock could decline materially and you and cash fows could be materially advert
could lose all or part of your investment.

## Our quarterly revenue and operating results are unpredictable and may fluctuate significantly from quarter to quarter,

 which could adversely affect our business, consolidated financial statements and the trading price of our common stock.Our revenues and operating results may vary significantly from quarter to quarter due to a number of factors, many of which are outside of our control and any of which may cause our stock price to fluctuate. The primary factors that may affect our revenues and operating results include, but are not limited to, the following:
consolidation within the telecommunications industry, including acquisitions of or by our customers;
general economic conditions in our markets, both domestic and international, as well as the level of discretionary IT
competitive conditions in our markets, including the effects of new entrants, consolidation, technological innovation and substantial price discounting;

- fluctuation in demand for our products and services, and the timing and size of customer orders
- fluctuations in foreign exchange rates;
- cancellation or deferral of existing customer orders or the renegotiation of existing contractual commitments;
- mix of product configurations sold;
- length and variability of the sales cycle for our products,
- application of complex revenue recognition accounting rules to our customer arrangements;
- timing of revenue recognition;
- changes in our pricing policies, the pricing policies of our competitors and the prices of the components of our products;
- market acceptance of new products, product enhancements and services that we offer;
- the quality and level of our execution of our business strategy and operating plan, and the effectiveness of our sales and marketing programs;
- new product announcements, introductions and enhancements by us or our competitors, which could result in deferrals of customer orders;
- our ability to develop, introduce, ship and successfully deliver new products and product enhancements that meet customer requirements in a timely manner;
- our reliance on contract manufacturers for the production and shipment of our hardware products;
- our or our contract manufacturers' ability to obtain sufficient supplies of sole or limited source components or materials;
- our ability to attain and maintain production volumes and quality levels for our products;
variability and unpredictability in the rate of growth in the markets in which we compete,
costs related to acquisitions; and
- corporate restructurings.

Equipment purchases by communications service providers and enterprises continue to be unpredictable. As with other telecommunications product suppliers, we typically recognize a portion of our revenue in a given quarter from sales booke and shipped in the last weeks of that quarter. As a result, delays in customer orders may result in delays in shipments and recognition of revenue beyond the end of a given quarter. Additionally, it can be difficult for us to predict the timing of receip of major customer orders, and we are unable to control timing decisions made by our customers. Consequently, our quarterly operating results are difficult to predict even in the short term and a delay in an anticipated sale past the end of a particular quarter may negatively impact our results of operations for that quarter, or in some cases, that year. Therefore, we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. If our revenue o operating results fall below the expectations of investors or securities analysts or below any guidance we may provide to the market, the price of our common stock could decline substantially. Such a stock price decline could also occur even if we meet our publicly stated revenue and/or earnings guidance.

A significant portion of our operating expenses is fixed in the short term. If revenues for a particular quarter are below expectations, we may not be able to reduce costs and expenses proportionally for that quarter. Any such revenue shortfall would, therefore, have a significant effect on our operating results for that quarter.

## We have incurred net losses and may incur additional net losses.

We incurred net losses in fiscal years 2016, 2015 and 2014. We may incur additional net losses in future quarters and years. Our revenues may not grow and we may never generate sufficient revenues to sustain profitability.

We will not be successful if we do not grow our customer base, especially since our revenue has historically been generated from a limited number of customers and the per-order revenue from orders placed by the majority of our new customers is generally lower than the per-order revenue generated from our historical sales. Additionally, if we are unable to generate recurring business from our existing customers, our consolidated financial statements could be materially and adversely affected.

Prior to our acquisition of Network Equipment Technologies, Inc. ("NET") in August 2012, we had shipped our products to a limited number of customers. Since the acquisition of NET, the number of customers to whom we have shipped our products placed by the majority of our new customers is generally lower than the per-order revenue generated from our historical customer orders.

Our future success will depend on our ability to attract additional customers beyond our current customer base. One customer, AT\&T, contributed more than $10 \%$ of our revenue in each of the past three years, representing approximately $12 \%$ of our revenue in $2016,13 \%$ of our revenue in 2015 and $19 \%$ of our revenue in 2014 . Factors that may affect our ability to grow our customer base include but are not limited to the following:

- economic conditions that discourage potential new customers from making the capital investments required to adopt new technologies;
- deterioration in the general financial condition of service providers and enterprises, or their ability to raise capital or access lending sources;
- new product introductions by our competitors; and
- the development of our channel partner program.

If we are unable to expand our customer base, we will be forced to rely on generating recurring revenue from existing customers, which may not be successful. We expect to derive an increasing percentage of our revenue from engagements with our value-added resellers ("VAR") and global system integration partners; however, in the foreseeable future, the majority of our revenue will continue to depend on sales of our products to a limited number of existing customers or sales to customers with lower per-order revenue than those generated from our historical sales. Factors that may affect our ability to generate recurring revenues from our existing customers include but are not limited to the following:
customer willingness to implement our products;

- pricing pressures due to the commoditization of our products;
- the timing of industry transitions to new network technologies
acquisitions of or by our customers
- delays or difficulties that we may incur in completing the development and introduction of our planned products or
product enhancements,
failure of our products to perform as expected; and
difficulties we may incur in meeting customers' delivery requirements or with software development, hardware design, manufacturing or marketing of our products and/or services.

The loss of any significant customer, or any substantial reduction in purchase orders or deferral of purchasing decisions from these customers, could materially and adversely affect our consolidated financial statements.

We continue to enhance our sales strategy, which we expect will include more partner sales engagements to resell our products and services through authorized Sonus distributors, value added resellers, system integrators and other channel partners. Disruptions to, or our failure to effectively develop and manage, these partners and the processes and procedures that support them could adversely affect our ability to generate revenues from the sale of our products and services. If we do not have adequate personnel, experience and resources to manage the relationships with these partners and to fulfill our responsibilities under such arrangements, such shortcomings could lead to the decrease of the sales of our products and services and our operating results could suffer.
We continue to enhance our sales strategy, which we expect will include more partner sales engagements to resell our product and services through authorized Sonus distributors, value added resellers, system integrators and other channel partners. Our
future success is dependent upon establishing and maintaining successful relationships with a variety of distributors, value added resellers, system integrators and other channel partners. We may also need to pursue strategic partnerships with vendors who have broader technology or product offerings in order to compete with end-to-end solution providers. In addition, many of the enterprise markets we are pursuing require a broad network of resale partners in order to achieve effective distribution.

Many of our distribution and channel partners sell competitive products and services and the loss of, or reduction in sales by, these partners could materially reduce our revenues. Our sales through channel partners typically involve the use of our products as components of a larger solution being implemented by the systems integrator. In these instances, the purchase and sale of our products are dependent on the channel partner, who typically controls the timing, prioritization and implementation of the project. Project delays, changes in priority or solution re-design decisions by he system integration partners; fail to develop new relationships with other partners in new markets; fail to manage, train or provide incentives to our existing partners effectively; or if these partners are not successful in their sales efforts, sales of our products and services may decrease and our operating results could suffer. Moreover, if we do not have adequate personnel, experience and resources to manage the relationships with our partners and to fulfill our responsibilities under such arrangements, any shortcomings could have a material adverse impact on our business and consolidated financial statements.

In addition, we recognize some of our revenue based on a drop-ship model using information provided by our partners. If those partners provide us with inaccurate or untimely information, the amount or timing of our revenues could be adversely affected. We may also be impacted by financial failure of our partners, which could result in our inability to collect accounts receivable in full.

As the telecommunications industry and the requirements of our current and potential customers evolve, we are redirectin certain of our resources to more readily respond to the changing environment through the research and development of innovative new products and the improvement of existing products. If our strategic plan is not aligned with the direction our customers take as they invest in the evolution of their networks, customers may not buy our products or use our services.

Success in our industry requires large investments in technology and creates exposure to rapid technological and marke changes. We spend a significant amount of time, money and resources both developing new technology, products and solutions and acquiring new businesses or business assets, as applicable, such as NET in 2012, Performance Technologies, Incorporated ("PT") in 2014 and Taqua, LLC ("Taqua") in 2016. In 2015, we acquired from Treq Labs, Inc. ("Treq") certain assets related to Treq's business of designing, developing, marketing, selling, servicing and maintaining software-defined networking ("SDN") technology, SDN controller software and SDN management software (the "SDN Business"). Our strategic plan includes a significant shift in our investments from mature technologies that previously generated significant revenue for us toward certain next-generation technologies, as well as working with channel partners to sell our products. In order for us to be successful, our technologies, products and solutions must be accepted by relevant standardization bodies and by the industry as a whole. Our choices of specific technologies to pursue, and those to de-emphasize, may prove to be inconsistent with our customers' investment spending. Our success also depends upon our ability to integrate new and acquired products and services, as well as our ability to enhance our existing products and services. Moreover, if we invest in the development of technologies, products and solutions that do not function as expected, are not adopted by the industry, are not ready in time, are not accepted by our customers as quickly as anticipated, mature more quickly than we anticipated or are not successful in the marketplace, our sales and earnings may suffer and, as a result, our stock price could decline. As technology advances, we may not be able to respond quickly or effectively to developments in the market for our products, or new industry standards may emerge and could render our existing or future products and services obsolete. If our products and services become technologically obsolete or if we are unable to develop successor products and services that are accepted by our customers, we may be unable to sell our products and services in the marketplace and face declines in sales. We may also experience difficulties with software development, hardware design, manufacturing or marketing that could delay or prevent our development, introduction or marketing of new products and enhancements.

We believe the telecommunications industry is in the early stages of a major architectural shift to the virtualization of networks. If the architectural shift does not occur, if it does not occur at the pace we predict, or if the products and services we have developed are not attractive to our customers after such shift takes place, our revenues could decline.

We believe the telecommunications industry is in the early stages of transitioning to the virtualization of networks, and we are developing products and services that we believe will be attractive to our customers and potential customers who make that shift. While we anticipate that the industry shift to a software-centric cloud-based architecture is all but certain to happen, fundamental changes like this often take time to accelerate. In addition, our customers may adapt to such changes at varying rates. As our customers take time to determine their future network architectures, we may encounter delayed timing of orders deferred purchasing decisions and reduced expenditures. These longer decision cycles and reduced expenditures may
negatively impact our revenues, or make it difficult for us to accurately predict our revenues, either of which could materially adversely affect our consolidated financial statements and cause our stock price to decline.

In 2012, the macro-environment for our media gateway trunking business faced significant declining revenues that happened faster than we were anticipating. Since then, we have continued to experience significant declines in customer spending in our media gateway trunking business. Even though we continue to transform our company from a media gateway trunking business to an SBC and DSC security company, a portion of our current revenue remains dependent upon he commercial success of our voice infrastructure products, which we believe will remain true for the forese the market for these products continues to significantly decline and if our SBC and DSC sales do not accelerate as quickly as we forecast, our operating results could suffer.

While we continue to transform our company from a media gateway trunking business to a Session Border Controller ("SBC") and Diameter Signaling Controller ("DSC") security business, a portion of our current revenue still depends upon the commercial success of our TDM-to-IP and our all-IP voice infrastructure products and solutions, and we believe this will remain true for the foreseeable future. If the market for these products continues to significantly decline and if our SBC and DSC sales do not accelerate as quickly as we forecast, our operating results could suffer.

## Restructuring activities could adversely affect our ability to execute our business strategy.

We recorded net restructuring expense of $\$ 10.5$ million in the aggregate in 2016,2015 and 2014, comprised of $\$ 9.9$ million fo severance and related costs, $\$ 0.4$ million for the consolidation of certain facilities and $\$ 0.2$ million for the write-off of assets associated with the headcount reduction and facilities consolidations.

Our current restructuring and any future restructuring, should it become necessary for us to continue to restructure our business due to worldwide market conditions or other factors that reduce the demand for our products and services, could adversely affect our ability to execute our business strategy in a number of ways, including through:

- loss of key employees
diversion of management's attention from normal daily operations of the business;
diminished ability to respond to customer requirements related to both products and services
- decrease in cash and profits related to severance payments and facility termination costs;
- disruption of our engineering and manufacturing processes, which could adversely affect our ability to introduce new
products and to deliver products bor a mely basis and in accordance win the highest quality standards; and/or reduced ability to execute effectively internal administrative processes, including the implementation of key information technology programs.

If we fail to realize the anticipated benefits from our recent acquisitions on a timely basis, or at all, our business and financial condition may be adversely affected.

We may fail to realize the anticipated benefits from our recent acquisitions on a timely basis, or at all, for a variety of reasons including but not limited to the following

- problems or delays in assimilating or transitioning to us the acquired assets, operations, systems, processes, controls technologies, products or personne
loss of acquired customer accounts
- unanticipated costs associated with the acquisitions;
- failure to identify in the due diligence process or assess the magnitude of certain liabilities we assumed in the acquisitions, which could result in unexpected litigation or regulatory exposure, unfavorable accounting treatment, unexpected increases in taxes due, significant issues with product quality or development or other adverse effects on our business or consolidated financial statements;
- multiple or overlapping product lines as a result of the acquisitions that are offered, priced and supported differently, which could cause customer confusion and delays;
- higher than anticipated costs in continuing support and development of acquired products;
diversion of management's attention from our core business and the challenges of managing larger and more widespread operations from the acquisitions;
- adverse effects on existing business relationships of Sonus, the SDN Business and/or Taqua with respective suppliers, licensors, contract manufacturers, customers, distributors, resellers and industry experts;
- significant impairment, exit and/or restructuring charges if the products or technologies acquired in the acquisitions do not meet our sales expectations or are unsuccessful;
- insufficient revenue to offset increased expenses associated with the acquisitions
- risks associated with entering markets in which we have no or limited prior experience;
potential loss of the employees we acquired in the acquisitions or our own employees; and/or
- failure to properly integrate internal controls and financial systems of the combined companies.

If we are not able to successfully manage these issues, the anticipated benefits and efficiencies of our recent acquisitions may not be realized fully or at all, or may take longer to realize than expected, and our ability to compete, our revenue and gross margins and our results of operations may be adversely affected.

## The acquisition of Taqua may result in additional expenses that could adversely affect the financial results of the combine

 company.The financial results of Sonus and Taqua as a combined company may be adversely affected by cash expenses and non-cash accounting charges incurred in connection with the combination. In addition to the amortization of intangible assets acquired in connection with this acquisition and other related expenses, we recorded $\$ 1.2$ million of acquisition-related cash expense in 2016 in connection with this acquisition and may incur additional acquisition-related cash expense in the future. The prian our com
charges

Any future investments, mergers or acquisitions we make or enter into, as applicable, could be difficult to integrate, disrupt our business, dilute shareholder value and seriously harm our financial condition.

We are not currently a party to any material pending merger or acquisition agreements. However, we may merge with or acquire additional businesses, products or technologies in the future. No assurance can be given that any future merger or acquisition will be successful or will not materially and adversely affect our business, operating results or financial condition. We continue to review opportunities to merge with or acquire other businesses or technologies that would add to our existing product line, complement and enhance our current products, expand the breadth of our markets, enhance our technical capabilities or otherwise offer growth opportunities. If we enter into a merger or make acquisitions in the future, we could among other things:

- issue stock that would dilute existing stockholders' percentage ownership;
- incur debt or assume liabilities;
- reduce significantly our cash and investments;
- incur significant impairment charges related to the write-off of goodwill and intangible assets;
- incur significant amortization expenses related to intangible assets; and/or
- incur large and immediate write-offs for in-process research and development and stock-based compensation.

Mergers and acquisitions are inherently risky and subject to many factors outside of our control. Therefore, we cannot be certain that we would be successful in overcoming problems in connection with our past or future acquisitions. Our inability to do so could significantly harm our business, revenues, and results of operations.

## If in the future we do not have a sufficient number of shares available to issue to our employees, the limited number of shares we could issue may impact our ability to attract, retain and motivate key personnel.

We historically have used stock options, restricted stock and other equity awards as a significant component of our employee compensation program in order to align our employees' interests with the interests of our stockholders, encourage employee retention and provide competitive compensation packages. In 2007, our stockholders approved our 2007 Stock Incentive Plan (the "2007 Plan"), which included a limited amount of shares to be granted under such 2007 Plan. Our stockholders approved amendments to the 2007 Plan in June 2010, June 2013, December 2014 and June 2015. At our 2016 annual meeting of stockholders, our stockholders approved an amendment and restatement of the 2007 Plan (as amended and restated, the "Stock Plan") that, among other things, increased the aggregate number of shares of our common stock authorized for issuance unde the Stock Plan by 800,000 new shares, from $15,676,713$ shares to $16,476,713$ shares. However, our stockholders did not approve a proposed stock option exchange program that, if implemented, would have returned shares of our common stock to the Stock Plan that would then be available for future issuance under the Stock Plan.

Since only one of these proposals was approved at our 2016 annual meeting of stockholders, we may not have sufficient shares for our needs in the near future. If our stockholders do not approve any other future amendments that we determine are needed to the Stock Plan, the limited number of shares available for use as equity incentives to employees may make it more difficult for us to attract, retain and motivate key personnel.

## Worldwide efforts to contain capital spending and global economic conditions and uncertainties in the geopolitical

 environment could have a material adverse effect on $u$.One factor that significantly affects our operating results is the impact of economic conditions on the willingness of our current and potential customers to make capital investments. Given the general uncertainty regarding global economic conditions and uncertainties in the geopolitical environment, we believe that customers have tried to maintain or improve profitability through cost control and constrained capital spending, which places additional pressure on IT departments to demonstrate acceptable return on investment. Some of our current or prospective customers may cancel or delay spending on the development or roll out of capital and technology projects with us due to economic uncertainty and, consequently, our results of operations may be adversely affected. In addition, current uncertain worldwide economic and political environments make it increasingly difficult for us, our customers and our suppliers to accurately forecast future product demand, which could result in an inability to satisfy demand for our products and a loss of market share. Our revenues are likely to decline in such circumstances and our profit margins could erode, or we could incur significant losses.

Moreover, economic conditions worldwide may contribute to slowdowns in the communications and networking industries, as well as to specific segments and markets in which we operate, resulting in, among other things:

- reduced demand for our products and services as a result of our customers choosing to refrain from building capital intensive networks;
- increased price competition for our products, not only from our competitors, but also as a consequence of customers disposing of unutilized products;
risk of excess and obsolete inventories
excess facilities and manufacturing capacity; and/or
higher overhead costs as a percentage of revenue and higher interest expense.
Continuing turmoil in the geopolitical environment in many parts of the world, including terrorist activities and military actions, as well as political and economic issues in many regions, including the uncertainty arising from the recent referendum vote in the UK in favor of exiting the European Union as well as from changes to be implemented by the new U.S. presidential administration, continue to put pressure on global economic conditions. Our operating results and our ability to expand into other international markets may also be affected by changing economic conditions particularly germane to that sector or to particular customer markets within that sector.

If we fail to compete successfully against telecommunications equipment and networking companies, our ability to increase our revenues and achieve profitability will be impaired.

Competition in the telecommunications market is intense. This market has historically been dominated by large incumbent telecommunications equipment companies, such as Ericsson LM Telephone Company and Huawei Technologies Co. Ltd., both of which are our direct competitors. We also face competition from other telecommunications and networking companies, including ADTRAN, Inc., ALOE Systems Inc., AudioCodes Ltd., Avaya Inc., Cisco Systems, Inc., Dialogic Inc., FS Networks, Inc., GENBAND Inc., Metaswitch Networks Corporation, Mitel Networks Corporation, Nokia Corporation, Oracle
Corporation, Sansay, Inc., Technicolor SA, Xura, Inc. and ZTE Corporation, all of which design competing products. These or other competitors may also merge, intensifying competition. Additional competitors with significant financial resources may enter our markets and further intensify competition.

Many of our current and potential competitors have significantly greater selling and marketing, technical, manufacturing, financial and other resources than we have. Further, some of our competitors sell significant amounts of other products to ou current and prospective customers and have the ability to offer lower prices to win business. Our competitors' broad product portfolios, coupled with already existing relationships, may cause our customers to buy our competitors' products or harm our ability to attract new customers
To compete effectively, we must deliver innovative products that:

- provide extremely high reliability and quality;
- deploy and scale easily and efficiently;
- interoperate with existing network infrastructures and multivendor solutions;
- provide effective network management;
- are accompanied by comprehensive customer support and professional services;
- provide a cost-effective and space-efficient solution for enterprises and service providers;
- meet price competition from low cost equipment providers; and
offer solutions that are timely for the market and support where the industry is heading
If we are unable to compete successfully against our current and future competitors, we could experience price reductions, order cancellations and loss of customers and revenues, and our operating results could be adversely affected.


## If we do not anticipate and meet specific customer requirements or if our products do not interoperate with our customers

 existing networks, we may not retain current customers or attract new customersTo achieve market acceptance for our products, we must effectively anticipate, and adapt in a timely manner to, customer requirements and offer products and services that meet changing customer demands. Prospective customers may require product features and capabilities that our current products do not have. The introduction of new or enhanced products also requires that we carefully manage the transition from older products in order to minimize disruption in customer ordering patterns and ensure that adequate supplies of new products can be delivered to meet anticipated customer demand. If we fail to develop products and offer services that satisfy customer requirements or if we fail to effectively manage the transition from older products, our ability to create or increase demand for our products and services could be seriously harmed and we may lose current and prospective customers.

Many of our customers will require that our products be designed to interface with their existing networks, each of which may have different specifications. Issues caused by an unanticipated lack of interoperability may result in significant warranty, support and repair costs, divert the attention of our engineering personnel from our hardware and software development efforts and cause significant customer relations problems. If our products do not interoperate with those of our customers' networks, installations could be delayed or orders for our products could be canceled, which would seriously harm our gross margins and result in loss of revenues or customers. Additionally, our customers may decide to devote a significant portion of their budget to evolving technology as they consider national or worldwide build-outs. Therefore, if the demand for our products is not strong and if our target customers do not adopt, purchase and successfully deploy our current or planned products, our revenues will not grow.

Our large customers have substantial negotiating leverage, and they may require that we agree to terms and conditions that may have an adverse effect on our business.

Large communications service providers have substantial purchasing power and leverage in negotiating contractual arrangements with us. These customers may, among other things, require us to develop additional features, require penalties for failure to deliver such features, require us to partner with a certain reseller before purchasing our products and/or seek discounted product and/or service pricing. As we sell more products to this class of customer, we may be required to agree to terms and conditions that are less beneficial to us, which may affect the timing of revenue recognition, amount of deferred revenues or product and service margins and may adversely affect our financial position and cash flows in certain reporting periods.

Our stock price has been and may continue to be volatile.
The market for technology stocks has been, and will likely continue to be, volatile. The following factors, among others, could cause the market price of our common stock to fluctuate significantly:

- addition or loss of any major customer;
- continued significant declines in customer spending in the media gateway trunking business
- decreased spending by customers in the SBC and/or DSC businesses;
consolidation of our customers and among our competitors in the telecommunications industry;
changes in the financial condition or anticipated capital expenditure purchases of any existing or potential major customer;
- economic conditions for the telecommunications, networking and related industries
- quarterly variations in our bookings, revenues and operating results;
- changes in financial estimates by securities analysts;
- speculation in the press or investment community;
- announcements by us or our competitors of significant contracts, new products or acquisitions, distribution partnerships, joint ventures, mergers or capital commitments;
- activism by any single large stockholder or combination of stockholders;
- sales of common stock or other securities by us or by our stockholders in the future
- securities and other litigation
repurchases under our stock buyback program
announcement of a stock split, reverse stock split, stock dividend or similar event; and/or emergence or adoption of new technologies or industry standards.

Furthermore, brokerage firms often do not permit stocks trading below $\$ 5.00$ per share to be sold short, but often permit short selling of shares which are traded at higher prices. As a result, to the extent our per-share trading price is consistently above $\$ 5.00$, investors may short our stock. This may increase the volatility of our stock price.

Our Amended Credit Agreement contains financial and operating restrictions that may limit our access to credit. If we fail to comply with covenants in the Amended Credit Agreement, we may be required to repay any potential indebtedness thereunder, which may have an adverse effect on our liquidity. In addition, if we are unable to extend, renew or replace the Credit Agreement by the maturity date of June

The Amended Credit Agreement provides us with a revolving credit facility of up to $\$ 20$ million. Provisions in the Amended Credit Agreement impose limitations on our ability to, among other things:

- incur additional indebtedness
- create liens,
- dispose of assets;
- make certain investments; and
- merge or consolidate

In addition, we are required to meet certain financial covenants customary for financings of this type. Our failure to comply with these covenants may result in the declaration of an event of default, which could cause us to be unable to borrow under the Amended Credit Agreement or result in the acceleration of the maturity of indebtedness outstanding under the Amended Credit Agreement at such time. If the maturity of our indebtedness is accelerated, we may not have sufficient funds available for repayment or we may not have the ability to borrow or obtain sufficient funds to replace the accelerated indebtedness on term acceptable to us, or at all. We are also subject to a commitment fee at an annualized rate of $0.1125 \%$ on any unused commitments available for borrowing.

Furthermore, while we had no amounts outstanding under the Amended Credit Agreement as of December 31, 2016, we may wish to draw on this facility in the future. We may be prevented from borrowing, however, if we are unable to extend, renew or replace the Credit Agreement by the maturity date of June 30, 2017, on favorable terms, or at all, which could have a material adverse effect on our liquidity and cause our business, operations and financial condition to suffer

Our business could be jeopardized if we are unable to protect our intellectual property; additionally, in some jurisdictions, our rights may not be as strong as we currently enjoy in the United States.

We rely on a combination of security countermeasures within our deployed products, as well as patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology, Monitoring unauthorized use of our products is difficult and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. The legal systems of many foreign countries do not protect or honor intellectual property rights to the same extent as the legal system of the United States. It may be very difficult, time-consuming and costly for us to attempt to enforce our intellectual property rights, especially in these foreign jurisdictions. If competitors are able to use our technology, our ability to compete effectively could be harmed.

Claims that our current or future products infringe or misappropriate the proprietary rights of others could adversely affect our ability to sell those products and cause us to incur additional costs.

Substantial litigation over intellectual property rights exists in the telecommunications industry. We expect that we could be increasingly subject to third-party infringement claims as our revenue increases, the number of competitors grows and/or the functionality of products and technology in different industry segments overlaps. Third parties may currently have, or may eventually be issued, patents on which our current or future products or technologies may allegedly infringe. For example, there has been an increase in the industry of third-party infringement claims brought by Non-Practicing Entities, also known as patent trolls.

In addition, we and our customers have received inquiries from intellectual property owners and may become subject to claims that we or our customers allegedly infringe the intellectual property rights of third parties. Any parties asserting that our products infringe upon their proprietary rights could force us to license their patents for substantial royalty payments or to defend ourselves and possibly our customers or contract manufacturers in litigation. These claims and any resulting licensing of our proprietary rights. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling, incorporating or using our products that use the challenged intellectual property;
- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available at acceptable prices, on acceptable terms, or at all; or
- redesign those products that use any allegedly infringing technology.

Patent litigation, regardless of its outcome, will likely result in the expenditure of significant financial resources and the diversion of management's time and resources. In addition, patent litigation may cause negative publicity, adversely impact prospective customers, cause product shipment delays, prohibit us from manufacturing, marketing or selling our current or prospective customers, cause product shipment delays, prohibit us from manufacturing, marketing or sube products, require us to develop non-infringing technology, make substantial payments to third parties or enter into royalty or license agreements, which may not be available on acceptable terms or at all. If a third party's claim of infringement against us in a particular patent litigation is successful, and we could not develop non-infringing technology or license the infringed or similar technology on a timely and cost-effective basis, our revenue may decrease substantially and we could be exposed to significant liability. A court could enter orders that temporarily, preliminarily or permanently enjoin us or our customers from making, using, selling, offering to sell or importing our current or future products, or could enter an order mandating that we undertake certain remedial activities. Although historically our costs to defend lawsuits relating to
We may face risks related to litigation that could result in significant legal expenses and settlement or damage awards.
From time to time, we are subject to claims and litigation regarding intellectual property rights or other claims, which could seriously harm our business and require us to incur significant costs. We are currently subject to a purported class action litigation alleging violations of the federal securities laws in federal district court against us and two of our officers, Raymond P. Dolan, our President and Chief Executive Officer, and Mark T. Greenquist, our former Chief Financial Officer (collectively, the "Defendants"). The plaintiff in the case claims to represent purchasers of our common stock during the period from October 23, 2014 and March 24, 2015, and seeks unspecified damages. The principal allegation contained in the complaint is that the Defendants made misleading forward-looking statements concerning our first quarter of 2015 financial performance. We are also fully cooperating with an SEC inquiry regarding the development and issuance of our first quarter 2015 revenue and earnings guidance. At this time, it is not possible to predict the outcome of the SEC's inquiry, including whether or not any proceedings will be initiated or, if so, when or how the matter will be resolved.

In the past, we have also been named as a defendant in other securities class action and derivative lawsuits. We are generally obliged, to the extent permitted by law, to indemnify our current and former directors and officers who are named as defendants in these lawsuits. Defending against litigation may require significant attention and resources of management. Regardless of the outcome, such litigation could result in significant legal expenses.

We may also be subject to employment claims in connection with employee terminations. In addition, companies in our industry whose employees accept positions with us may claim that we have engaged in unfair hiring practices. These claims may result in material litigation. We could incur substantial costs defending ourselves or our employees against those claims, regardless of their merits. Further, defending ourselves from those types of claims could divert our management's attention from our operations. The cost of employment claims may also rise as a result of our increasing international expansion.
If we are a party to material litigation and if the defenses we claim are ultimately unsuccessful, or if we are unable to achieve a favorable settlement, we could be liable for large damage awards that could have a material adverse effect on our business and consolidated financial statements.

## Actions that may be taken by significant stockholders may divert the time and attention of our Board of Directors and management from our business operations.

Campaigns by significant investors to effect changes at publicly-traded companies continue to be prevalent. There can be no assurance that one or more current or future stockholders will not pursue actions to effect changes in our management and strategic direction, including through the solicitation of proxies from our stockholders. If a proxy contest were to be pursued
by any stockholder, it could result in substantial expense to us, consume significant attention of our management and Board of Directors, and disrupt our business.

## Delaware law and our charter documents contain provisions that could discourage or prevent a potential takeover, even if

 such a transaction would be beneficial to our stockholders.Some provisions in our amended and restated certificate of incorporation, our amended and restated by-laws, as well as provisions of Delaware law, may discourage, delay or prevent a merger or acquisition that may be deemed undesirable by our Board of Directors but that a stockholder may consider favorable. These include provisions:

- authorizing the Board of Directors to issue shares of preferred stock;
- limiting the persons who may call special meetings of stockholders;
- prohibiting stockholder actions by written consent;
- permitting the Board of Directors to increase the size of the Board and to fill vacancies;
- providing indemnification to our directors and officers;
- controlling the procedures for conduct and scheduling of Board and stockholder meetings;
- requiring a super-majority vote of our stockholders to amend our amended and restated by-laws and certain provisions of our amended and restated certificate of incorporation; and
- establishing advance notice requirements for nominations for election to the Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

These provisions, alone or together, could delay hostile takeovers or changes in control of us or our management.
As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents some stockholders holding more than $15 \%$ of our outstanding common stock from engaging in certain business combinations without approval of the holders of substantially all of our outstanding common stock.

Any provision of our amended and restated certificate of incorporation, our amended and restated by-laws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock. Although we believe that our amended and restated certificate of incorporation, our amended and restated bylaws and provisions of Delaware law provide an opportunity for the Board of Directors to assure that our stockholders realize full value for their investment, they could have the effect of delaying or preventing a change of control that some stockholders may consider beneficial.

We are exposed to fluctuations in currency exchange rates that could negatively impact our financial results and cash flows.
Because a portion of our business is conducted outside the United States, we face exposure to adverse movements in foreign currency exchange rates. These exposures may change over time as business practices evolve, and they could have a material adverse impact on our financial results and cash flows. An increase in the value of the dollar could increase the real cost to our customers of our products in those markets outside the United States where we often sell in dollars, and a weakened dollar could increase the cost of local operating expenses and procurement of raw materials from sources outside the United States.

We may face risks associated with our international expansion that could impair our ability to grow our international revenues. If we fail to manage the operational and financial risks associated with our international operations, it could have a material adverse effect on our business and consolidated financial statements.
We have expanded, and expect to continue to expand, our operations in international and emerging markets. International operations are a significant part of our business, and such operations will continue to require significant management attention and financial resources to successfully develop direct and indirect international sales and support channels. In addition, our international operations are subject to other inherent risks, including:

- reliance on channel partners;
- greater difficulty collecting accounts receivable and longer collection cycles;
- difficulties and costs of staffing and managing international operations;
- impacts of differing technical standards outside the United States;
- compliance with international trade, customs and export control regulations;
- reduced protection for intellectual property rights in some countries;
foreign government regulations limiting or prohibiting potential sales or increasing the cost of doing business in such markets, including reversals or delays in the opening of foreign markets to new competitors or the introduction of new technologies;
- challenging pricing environments in highly competitive new markets;
- foreign currency exchange controls, restrictions on repatriation of cash and changes in currency exchange rates;
- potentially adverse tax consequences; and
political, social and economic instability, including as a result of the fragility of global financial markets, health pandemics or epidemics and/or acts of war or terrorism.

Our international revenue, both as a percentage of total revenue and absolute dollars, may vary from one period to the next, and accordingly, current data may not be indicative of future periods. If we are unable to support our business operations in international and emerging markets, or their further expansion, while balancing the higher operational and financial risks associated with these markets, our business and consolidated financial statements could be harmed.

In addition, we may not be able to develop international market demand for our products, which could impair our ability to grow our revenues. In many international markets, long-standing relationships between potential customers and their local suppliers and protective regulations, including local content requirements and approvals, create barriers to entry. We have limited experience marketing, distributing and supporting our products in certain international locations and, to do so, we expect that we will need to develop versions of our products that comply with local standards. Moreover, difficulties in foreign financial markets and economies and of foreign financial institutions, particularly in emerging markets, could adversely affect demand from customers in the affected countries.

We depend upon contract manufacturers and any disruption in these relationships may cause us to fail to meet the demands of our customers and damage our customer relationships. Additionally, in the event we elect to consolidate and/or change any of our manufacturers, qualifying a new contract manufacturer to commence commercial scale production or consolidating to a reduced number of contract manufacturers are expensive and time-consuming activities and could affect our business.

While we currently work with four contract manufacturers, we primarily rely upon one large global manufacturer to assemble our products according to our specifications and to fulfill orders on a timely basis. Reliance on a third-party manufacturer involves a number of risks, including a lack of control over the manufacturing process, inventory management and the potential absence or unavailability of adequate capacity. We do not have the internal manufacturing capabilities to meet our customers' demands. Any difficulties or failures to perform by our contract manufacturers could cause delays in customer product shipments or otherwise negatively affect our results of operations.

With the acquisition of Taqua in September 2016, we increased the number of contract manufacturers we work with from three to four. Any future changes to or consolidations of our current contract manufacturers could lead to material shortages or delays in the supply of our products. In the event we elect to continue to consolidate and/or change any of our manufacturers qualifying a new contract manufacturer to commence commercial scale production or consolidating to a reduced number of contract manufacturers are expensive and time-consuming activities and could result in a significant interruption in the supply of our products. If a change in contract manufacturers results in delays in our fulfillment of customer orders or if a contract manufacturer fails to make timely delivery of orders, we may lose revenues and suffer damage to our customer relationships.

We and our contract manufacturers rely on single or limited sources for supply of some components of our products and if we fail to adequately predict our manufacturing requirements or if our supply of any of these components is disrupted, we will be unable to ship our products.

We and our contract manufacturers currently purchase several key components of our products, including commercial digital signal processors, from single or limited sources. Single-source and limited source manufacturing arrangements are of a nature that ordinarily accompanies the type of business we conduct. Nevertheless, depending upon the component, there may or may not be alternative sources of substitutes. We purchase these components on a purchase order basis. If we overestimate our component and finished goods requirements, we could have excess inventory, which would increase our costs. If we underestimate our requirements, we may not have an adequate supply, which could interrupt manufacturing of our products and result in delays in shipments and revenues. Additionally, if any of our contract manufacturers underestimates our requirements, they may not have an adequate supply, which could interrupt manufacturing of our products and result in delays in shipments and revenues. If any of our sole or limited source suppliers experiences capacity constraints, work stoppages or other reductions or disruptions in output, they may not be able to meet, or may choose not to meet, our delivery schedules. Moreover, we have agreed to compensate our contract manufacturers in the event of termination or cancellation of orders, discontinuance of product or excess material.

We currently do not have long-term supply contracts with our component suppliers and they are not required to supply us with products for any specified periods, in any specified quantities or at any set price, except as may be specified in a particular purchase order. In the event of a disruption or delay in supply, or inability to obtain products, we may not be able to develop an alternate source in a timely manner or at favorable prices, or at all. While we regularly monitor our inventory of supplies, a failure to find acceptable alternative sources could hurt our ability to deliver high-quality products to our customers and negatively affect our operating margins.

Reliance on our suppliers exposes us to potential supplier production difficulties, quality variations and unforeseen price increases. Our customers rely upon our ability to meet committed delivery dates, and any disruption in the supply of key components would seriously adversely affect our ability to meet these dates and could result in loss of customers, harm to our ability to attract new customers, or legal action by our customers. Defense-expedite rated orders from the U.S. federal government, which by law receive priority, can also interrupt scheduled shipments to our other customers. Additionally, any unforeseen price increases could reduce our profitability or force us to increase our prices, which could result in a loss of customers or harm our ability to attract new customers and could have a material adverse effect on our consolidated financial statements.

Our customer contracts also generally allow customers to reschedule delivery dates or cancel orders within certain time frames before shipment without penalty and outside those times frames with a penalty. Because of these and other factors, there are risks of excess or inadequate inventory that could negatively affect our expenses, revenue and earnings.

## The market for some of our products depends on the availability and demand for other vendors' products.

Some of our products, particularly those addressing the Unified Communications market, are designed to function with other vendors' products. In these cases, demand for our products is dependent upon the availability, demand for, and sales of the other vendors' products, as well as the degree to which our products successfully interoperate with the other vendors' products and add value to the solution being provided to the customer. If the other vendors change the design of their products, delay the issuance of new releases, fail to adequately market their products, or are otherwise unsuccessful in building a market for their products, the demand for our products will be adversely affected.

If we fail to hire and retain needed personnel, the implementation of our business plan could slow or our future growth could be jeopardized.

Our business depends upon highly skilled technical, managerial, engineering, sales, marketing and customer support personnel. Competition for these personnel is intense, especially during times of economic recovery or growth. Any failure to hire, assimilate in a timely manner and retain needed qualified personnel, particularly engineering and sales personnel, could impair our growth and make it difficult to meet key objectives, such as timely and effective product introductions.

Our future success depends upon the continued services of our executive officers who have critical industry experience and relationships that we rely on to implement our business plan. With the exception of certain key employees based in the European Union, none of our officers or key employees is bound by an employment agreement for any specific term. The loss of the services of any of our officers or key employees could delay the development and introduction of, and negatively impact our ability to sell, our products and achieve our business objectives.

We had two executive departures in the 2016: our Executive Vice President, Services, Product Management and Corporate Development and our Chief Financial Officer. We are currently searching for a permanent replacement for the Chief Financia Officer role. We had five executive departures in 2015: our Vice President, Finance, Controller and Principal Accounting Officer; our Vice President and General Manager, Products; our Vice President and General Manager, Global Services; our Chief Information Officer; and our Vice President, Global Marketing. We had one executive departure in 2014: the departure of our Executive Vice President of Strategy and Go-to-Market. While we have since hired replacements and/or promoted certain individuals on an interim or permanent basis, there is always a risk of uncertainty and instability relating to our ability to find highly qualified successors for certain executive positions and to transition the duties and responsibilities of any departing key executive in an orderly manner.
If we are not able to obtain necessary licenses or on-going maintenance and support of third-party technology at acceptable prices, on acceptable terms, or at all, it could harm our operating results or business.
We have incorporated third-party licensed technology, including open source software, into our current products. From time to time, we may be required to license additional technology from third parties to develop new products or product enhancements.

Third-party licenses and on-going maintenance and support may not be available or continue to be available to us on commercially reasonable terms or may be available to us but only at significantly escalated pricing. Additionally, we may not be able to replace the functionality provided by third-party software currently offered with our products if that software becomes obsolete, defective or incompatible with future versions of our products or is not adequately maintained or updated. The inability to maintain or re-license any third-party licenses required in our current products or to obtain any new third-party licenses to develop new products and product enhancements could require us to obtain substitute technology of lowe qualty or could seriously harm the competitiveness of our products. Any significant interruption in the availability of these third-party software products or defects in these products could harm our sales unless and until we can secure an alternative source. Although we believe there are adequate alternate sources for the technology licensed to us, such alternate sources may not provide us with the same functionality as that currently provided to us.

We test our products before they are deployed. However, because our larger scale products are sophisticated and designed to be deployed in complex networks, they may have errors or defects that we find only after full deployment, which could seriously harm our business.

Our larger scale products are sophisticated and are designed to be deployed in large and complex networks. We test our products before they are deployed. However, because of the nature of our products, they can only be fully tested when substantially deployed in very large networks with high volumes of traffic. Some of our customers may discover errors or defects in the software or hardware, or the products may not operate as expected after full deployment. As we continue to expand our distribution channel through distributors and resellers, we will need to rely on and support their service and support organizations. If we are unable to fix errors or other performance problems that may be identified after full deployment of our products, we could experience:
loss of, or delay in, revenues or increased expense

- loss of customers and market share
- failure to attract new customers or achieve market acceptance for our products;
- increased service, support and warranty costs and a diversion of development resources; and/or
- costly and time-consuming legal actions by our customers.

Because our larger scale products are deployed in large, complex networks around the world, failure to establish a support infrastructure and maintain required support levels could seriously harm our business.

Our larger scale products are deployed in large and complex networks around the world. Our customers expect us to establish a support infrastructure and maintain demanding support standards to ensure that their networks maintain high levels of availability and performance. To continue to support our customers with these larger scale products, our support organization will need to provide service and support at a high level throughout the world. If we are unable to provide the expected level of support and service to our customers, we could experience:

- loss of customers and market share
failure to attract new customers in new markets and geographies,
increased service, support and warranty costs and a diversion of development resources; and/or
- network performance penalties.

A portion of our revenue is generated from sales to U.S. federal government agencies. Disruptions to, or our failure to effectively develop, manage and maintain our government customer relationships could adversely affect our ability to generate revenue from the sales of certain of our products. Further, such government sales are subject to potential delays and cutbacks, require specific testing efforts, and impose significant compliance obligations.

A portion of our total revenue from product sales comes from contracts with U.S. federal government agencies. None of our current government contracts include long-term purchase commitments. Disruptions to, or our failure to effectively develop, manage and maintain our government customer relationships, could adversely affect our ability to generate revenue from the sales of our products.

A majority of our government sales involve products that have or will soon reach the end of their life cycles, and such government sales for these older products have declined substantially in recent periods. While governmental agencies hav purchased and are evaluating some of our new products for broader deployment, this new line of business may not develop quickly, if at all, or be sufficient to offset future declines in sales of these legacy products. Spending by government customers fluctuates based on budget allocations and the timely passage of the annual federal budget.

Among the factors that could impact federal government spending and which would reduce our federal government contracting result of the new presidential administration; changes, delays or cancellations of federal government programs or requirements; the adoption of new laws or regulations that affect companies that provide services to the federal government; federal government shutdowns or other delays in the government appropriations process; changes in the political climate, including with regard to the funding of products we provide; and general economic conditions. The loss or significant curtailment of any government contract or subcontracts, whether due to our performance or due to interruptions of or changes in governmental funding for such contracts or subcontracts, could have a material adverse effect on our business, results of operations and financial condition.

The Department of Defense ("DOD") has issued specific requirements for IP networking products for features and interoperability. In order for a vendor's product to be used to connect to the DOD network, that product must pass a series of significant tests and be certified by the Joint Interoperability Test Command ("JITC"). Certain of our products are already certified by JITC, including the Sonus SBC 5110 and the Sonus SBC 5210 session border controllers, as well as the VX900 VoIP Secure Voice Gateway. However, if we are unable to obtain JITC certification as needed, our DOD sales, and hence our revenue and results of operations, may suffer.

## Consolidation in the telecommunications industry could harm our busines.

The telecommunications industry, including many of our customers, has experienced consolidation, such as the acquisition of XO Communications, LLC by Verizon Communications in February 2017, Polycom, Inc. by Siris Capital Group LLC, a private equity investment firm, in September 2016, the acquisition of Aruba Networks, Inc. by HP Inc. in May 2015, the acquisition of Mavenir Systems, Inc. by Mitel Networks Corporation in April 2015, the acquisition of Riverbed Technology, Inc. by Thoma Bravo, a private equity investment firm, in April 2015, the acquisition of Dialogic Inc. by Novacap TMT IV, L.P. in 2014, the acquisitions of Acme Packet, Inc. and Tekelec by Oracle Corporation in 2013 and the pending acquisition of Level 3 Communications Inc. by CenturyLink Inc., and we expect this trend to continue. Consolidation among our customers may cause delays or reductions in capital expenditure plans and/or increased competitive pricing pressures as the number of available customers declines and the relative purchasing power of customers increases in relation to suppliers. Any of these factors could adversely affect our business.

We are exposed to the credit risk of some of our customers and to credit exposures in fragile financial markets, which could result in material losses.

Due to our reliance on significant customers, we are dependent on the continued financial strength of our customers. If one or more of our significant customers experience financial difficulties, it could result in uncollectable accounts receivable and ou loss of significant customers and anticipated revenue

Most of our sales are on an open credit basis, with typical payment terms of 30 to 60 days. We monitor individual custome payment capability in granting such open credit arrangements, seeking to limit such open credit to amounts we believe our customers can pay and maintain reserves we believe are adequate to cover exposure for doubtful accounts. However, there can be no assurance that our open credit customers will pay the amounts they owe to us or that the reserves we maintain will be adequate to cover such credit exposure. Our customers failure to pay and/or our failure to maintain sufficient reserves could have a material adverse effect on our consolidated financial statements. Additionally, in the event that turmoil in the credit markets makes it more difficult for some customers to obtain financing, those customers' ability to pay could be adversely impacted, which in turn could have a material adverse impact on our business and consolidated financial statements.

A portion of our sales is derived through our distributors. As distributors tend to have more limited financial resources than other resellers and end-user customers, they generally represent sources of increased credit risk.

The hardware products that we purchase from our third-party vendors have life cycles, and some of those products have reached the end of their life cycles. If we are unable to correctly estimate future requirements for these products, it could harm our operating results or business.

Some of the hardware products that we purchase from our third-party vendors have reached the end of their life cycles. It ma be difficult for us to maintain appropriate levels of the discontinued hardware to adequately ensure that we do not have a shortage or surplus of inventory of these products. If we do not correctly forecast the demand for such hardware, we could have excess inventory and may need to write off the costs related to such purchases. The write-off of surplus inventory could materially and adversely affect our operating results. However, if we underestimate our forecast and our customers place
orders to purchase more products than are available, we may not have sufficient inventory to support their needs. If we are unable to provide our customers with enough of these products, it could make it difficult to retain certain customers, which could have a material and adverse effect on our business.

## Man-made problems, such as computer viruses, hacking or terrorism, and natural disasters may disrupt our operations and

 harm our operating results.Despite our implementation of network security measures, our servers are vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems. Any attack on our servers could have a material adverse effect on our business and consolidated financial statements. Additionally, the information systems of our customers could be compromised due to computer viruses, break-ins and hacking, which could lead to unauthorized tampering with our products and may result in, among other things, the disruption of our customers' business, errors or defects occurring in the software due to such unauthorized tampering, and our products not operating as expected after such unauthorized tampering. Such consequences could affect our reputation and have a material adverse effect on our business and consolidated financial
statements. Efforts to limit the ability of malicious third parties to disrupt the operations of the Internet or undermine our own security efforts may be met with resistance. In addition, the continued threat of terrorism and heightened security and military action in response to this threat, or any future acts of terrorism, may cause further disruptions to the economies of the United States and other countries and create further uncertainties or otherwise materially harm our business and consolidated financial statements. Likewise, events such as work stoppages or widespread blackouts could have similar negative impacts. Such disruptions or uncertainties could result in delays or cancellations of customer orders or the manufacture or shipment of our products and have a material adverse effect on our business and consolidated financial statements.

Natural catastrophic events, such as earthquakes, fire, floods, or tornadoes, may also affect our or our customers' operations and could have a material adverse effect on our business. Moreover, one of our offices is located in the Silicon Valley area of Northern California, a region known for seismic activity. These facilities are located near the San Francisco Bay where the water table is quite close to the surface and where tenants in nearby facilities have experienced water intrusion problems. A significant natural disaster, such as an earthquake or flood, could have a material adverse effect on our business in this location.

## A breach of the security of our information systems or those of our third-party providers could adversely affect our

 operating results.We rely upon the security of our information systems and, in certain circumstances, those of our third-party providers, such as vendors, consultants and contract manufacturers, to protect our sensitive or proprietary information and information of our customers. Despite our security procedures and those of our third-party providers, our information systems and those of our third-party providers are vulnerable to threats such as computer hacking, cyber-terrorism or other unauthorized attempts by third parties to access, modify or delete our or our customers' sensitive or proprietary information. Such cyberattacks and other cyber incidents are occurring more frequently, are constantly evolving, are becoming more sophisticated and can take many forms. Information technology system failures, including a breach of our or our third-party providers' data security measures through a cyberattack, other cyber incident or otherwise, or the theft or loss of laptops, other mobile devices or electronic records used to back up our systems or our third-party providers' systems, could result in a disclosure of customer, employee, or our information or otherwise disrupt our ability to function in the normal course of business by potentially causing, among other things, delays in the fulfillment or cancellation of customer orders or disruptions in the manufacture or shipment of products or delivery of services, any of which could have a material adverse effect on our operating results. These types of security breaches could also create exposure to lawsuits, regulatory investigations, increased legal liability and/or reputationa damage. Such consequences could be exacerbated if we or our third-party providers are unable to adequately recover critical systems following a systems failure. Due to the constantly evolving nature of these security threats, the form and impact of any future incident cannot be predicted

Failure or circumvention of our controls and procedures could impair our ability to report accurate financial results and could seriously harm our business.

Even an effective internal control system, no matter how well designed, has inherent limitations - including the possibility of the circumvention or overriding of controls - and therefore, can provide only reasonable assurance with respect to financial statement preparation. The failure or circumvention of our controls, policies and procedures could impair our ability to repor accurate financial results and could have a material adverse effect on our business and consolidated financial statements.

Any changes to existing accounting pronouncements or taxation rules or practices may cause adverse fluctuations in our reported results of operations or affect how we conduct our business.

A change in accounting pronouncements or taxation rules or practices can have a significant effect on our reported results and may affect our reporting of transactions completed before the change is effective New accounting pronouncements, taxation rules and varying interpetations of accounting pronouncements or taxation rules have occurred in the past and may occur in the future. The change to existing rules, future changes, if any, or the need for us to modify a current tax position may adversely affect our reported financial results or the way we conduct our business. For example, a new revenue recognition standard was issued in 2014 that will be effective for companies in 2018, and we expect that the adoption of this new standard could have material impact on our consolidated financial statements.

## Changes in our business strategy related to product and maintenance offerings and pricing could affect revenue

 recognition.Our business strategy and competition within the industry could exert pricing pressure on our product and maintenance offerings. Changes in our product or maintenance offerings or packages and related pricing could affect the amount of revenue recognized in a reporting period

## If our goodwill or intangible assets become impaired, we may be required to record a significant charge to earnings.

Under generally accepted accounting principles, we review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Our intangible assets increased by approximately $\$ 12$ million in 2016 as a result of our acquisition of Taqua, $\$ 11$ million in 2015 as a result of our acquisition of the SDN Business and $\$ 17$ million in 2014 as a result of our acquisition of PT. Goodwill, which increased by approximately $\$ 9$ million in 2016 as a result of our acquisition of Taqua, $\$ 1$ million in 2015 as a result of our acquisition of the SDN Business and $\$ 7$ million in 2014 as a result of our acquisition of PT (net of the reduction of goodwill related to the sale of PT's Multi-Protocol Server business), is tested for impairment at least annually. Factors that may be considered a change in circumstances indicating that the carrying value of our goodwill or intangible assets may not be recoverable include significant underperformance relative to plan or long-term projections, strategic changes in business strategy, significant negative industry or economic trends, significant change in circumstances relative to a large customer, significant decline in our stock price for a sustained period and decline in our market capitalization to below net book value.

Failure by our strategic partners or by us in integrating products provided by our strategic partners could harm our business.

Our solutions include the integration of products supplied by strategic partners, who offer complementary products and services. We rely on these strategic partners in the timely and successful deployment of our solutions to our customers. If the products provided by these partners have defects or do not operate as expected, if the services provided by these partners are not completed in a timely manner, if our partners have organizational or supply issues, or if we do not effectively integrate and support products supplied by these strategic partners, then we may have difficulty with the deployment of our solutions that may result in:

- loss of, or delay in, revenues
- increased service, support and warranty costs and a diversion of development resources; and
network performance penalties.
In addition to cooperating with our strategic partners on specific customer projects, we also may compete in some areas with these same partners. If these strategic partners fail to perform or choose not to cooperate with us on certain projects, in addition to the effects described above, we could experience:
- loss of customers and market share; and
failure to attract new customers or achieve market acceptance for our products.


## Our use and reliance upon research and development resources in India may expose us to unanticipated costs and/or liabilities.

We have a material office in Bangalore, India. The employees at this facility consist principally of research and development personnel. There is no assurance that our reliance upon development resources in India will enable us to achieve meaningful cost reductions or greater resource efficiency. Further, our development efforts and other operations in India involve significant risks, including:

- difficulty hiring and retaining appropriate engineering and management resources due to intense competition for such resources and resulting wage inflation;
- knowledge transfer related to our technology and resulting exposure to misappropriation of intellectual property or information that is proprietary to us, our customers and other third parties;
- heightened exposure to changes in economic, security and political conditions in India; and
- fluctuations in currency exchange rates and tax compliance in India.

Difficulties resulting from the factors noted above and other risks related to our operations in India could increase our expenses, impair our development efforts, harm our competitive position and damage our reputation.

Failure to comply with the Foreign Corrupt Practices Act or the UK Bribery Act could subject us to significant civil or criminal penalties.

We earn a significant portion of our total revenues from international sales generated through our foreign direct and indirect operations. As a result, we are subject to the Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"), and the UK Bribery Act of 2010 (the "UKBA"), which are laws that prohibit bribery in the conduct of business. The FCPA generally prohibits U.S. companies and their intermediaries from making corrupt payments to foreign officials for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment, and requires companies to maintain adequate recordkeeping and internal accounting practices to accurately reflect the transactions of the company. The FCPA applies to companies, individual directors, officers, employees and agents. The UKBA is much broader and prohibits all bribery, in both the public and private sectors. Although the UKBA does not contain a separate financial records provision, such a requirement is captured under other UK legislation. Under the FCPA and the UKBA, U.S. companies, their subsidiaries, employees, senior officers and/or directors may be held liable for actions taken by strategic or local partners or representatives. In addition, the U.S. government or the UK government, as applicable, may seek to hold us liable for successor liability violations committed by companies in which we acquire. If we or our intermediaries fail to comply with the requirements of the FCPA and the UKBA, governmental authorities in the United States and the United Kingdom, as applicable, could seek to impose civil and/or criminal penalties, which could have a material adverse effect on our reputation and consolidated financial statements.

## Compliance with regulations regarding the use of conflict minerals may disrupt our operations and harm our operating

 results.In 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Securities and Exchange Commission adopted new requirements for companies that use certain minerals and derivative metals (referred to as "conflict minerals" regardless of their actual country of origin) in their products. These metals, which include tantalum, tin, gold and tungsten, are central to the technology industry and are present in our products as component parts. As a result, we are required to investigate and disclose whether or not the conflict minerals that are used in our products originated from the Democratic Republic of the Congo or adjoining countries. There are various costs associated with these investigation and disclosure requirements, in addition to the potential costs of changes to products, processes or sources of supply as a consequence of such activities. In addition, the implementation of these rules could adversely affect the sourcing, supply and pricing of materials used in our products. Also, we may face reputational challenges if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we may implement or if we are unable to replace any conflict minerals used in our products that are sourced from the Democratic Republic of the Congo or adjoining countries, as there may not be any acceptable alternative sources of the conflict minerals in question or alternative materials that have the properties we need for our products. We may also encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict-free. If we are not able to meet customer requirements, customers may choose to disqualify us as a supplier and we may have to write off inventory in the event that it cannot be sold. These changes could also have an adverse impact in our ability to manufacture and market our products.

We are subject to governmental export and import controls that could subject us to liability, require a license from the U.S. government or impair our ability to compete in international markets.

Our products are subject to U.S. export controls and may be exported outside the United States only with the required level of export license or through an export license exception because we incorporate encryption technology into our products. Under these laws and regulations, we are responsible for obtaining all necessary licenses or other approvals, if required, for exports of hardware, software and technology, as well as the provision of service. Obtaining export licenses can be difficult and timeconsuming, and in some cases a license may not be available on a timely basis or at all.
In addition, various countries regulate the import of certain encryption technology and have enacted laws that could limit our ability to distribute our products or our customers' ability to implement our products in those countries. Changes in our
products or changes in export and import regulations may create delays in the introduction of our products in international markets, prevent our customers with international operations from deploying our products throughout their global systems or in some cases, prevent the export or import of our products to certain countries altogether. Any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations or change in the countries, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely have a material adverse effect on our business and consolidated financial statements.

## Regulation of the telecommunications industry could harm our operating results and future prospects.

The telecommunications industry is highly regulated and our business and financial condition could be adversely affected by changes in the regulations relating to the telecommunications industry. Currently, there are few laws or regulations that apply directly to access to or delivery of voice services on IP networks. We could be adversely affected by regulation of IP networks and commerce in any country where we operate, including the United States. Such regulations could include matters such as voice over the Internet or using Internet protocol, encryption technology, and access charges for service providers. The adoption of such regulations could decrease demand for our products, and at the same time increase the cost of selling our products, which could have a material adverse effect on our business and consolidated financial statements.

## Item 1B. Unresolved Staff Comments

None.

## Item 2. Properties

Our corporate headquarters is located in a leased facility in Westford, Massachusetts, consisting of 97,500 square feet under a lease that expires in August 2018. In addition to our corporate headquarters, we maintained, as of December 31, 2016, the following facilities:

| Location | Principal use | Square footage (approximate) | Lease expiration |
| :---: | :---: | :---: | :---: |
| Bangalore, India | Engineering/development | 60,000 | October 2019 |
| Richardson, Texas | Customer testing | 26,500 | January 2020 |
| Freehold, New Jersey (a) | Engineering/development | 16,500 | January 2018 |
| Fremont, California | Engineering/development and general and administrative | 16,000 | June 2020 |
| Kanata, Canada | Engineering/development and general and administrative | 16,000 | October 2018 |
| Richardson, Texas | Engineering/development, sales and general and administrative | 15,600 | September 2021 |
| Prague, Czech Republic | Customer support | 11,500 | May 2019 |
| Swindon, United Kingdom | Engineering/development and customer support | 5,800 | December 2018 |
| San Jose, California (b) | Engineering/development | 5,500 | November 2018 |
| Rochester, New York | Engineering/development and general and administrative | 5,400 | October 2019 |
| Tokyo, Japan | Sales and customer support | 5,000 | May 2020 |
| Schaumburg, Illinois | Engineering/development | 4,700 | October 2019 |
| Richardson, Texas | Warehouse/manufacturing | 2,800 | March 2017 |
| Hyannis, Massachusetts | Engineering/development | 2,200 | December 2019 |

(a) In January 2017, we reduced the square footage of this facility to approximately 13,500 square feet and extended the lease through January 2024.

As of December 31, 2016, we also leased short-term office space in Australia, China, France, Germany, Malaysia, Mexico, Singapore, South Korea, Taiwan and the United Arab Emirates. We believe our existing facilities are adequate for our current needs and that suitable additional space will be available as needed.

## Item 3. Legal Proceedings

On April 6, 2015, Ming Huang, a purported shareholder of ours, filed a Class Action Complaint (Civil Action No. 3:15-02407), alleging violations of the federal securities laws (the "Complaint") in the United States District Court for the District of New Jersey (the "District of New Jersey"), against us and two of our officers, Raymond P. Dolan, our President and Chief Executive Officer, and Mark T. Greenquist, our former Chief Financial Officer (collectively, the "Defendants"). On september 21,
 "Plaintiff"). The Plaintiff claims to represent purchasers of our common stock during the period from October 23, 2014 to March 24, 2 , and seeks unspecified damages. The principal alegation conained in the Complaint is that the Defendants 22. 2015, we filed a Motion to Transfer (the "Motion to Transfer") this case to the United States District Court for the District of Massachusetts. The Plaintiff filed his Motion to Transfer on Otober 13,2015. On March 21, 2016, the District f New Jersey granted our Motion to Transf Thus Motion to Transfer on October 13, 2015. On March 21, 2016, the District of New Jersey granted our Motion to Transfer. Thus, (nv-10657-GAO) On May 4 2016, the Plaintiff filed an amded complaint (the "Amended Complaint") which is now the cv-10657-GAO). On May 4, 2016, the Plaintiff filed an amended complaint (the "Amended Complaint"), which is now the Amended Complaint (the "Motion to Dismiss") and July 25, 2016 , the Plaintiff filed an opposition to the Motion to Dismiss We filed our reply to the Plaintiff's opposition to the Motion to Dismiss on August 15, 2016. A hearing on the Motion to We filed our reply to thiss is scheduled for February 28, 2017. We believe that the Defendants have meritorious defenses to the Motion to in the Amended Complaint and do not expect the results of this suit to have a material adverse effect on our business or in the Amended Complaint and do
consolidated financial statements.

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

## Item 4. Mine Safety Disclosures

Not applicable.

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity

 Securities
## Market Information

Our common stock is quoted on the NASDAQ Global Select Market under the symbol "SONS"
The following table sets forth, for the time periods indicated, the high and low sale prices of our common stock as reported on the NASDAQ Global Select Market:

|  | High |  | Low |  |
| :---: | :---: | :---: | :---: | :---: |
| Fiscal 2016 |  |  |  |  |
| First quarter | \$ | 8.10 | \$ | 5.15 |
| Second quarter | \$ | 9.26 | \$ | 7.05 |
| Third quarter | \$ | 10.00 | \$ | 7.52 |
| Fourth quarter | \$ | 7.84 | \$ | 5.51 |
| Fiscal 2015 |  |  |  |  |
| First quarter | \$ | 20.75 | \$ | 7.86 |
| Second quarter | \$ | 8.55 | \$ | 7.50 |
| Third quarter | \$ | 8.20 | \$ | 5.82 |
| Fourth quarter | \$ | 7.55 | \$ | 5.55 |

## Holder

At February 22, 2017, there were approximately 158 holders of record of our common stock

## Dividend Policy

We have never declared or paid cash dividends and have no present intention to pay cash dividends in the foreseeable future.
Recent Sales of Unregistered Securities
None.

## Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes repurchases of our common stock during the fourth quarter of 2016:

| Period | Total Number of Shares Purchased (1) | Average Price Paid per Shar |  | Total Number of Shares Purchased ${ }_{\text {as Part }}$ Publicly Announced Plans or Programs (2) | Approximate Dollar Value of Shares that May <br> Yet be Purchased Under the Plans or Programs (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October 1, 2016 to October 31, 2016 | 119,559 | \$ | 6.35 | 85,000 | \$ | 7,331,121 |
| November 1, 2016 to November 30, 2016 | 245,405 | \$ | 5.98 | 245,000 |  | 5,865,165 |
| December 1, 2016 to December 31, 2016 | 70,162 | \$ | 6.22 | 70,000 |  | 5,429,481 |
| Total | 435,126 | \$ | 6.12 | 400,000 |  | 5,429,481 |

(1) Upon vesting of restricted stock awards, our employees are permitted to return to us a portion of the newly vested shares to satisfy the tax withholding obligations that arise in connection with such vesting. During the fourth quarter of 2016, 35,126 shares of restricted stock were returned to us by employees to satisfy tax withholding obligations arising in connection with vesting of restricted stock, which shares are included in this column.
(2) Consists of purchases pursuant to a stock buyback program announced on July 29, 2013, under which our Board of Directors has authorized the repurchase of up to $\$ 100$ million of our common stock from time to time on the open market or in privately negotiated transactions (the "2013 Buyback Program"). At December 31, 2016, we had $\$ 5.4$ million remaining under the 2013 Buyback Program for future repurchases. The timing and amount of any shares repurchased will be determined by our management based on its evaluation of market conditions and other factors. We may elect to implement a 10b5-1 repurchase program, which would permit shares to be repurchased when we might otherwise be precluded from doing so under insider trading laws. The 2013 Buyback Program does not have a fixed expiration date but may be suspended or discontinued at any time. The 2013 Buyback Program is being funded using our working capital.
(3) Consists of remaining amounts available for repurchases under the 2013 Buyback Program.

## Performance Graph

The following performance graph compares the cumulative total return to stockholders for our common stock for the period from December 31, 2011 through December 31, 2016 with the cumulative total return over the same period on the NASDAQ Composite Index and the NASDAQ Telecommunications Index. The comparison assumes an investment of $\$ 100$ on December 31, 2011 in our common stock and in each of the indices and, in each case, assumes reinvestment of all dividends, if any. The performance shown is not necessarily indicative of future performance.

This graph is not deemed to be "filed" with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and should not be deemed to be incorporated by reference into any of our prio or subsequent filings under the Securities Act of 1933, as amended, or the Exchange Act.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Sonus Networks, Inc., the NASDAQ Composite Index and the NASDAQ Telecommunications Index


S100 invested on $12 / 31 / 111$ in stock or index, including reinvestment of dividends.
Fiscal year ending December 31 .

|  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sonus Networks, Inc. | \$ | 100.00 | \$ | 70.83 | \$ | 131.25 | \$ | 165.42 | \$ | 59.42 | \$ | 52.50 |
| NASDAQ Composite | \$ | 100.00 | \$ | 116.41 | \$ | 165.47 | \$ | 188.69 | \$ | 200.32 | \$ | 216.54 |
| NASDAQ Telecomm | \$ | 100.00 | \$ | 102.78 | \$ | 143.40 | \$ | 149.42 | \$ | 144.02 |  | 153.88 |

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K.

| Consolidated Statement of Operations Data (In thousands, except per share amounts) | Year ended December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 (1) |  | 2015 (2) |  | 2014 (3) |  | 2013 |  | 2012 (4) |  |
| Revenue: |  |  |  |  |  |  |  |  |  |  |
| Product | \$ | 146,381 | \$ | 141,913 | \$ | 182,455 | \$ | 167,272 | \$ | 153,326 |
| Service |  | 106,210 |  | 107, 121 |  | 113,871 |  | 109,461 |  | 100,808 |
| Total revenue |  | 252,591 |  | 249,034 |  | 296,326 |  | 276,733 |  | 254,134 |
| Cost of revenue: |  |  |  |  |  |  |  |  |  |  |
| Product |  | 47,367 |  | 50,460 |  | 60,284 |  | 59,235 |  | 58,109 |
| Service |  | 37,613 |  | 36,917 |  | 42,637 |  | 45,038 |  | 53,431 |
| Total cost of revenue |  | 84,980 |  | 87,377 |  | 102,921 |  | 104,273 |  | 111,540 |
| Gross profit |  | 167,611 |  | 161,657 |  | 193,405 |  | 172,460 |  | 142,594 |
| Operating expenses: |  |  |  |  |  |  |  |  |  |  |
| Research and development |  | 72,841 |  | 77,908 |  | 79,396 |  | 69,559 |  | 67,341 |
| Sales and marketing |  | 68,539 |  | 72,841 |  | 80,141 |  | 78,365 |  | 76,341 |
| General and administrative |  | 35,948 |  | 39,846 |  | 43,937 |  | 40,107 |  | 34,283 |
| Acquisition-related expense |  | 1,152 |  | 131 |  | 1,558 |  | 93 |  | 5,496 |
| Restructuring expense |  | 2,740 |  | 2,148 |  | 5,625 |  | 5,411 |  | 7,675 |
| Total operating expenses |  | 181,220 |  | 192,874 |  | 210,657 |  | 193,535 |  | 191,136 |
| Loss from operations |  | $(13,609)$ |  | (31,217) |  | (17,252) |  | (21,075) |  | (48,542) |
| Interest and other income, net |  | 2,193 |  | 1,329 |  | 2,611 |  | 408 |  | 814 |
| Loss from continuing operations before income taxes |  | (11,416) |  | $(29,888)$ |  | (14,641) |  | (20,667) |  | (47,728) |
| Income tax provision |  | $(2,516)$ |  | $(2,007)$ |  | $(2,214)$ |  | $(1,452)$ |  | $(2,441)$ |
| Net loss | S | $\underline{(13,932)}$ | S | $\xrightarrow{(31,895)}$ | S | (16,855) | S | $\underline{(22,119)}$ | \$ | $\xrightarrow{(50,169)}$ |
|  |  |  |  |  |  |  |  |  |  |  |
| Loss per share |  |  |  |  |  |  |  |  |  |  |
| Basic | \$ | (0.28) | \$ | (0.64) | \$ | (0.34) | s | (0.40) | \$ | (0.90) |
| Diluted | \$ | (0.28) | s | (0.64) | \$ | (0.34) | \$ | (0.40) | \$ | (0.90) |
|  |  |  |  |  |  |  |  |  |  |  |
| Shares used to compute loss per share |  |  |  |  |  |  |  |  |  |  |
| Basic |  | 49,385 |  | 49,560 |  | 50,245 |  | 55,686 |  | 56,018 |
| Diluted |  | 49,385 |  | 49,560 |  | 50,245 |  | 55,686 |  | 56,018 |

(1) Includes $\$ 1.9$ million of revenue and $\$ 4.7$ million of net loss attributable to Taqua, LLC for the period subsequent to it acquisition by the Company on September 26, 2016.
(2) Includes the results of operations of the SDN Business of Treq Labs, Inc. for the period subsequent to its acquisition by the Company on January 2, 2015. The Company has not disclosed the revenue and earnings of the SDN Business for the period since January 2, 2015, as these amounts are not significant to the Company's consolidated financial statements.
(3) Includes $\$ 14.8$ million of revenue attributable to Performance Technologies Incorporated for the period subsequent to its acquisition by the Company on February 19, 2014. The impact on earnings is not significant.
million of net loss attributable to NET for the period subsequent to its acquisition by the Company on August 24, 2012.

## Consolidated Balance Sheet Data

## (In thousands)

Cash and cash equivalents
Marketable securities
Investments
Working capital
Total assets
Convertible subordinated note
Long-term deferred revenue
Other long-term liabilities
Total stockholders' equity

| December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  |
| s | 31,923 | s | 50,111 | \$ | 41,157 | \$ | 72,423 | S | 88,004 |
| \$ | 61,836 | \$ | 58,533 | \$ | 64,443 | \$ | 138,882 | \$ | 161,905 |
| \$ | 32,371 | \$ | 33,605 | \$ | 42,407 | \$ | 34,364 | \$ | 29,698 |
| s | 100,845 | \$ | 117,692 | \$ | 129,480 | \$ | 223,879 | \$ | 286,745 |
| \$ | 308,059 | \$ | 312,891 | \$ | 332,635 | \$ | 417,484 | \$ | 470,740 |
| \$ | - | \$ | - | \$ | - | \$ | 2,380 | s | 2,380 |
| s | 7,188 | \$ | 7,374 | \$ | 8,009 | \$ | 10,528 | s | 11,647 |
| \$ | 1,633 | \$ | 2,760 | \$ | 5,246 | \$ | 4,371 | \$ | 5,706 |
| \$ | 219,122 | \$ | 223,026 | \$ | 240,350 | s | 312,252 | s | 376,046 |

## Overview

We are a leading provider of networked solutions for communications service providers (e.g., telecommunications, wireless and cable service providers) and enterprises to help them secure and unify their real-time communications infrastructures. We help the world's leading communications service providers and enterprises embrace the next generation of Session Initiation Protocol ("SIP") and 4G/LTE (Long Term Evolution)-based solutions, including Voice over Internet Protocol ("VoIP"), Voice over WiFi ("VoWiFi"), video and Unified Communications ("UC") by securing and enabling reliable and scalable Internet Protocol ("IP") networks. Our products include session border controllers ("SBCs"), diameter signaling controllers ("DSCs") and VoWiFi solutions, which are supported by a global services team with experience in design, deployment and maintenance of some of the world's largest IP networks.

Our solutions provide a secure way for our customers to link and leverage multivendor, multiprotocol communications systems and applications across their networks, around the world and in a rapidly changing ecosystem of IP-enabled devices such as smartphones and tablets. Our solutions help realize the intended value and benefits of UC platforms by enabling disparate communications environments, commonplace in most enterprises today, to work seamlessly together. Likewise, our solutions secure the evolution to cloud-based delivery of UC solutions - both for service providers transforming to a cloud based network and for enterprises using cloud-based UC.

We utilize both direct and indirect sales channels to reach our target customers. Customers and prospective customers in the service provider space are traditional and emerging communications service providers, including long distance carriers, local exchange carriers, Internet service providers, wireless operators, cable operators, international telephone companies and carriers that provide services to other carriers. Enterprise customers and target enterprise customers include financial institutions, retailers, state and local governments, and other multinational corporations. We collaborate with our customers to
identify and develop new, advanced services and applications that can help to reduce costs, improve productivity and generate identify and develop new, advanced services and applications that can help to reduce costs, improve productivity and generate new revenue.

We have traditionally sold our products through a global direct sales force, with additional sales support from regional channel partners throughout the world. Our channel partner program, Sonus Partner Assure, expands our coverage of the service provider and enterprise markets.

Our fiscal year ends on December 31. For fiscal years 2015 and 2014, we reported our first, second and third quarters on a 4-4-5 basis, with the quarter ending on the Friday closest to the last day of each third month. In 2015, our first quarter ended on March 27, 2015, our second quarter ended on June 26, 2015 and our third quarter ended on September 25, 2015. In 2014 our first quarter ended on March 28, 2014, our second quarter ended on June 27, 2014 and our third quarter ended on September 26, 2014. Effective January 1, 2016, we reported our first, second and third quarters on a month-end basis, such that our first quarter ended on March 31, 2016, our second quarter ended on June 30, 2016 and our third quarter ended on September 30, 2016.

## Business Acquisitions

On September 26, 2016 (the "Taqua Acquisition Date"), we acquired Taqua, LLC ("Taqua"), a leading supplier of IP communications systems, applications and services to mobile and fixed operators. Taqua enables the transformation of software-based service provider networks to deliver next-generation voice, video and messaging services, including Volp, Vo Controller used in IP Peering applications (the T7100), both of which are complementary to our current product offerings. In consideration, we paid $\$ 19.9$ million in cash to the sellers on the Taqua Acquisition Date, net of cash acquired. We also entered into an Earn-Out Agreement, dated as of September 26,2016 , with Taqua Holdings, LLC and Jeffrey L. Brawner the seller representative in the transaction under which there is the potential for additional cash payments of up to $\$ 65$ million in the aggregate to the sellers if certain annual revenue thresholds are exceeded as measured annually through 2020 . Based on historical and forecasted sales, no incremental contingent consideration was recorded as of December 31, 2016. The financia results of Taqua are included in our consolidated financial statements starting on the Taqua Acquisition Date.

On January 2, 2015 (the "Treq Asset Acquisition Date"), we acquired from Treq Labs, Inc. ("Treq") certain assets related to its business of designing, developing, marketing, selling, servicing and maintaining software-defined networking ("SDN") technology, SDN controller software and SDN management software (the "SDN Business") for $\$ 10.1$ million in cash on the

Treq Asset Acquisition Date, with an additional consideration payment of $\$ 750,000$ paid on each of July 2, 2015 and January 4, 2016. We also entered into an Earn-Out Agreement under which we agreed to issue to the sellers up to an aggregate of 1.3 million shares of common stock over a three-year period subsequent to the Treq Asset Acquisition Date if aggregate revenue thresholds of at least $\$ 60$ million are achieved by the SDN Business during that period, and up to an aggregate of an additional 2.2 million shares ( 3.5 million shares in total) if aggregate revenue thresholds of at least $\$ 150$ million are achieved by the SDN Business during that period. If the initial revenue thresholds are not met, no shares will be issued. Based on historical and forecasted sales, no incremental contingent consideration was recorded initially as of the Treq Asset Acquisition Date or through December 31, 2016. The SDN Business provides solutions that optimize networks for voice, video and UC for both enterprise and service provider customers. We believe that the acquisition of the SDN Business has helped to accelal statement delivery of our SDN strategy. The financial results of the SDN Business are included in our consolidated financial statement starting on the Treq Asset Acquisition Date.

On February 19, 2014 (the "PT Acquisition Date"), we completed the acquisition of Performance Technologies, Incorporated ("PT") for $\$ 3.75$ per share, or approximately $\$ 35$ million in cash, net of PT's cash and excluding acquisitionrelated costs. This acquisition has enabled us to expand and diversify our portfolio with an integrated, virtualized Diameter and SIP-based solution and deliver strategic value to service providers seeking to offer new multimedia services through mobile, cloud-based real-time communications. The financial results of PT are included in our consolidated financial statements for the period subsequent to the PT Acquisition Date. On June 20, 2014, we sold the PT Multi-Protocol Server ("MPS") business for $\$ 2.0$ million. We had acquired the MPS business in connection with the acquisition of PT. The results of operations of the MPS business are excluded from our consolidated results for the period subsequent to June 20, 2014.

## Corporate Strategy

Our strategy is designed to capitalize on our technology and market lead, and build a premier franchise in multimedia infrastructure solutions. We are currently focusing our major efforts on the following aspects of our business which enable next generation communications including SIP- and 4G/LTE-based networks.

- expanding our communications network solutions to address emerging UC-, IP- and cloud-based enterprise and service providers;
embracing the principles outlined by 3GPP, 4GPP2 and LTE architectures and delivering the industry's most advanced IMS (IP Multimedia Subsystem)-ready SBC and DSC product suites,
- leveraging our TDM (time division multiplexing)-to-IP gateway technology leadership with service providers to
accelerate adoption of SIP-enabled Unified Communication services,
- expanding and broadening our customer base by targeting the enterprise market for SIP trunking and access solutions; providing an environment for our customers to enable real-time communication to embed into their presence on the worldwide web;
- expanding our global sales distribution, marketing and support capabilities
actively contributing to the SIP standards definition and adoption process;
pursuing strategic transactions and alliances;
successfully implementing our cost reduction initiatives; and
- delivering sustainable profitability by continuing to improve our overall performance.


## Financial Overview

Restructuring and Cost Reduction Initiative
We have been committed to streamlining our operations and reducing our operating costs.
In August 2012, we committed to a restructuring initiative to close and consolidate certain facilities and reduce our worldwide workforce (the "2012 Restructuring Initiative"). We regularly review our restructuring accruals against expected cash expenditures to determine if adjustments are required. As a result of such reviews, we recorded a net credit to restructuring expense aggregating $\$ 1.7$ million in 2015. We recorded $\$ 5.6$ million of expense in connection with the 2012 Restructuring Initiative in 2014. As of December 31, 2015, the payments related to this initiative had been completed.

To better align our cost structure to our then-current revenue expectations, in April 2015, we announced a cost reduction review. As part of this review, on April 16, 2015, we initiated a restructuring plan to reduce our workforce by approximately 150 positions, or $12.5 \%$ of our worldwide workforce (the " 2015 Restructuring Initiative"). We recorded restructuring expense of $\$ 67,000$ in 2016 and $\$ 3.8$ million in 2015 in connection with the 2015 Restructuring Initiative.

On July 25,2016 , we announced a program to further accelerate our investment in new technologies as the communications industry migrates to a cloud-based architecture (the "2016 Restructuring Initiative"). We expect to record expense aggregating between $\$ 3$ million and $\$ 4$ million in connection with this action, resulting in expected annual savings of approximately $\$ 6$ million to $\$ 8$ million. We recorded $\$ 1.5$ million of expense in 2016 and expect to record the remaining expense by the end of the second quarter of 2017 . We intend to utilize the majority of the savings to shift headcount towa new strategic initiatives, such as new products and an expanded go-to-market footprint in selected geographies and discrete vertical markets.

In connection with the acquisition of Taqua, our management approved a restructuring plan in the third quarter of 2016 to eliminate certain redundant positions within the combined companies. On October 24, 2016, the Audit Committee of our Board of Directors approved a broader Taqua restructuring plan related to headcount and redundant facilities (collectively, the We anticipate we will record additional future expense in connection with this initiative for headcount and redundant facilitie aggregating approximately $\$ 1$ million.

## Financial Results

We reported losses from operations of $\$ 13.6$ million for $2016, \$ 31.2$ million for 2015 and $\$ 17.3$ million for 2014 . We reported net losses of $\$ 13.9$ million for 2016, $\$ 31.9$ million for 2015 and $\$ 16.9$ million for 2014.

Our revenue was $\$ 252.6$ million in 2016, $\$ 249.0$ million in 2015 and $\$ 296.3$ million in 2014. Our gross profit was $\$ 167.6$ million in 2016, $\$ 161.7$ million in 2015 and $\$ 193.4$ million in 2014. Our gross profit as a percentage of revenue ("tota gross margin") was $66.4 \%$ in $2016,64.9 \%$ in 2015 and $65.3 \%$ in 2014.

Our operating expenses were $\$ 181.2$ million in 2016 , compared to $\$ 192.9$ million in 2015 and $\$ 210.7$ million in 2014 . Our 2016 operating expenses included $\$ 1.2$ million of incremental acquisition-related costs for professional and services fees related to our September 2016 acquisition of Taqua and $\$ 2.7$ million of restructuring expense, comprised of $\$ 1.5$ million related to our 2016 Restructuring Initiative, $\$ 1.2$ million related to our Taqua Restructuring Initiative and $\$ 67,000$ related to our 2015 Restructuring Initiative. Our 2015 operating expenses included $\$ 0.1$ million of incremental acquisition-related costs for professional and services fees related to the January 2015 acquisition of the SDN Business and $\$ 2.1$ million of restructuring expense, comprised of $\$ 3.8$ million of expense related to our 2015 Restructuring Initiative, net of $\$ 1.7$ million of reversals of restructuring expense previously recorded in connection with our 2012 Restructuring Initiative. Our 2014 operating expenses included $\$ 1.6$ million of incremental acquisition-related expense, comprised of $\$ 1.3$ million related to the acquisition of PT and $\$ 0.3$ million related to the acquisition of the SDN Business. Our 2014 operating expenses also included $\$ 5.6$ million of restructuring expense related to our 2012 Restructuring Initiative.

We recorded stock-based compensation expense of $\$ 19.8$ million in $2016, \$ 21.7$ million in 2015 and $\$ 23.9$ million in 2014.

We sold a domain name and a block of IPv4 addresses in July 2016 and December 2016, respectively, both of which we had acquired in connection with previous acquisitions, and recorded income aggregating $\$ 1.3$ million in connection with these transactions. In October 2015, we sold a domain name we had acquired in connection with our acquisition of PT. We recorded $\$ 0.9$ million of income in connection with this transaction. These amounts are included in Other income, net, in our consolidated statement of operations.

In March 2014, we reached a settlement agreement for $\$ 2.25$ million to recover a portion of our losses related to the impairment of certain prepaid royalties that we had written off in 2012. This amount is included in Other income, net, in our consolidated statement of operations for 2014.

See "Results of Operations" in this Management's Discussion and Analysis of Financial Condition and Results of Operations for a discussion of these changes in our revenue and expenses.

## Critical Accounting Policies and Estimates

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

- Revenue recognition;
-     - Loss contion of invenciestory;
- Stock-based compensation
- Business combinations;
- Goodwill and intangible assets; and
- Accounting for income taxes.

Revenue Recognition. We recognize revenue from sales when persuasive evidence of an arrangement exists, delivery has occurred, the sale price is fixed or determinable, and collectability of the related receivable is probable. When we have future obligations, including a requirement to deliver additional elements that are essential to the functionality of the delivered elements or when customer acceptance is required, we defer revenue recognition and related costs until those obligations are satisfied. Likewise, when fees for products or services are not fixed and determinable, we defer the recording of receivables, deferred revenue and revenue until such time as the fees become due or are collected. We limit the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations, or subject to customer-specific return, exchange or refund provisions.

Revenue from maintenance and support services is generally recognized ratably over the service period. Maintenance revenue is deferred until the associated product is accepted by the customer and all other revenue recognition criteria have been met. Maintenance and support services include telephone support, return and repair support and unspecified rights to product upgrades and enhancements. Revenue from other professional services is typically recognized as the services are delivered if all other revenue recognition criteria have been met.

Our products typically have both software and non-software components that function together to deliver the products' essential functionality. Many of our sales involve multiple-element arrangements that include both software and hardwarerelated products, maintenance and various professional services. We recognize revenue in accordance with the provisions of Accounting Standards Codification ("ASC") 605-25, Revenue Recognition - Multiple-Element Arrangements ("ASC 605-25") for transactions that include both hardware and software components. We recognize revenue from stand-alone software sales under the software revenue recognition guidance in ASC 985-605, Software - Revenue Recognition ("ASC 985-605").

For multiple-element arrangements that include both software-only products and non-software products, we allocate the total arrangement consideration to the software-only deliverables as a group and to the individual non-software deliverables based on their relative selling prices. If an undelivered element (such as maintenance and support services) relates to both the software-only and non-software deliverables, we bifurcate the consideration allocated to the undelivered element (such as maintenance and support services) into a non-software component and the software-only component using the relative selling price method. The consideration allocated to the non-software and software-only deliverables is recognized in accordance with the applicable guidance as discussed within this critical accounting policy.

For transactions that include multiple elements, arrangement consideration is allocated to each element based on the relative selling prices of all of the elements in the arrangement using the fair value hierarchy as required by ASC 605-25.

Consistent with the methodology under the previous accounting guidance, we establish vendor-specific objective evidence of selling price ("VSOE") based upon the price charged when the same element is sold separately or established by management having the relevant pricing authority. We have VSOE for our maintenance and support services and certain professional services. When VSOE exists it is used to determine the selling price of a deliverable. We have not been able to establish VSOE on any of our products and for certain of our services because we have not sold such products or services on a stand-alone basis, not priced such products or services within a narrow range, or had limited sales history

When VSOE is not established, we attempt to establish the selling price of each element based on third-party evidence ("TPE"). Our solution typically differs from that of our peers as there are no similar or interchangeable competitor products or services. Our various product, service and maintenance offerings contain a significant level of unique features and functionality
and therefore, comparable pricing of competitors' products and services with similar functionality cannot be obtained. Accordingly, we are not able to determine TPE for our products or services.

When we are unable to establish selling price using VSOE or TPE, we use estimated selling price ("ESP") in our allocation of arrangement consideration for the relevant deliverables. The objective of ESP is to determine the price at which we would transact a sale if a product or service was sold on a stand-alone basis. We deterine ES a conditions, such as geographic or regionalspecific market factors, profit objectives and pricing practices for such deliverables. The determination of ESP is a formal process within the Company that includes review and approval by our management.

We sell the majority of our products directly to our end customers. For products sold to resellers and distributors, we recognize revenue on a sell-through basis.

Valuation of Inventory. We review inventory for both potential obsolescence and potential loss of value periodically. In this review, we make assumptions about the future demand for and market value of the inventory and, based on these assumptions, estimate the amount of any excess, obsolete or slow-moving inventory.

We write down our inventories if they are considered to be obsolete or at levels in excess of forecasted demand. In these cases, inventory is written down to estimated realizable value based on historical usage and expected demand. Inherent in our products and technical obsolescence of our products. If future demand or market conditions are less favorable than our projections, additional inventory write-downs could be required and would be reflected in the cost of revenue in the period the revision is made. To date, we have not been required to revise any of our assumptions or estimates used in determining our inventory valuations.

We write down our evaluation equipment at the time of shipment to our customers, as it is not probable that the inventory value will be realizable.

Loss Contingencies and Reserves. We are subject to ongoing business risks arising in the ordinary course of business that affect the estimation process of the carrying value of assets, the recording of liabilities and the possibility of various loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred or an asset has been impaired and the amount of loss can be reasonably estimated. We regularly evaluate current information available to determine whether such amounts should be adjusted and record changes in estimates in the period they become known. We are subject to various legal claims. We reserve for legal contingencies and legal fees when the amounts are probable and reasonably estimable.

Stock-Based Compensation. Our stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period.

We use the Black-Scholes valuation model for estimating the fair value on the date of grant of employee stock options. Determining the fair value of stock option awards at the grant date requires judgment regarding certain valuation assumptions, including the volatility of our stock price, expected term of the option, risk-free interest rate and expected dividends. Change in such assumptions and estimates could result in different fair values and could therefore impact our earnings. Such changes, however, would not impact our cash flows. The fair value of RSAs, RSUs and PSAs is based upon our stock price on the grant date.

In 2015, we began to grant PSUs that include a market condition to certain of our executives. We use a Monte Carlo simulation approach to model future stock price movements based upon the risk-free rate of return, the volatility of each entity, and the pair-wise covariance between each entity. These results are then used to calculate the grant date fair values of the PSUs.

The amount of stock-based compensation expense recorded in any period for unvested awards requires estimates of the amount of stock-based awards that are expected to be forfeited prior to vesting, as well as assumptions regarding the probability that PSAs will be earned.

Business Combinations. We allocate the purchase price of acquired companies to identifiable assets acquired and liabilities assumed at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed and represents the expected future economic benefits arising from other assets acquired in the business combination that are not
individually identified and separately recognized. Significant management judgments and assumptions are required in determining the fair value of assets acquired and liabilities assumed, particularly acquired intangible assets which are principally based upon estimates of the future performance and cash flows expected from the acquired business and applied discount rates. While we use our best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at a business combination date, our estimates and assumptions are inherently uncertain and subject to refinement. If different assumptions are used, it could materially impact the purchase price allocation and our financial position and results of operations. Any adjustments to assets acquired or liabilities assumed subsequent to the purchase price allocation period are included in operating results in the period in which the adjustments are determined. Intangible assets typically are comprised of developed technology, trademarks and trade names, customer contracts/ relationships, order backlog, internal use software and covenants not to compete.

Goodwill and Intangible Assets. Goodwill is not amortized, but instead is tested for impairment at least annually or if indicators of potential impairment exist. Intangible assets with estimated lives and other long-lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of intangible assets with estimated lives and other long-lived assets is measured by comparing the carrying amount of the asset to future net undiscounted pretax cash flows expected to be generated by the asset. If these comparisons the asset exceeds the related estimated fair value.

Estimated fair value is based on either discounted future pretax operating cash flows or appraised values. Considerable judgment is required to estimate discounted future operating cash flows. Judgment is also required in determining whether an event has occurred that may impair the value of goodwill or identifiable intangible or other long-lived assets. Factors that could indicate an impairment may exist include significant underperformance relative to plan or long-term projections, strategic changes in business strategy, significant negative industry or economic trends, a significant change in circumstances relative to a large customer, a significant decline in our stock price for a sustained period and a decline in our market capitalization to below net book value. We must make assumptions about future cash flows, future operating plans, discount rates and othe factors in the models and valuation reports. To the extent these future projections and estimates change, the estimated amounts of impairment could differ from current estimates.

Our annual testing for impairment of goodwill is completed as of November 30. We operate as a single operating segment with one reporting unit and consequently evaluate goodwill for impairment based on an evaluation of the fair value of our company as a whole. We performed our step one assessments for 2016, 2015 and 2014 as proscribed by Intangibles Goodwill and Other (ASC Topic 350) and concluded for all three years that it was not more likely than not that the fair value of our reporting unit was less than its carrying value.

Accounting for Income Taxes. Our provision for income taxes is comprised of a current and a deferred portion. The current income tax provision is calculated as the estimated taxes payable or refundable on tax returns for the current year. We provide for deferred income taxes resulting from temporary differences between financial and taxable income. Such differences arise primarily from tax net operating loss and credit carryforwards, depreciation, deferred revenue, stock-based compensation expense, accruals and reserves.

We assess the recoverability of any tax assets recorded on the balance sheet and provide any necessary valuation allowances as required. In evaluating our ability to recover our deferred tax assets, we consider all available positive and negative evidence including our past operating results, the existence of cumulative income in the most recent years, changes in the business in which we operate and our forecast of future taxable income. In determining future taxable income, we are responsible for assumptions utilized, including the amount of state, federal and international pre-tax operating income, the reversal of temporary differences and the implementation of feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we are using to manage our underlying businesses. Such assessment is completed on a jurisdiction by jurisdiction basis.

At December 31, 2016, we had valuation allowances of approximately $\$ 142$ million to offset net domestic deferred tax assets of approximately $\$ 142$ million. In the event we determine it is more likely than not that we will be able to use a deferred tax asset in the future in excess of its net carrying value, the valuation allowance would be reduced, thereby increasing net earnings and increasing equity in the period such determination is made. We have recorded net deferred tax assets in some of our international subsidiaries. These amounts could change in future periods based upon our operating results and changes in tax law.

We provide for income taxes during interim periods based on the estimated effective tax rate for the full year. We record a cumulative adjustment to the tax provision in an interim period in which a change in the estimated annual effective tax rate is determined.

We have not provided for U.S. income taxes on the undistributed earnings of non-U.S. subsidiaries, as we currently plan to indefinitely reinvest these amounts and have the intent and ability to do so. Cumulative undistributed foreign earnings were approximately $\$ 28$ million at each of December 31, 2016 and December 31, 2015. Generally, the undistributed foreign earnings become subject to U.S. taxation upon the remittance of dividends and under certain other circumstances. We have earnings become subject to U.S. taxation upon the remittance of dividends and under certain other circumstances. We have bearnings of our non-U.S. subsidiaries. Previously taxed earnings were approximately $\$ 16$ million at each of December 31, 2016 and December 31, 2015. Thus, $\$ 12$ million of the undistributed earnings at each of December 31, 2016 and December 31, 2015 are subject to U.S. income taxes on undistributed earnings. We do not believe it is practicable to estimate with reasonable accuracy the hypothetical amount of the unrecognized deferred tax liability on our undistributed foreign earnings given the large number of tax jurisdictions involved and the many factors and assumptions required to estimate the amount of the U.S. federal income tax on the undistributed earnings after reduction for the available foreign tax credits.

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins than $50 \%$ likelihood of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of recognized tax benefit is still appropriate. The recognition and measurement of tax benefits require significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

## Results of Operations

## Years Ended December 31, 2016 and 2015

Revenue. Revenue for the years ended December 31, 2016 and 2015 was as follows (in thousands, except percentages):

|  | $\begin{gathered} \text { Year ended } \\ \text { December 31, } \end{gathered}$ |  |  |  | Increase (decrease)from prior year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2016 |  | 2015 |  | ¢ | \% |
| Product | \$ | 146,381 | \$ | 141,913 | \$ | 4,468 | 3.1 \% |
| Service |  | 106,210 |  | 107,121 |  | (911) | (0.9)\% |
| Total revenue | \$ | 252.591 | \$ | 249,034 | \$ | 3.557 | 1.4 \% |

Product revenue is comprised of sales of our communication infrastructure products. The increase in product revenue in 2016 compared to 2015 was primarily the result of an increase in sales of our SBC 5000 series products and our SBC 7000 , which contributed approximately $\$ 5$ million of higher product revenue in 2016 compared to 2015 , and the inclusion of $\$ 0.7$ million of product revenue from Taqua in our current year results. These increases were partially offset by net decreases in sales of our other products, particularly our GSX-related products.

In 2016, approximately $26 \%$ of our product revenue recognized was from indirect sales through our channel partner program, compared to approximately $24 \%$ in 2015.

In both 2016 and 2015, our product revenue from sales to enterprise customers was approximately $19 \%$ of our total product revenue. These sales were made both through our direct sales team and indirect sales channel partners.

The timing of the completion of customer projects, revenue recognition criteria satisfaction and customer payments included in multiple element arrangements may cause our product revenue to fluctuate from one period to the next. These complex arrangements are generally completed through our direct sales force.
Service revenue is primarily comprised of hardware and software maintenance and support ("maintenance revenue") and network design, installation and other professional services ("professional services revenue").

Service revenue for the years ended December 31, 2016 and 2015 was comprised of the following (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | Increase (decrease) from prior year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | \$ |  | \% |
| Maintenance | \$ | 86,995 | \$ | 89,280 | \$ | $(2,285)$ | (2.6)\% |
| Professional services |  | 19,215 |  | 17,841 |  | 1,374 | 7.7 \% |
| Total service revenue | \$ | 106,210 | \$ | 107,121 | \$ | (911) | (0.9)\% |

Our maintenance revenue decreased in 2016 compared to 2015, primarily due to customer mix, including merger activity among certain of our customers, and the timing of product shipments in 2016. This decrease was partially offset by the growth of our installed customer base, the timing of maintenance renewals and the acquisition of Taqua.

The increase in our professional services revenue in 2016 compared to 2015 was primarily due to an increase in volume of projects completed in the current year compared to the prior year. The timing of the completion of projects for revenue recognition, customer payments and maintenance contracts may cause our services revenue to fluctuate from one period to the next.

The following customer contributed 10\% or more of our revenue in the years ended December 31, 2016 and 2015:

International revenue was approximately $31 \%$ of revenue in 2016 and approximately $29 \%$ of revenue in 2015 . Due to the timing of project completions, we expect that the domestic and international components as a percentage of our revenue may fluctuate from quarter to quarter and year to year.

Our deferred product revenue was $\$ 6.9$ million at December 31, 2016 and $\$ 12.5$ million at December 31, 2015. Our deferred service revenue was $\$ 43.8$ million at December 31, 2016 and $\$ 33.6$ million at December 31, 2015. Our deferred revenue balance may fluctuate as a result of the timing of revenue recognition, customer payments, maintenance contract renewals, contractual billing rights and maintenance revenue deferrals included in multiple element arrangements.

We expect that our product revenue in 2017 will be relatively flat compared to 2016 levels, primarily due to continued consolidation among our customers and their suppliers. We will continue to focus on expanding our product offerings to address the emerging UC and IP-based markets, such as SBC, in both the enterprise and service provider markets, which we believe are aligned with the technology strategies of our customers.

We expect that our service revenue in 2017 will increase from 2016 levels as a result of the continued growth of our installed customer base, partially offset by lower revenue resulting from the aforementioned customer merger activities.

Overall, we expect that total revenue in 2017 will be flat to slightly higher, or low single digit growth, compared to 2016 total revenue.

Cost of Revenue/Gross Margin. Our cost of revenue consists primarily of amounts paid to third-party manufacturers fo purchased materials and services, royalties, manufacturing and professional services personnel and related costs, and provision for inventory obsolescence. Our cost of revenue and gross margins for the years ended December 31, 2016 and 2015 were as follows (in thousands, except percentages):

|  | Year endedDecember 31, |  |  |  | Increase (decrease)from prior year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | S |  | \% |
| Cost of revenue |  |  |  |  |  |  |  |
| Product | \$ | 47,367 | \$ | 50,460 | \$ | $(3,093)$ | (6.1)\% |
| Service |  | 37,613 |  | 36,917 |  | 696 | 1.9 \% |
| Total cost of revenue | \$ | 84.980 | \$ | 87.377 | \$ | (2.397) | (2.7)\% |
| Gross margin |  |  |  |  |  |  |  |
| Product |  | 67.6\% |  | 64.4\% |  |  |  |
| Service |  | 64.6\% |  | 65.5\% |  |  |  |
| Total gross margin |  | 66.4\% |  | 64.9\% |  |  |  |

The increase in product gross margin in 2016 compared to 2015 was primarily due to higher product revenue agains Tertain fixed manufacturing costs, coupled with $\$ 4.7$ million of lower variable costs in connection with our inventory valuation, which increased our product gross margin in the aggregate by approximately three percentage points. Our product nd customer mix, particularly sales of our SBC 7000 and SBC 5000 products, contributed slightly to the increase in our product gross margin in 2016

The decrease in service gross margin in 2016 compared to 2015 was primarily attributable to slightly higher fixed service costs, including the inclusion of Taqua expenses since the Taqua Acquisition Date, and third party costs, both against slightly lower revenue, each of which decreased our service gross margin by approximately one-half of one percentage point.

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

We believe that our total gross margin will continue to be comparable to historical levels on an annualized basis in the foreseeable future

Research and Development Expenses. Research and development expenses consist primarily of salaries and related personnel expenses and prototype costs for the design, development, testing and enhancement of our products. Research an development expenses for the years ended December 31, 2016 and 2015 were as follows (in thousands, except percentages):

| Year ended December 31, |  |  |  | $\begin{aligned} & \text { Decrease } \\ & \text { from prior year } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | \$ | \% |
| \$ | 72,841 | \$ | 77,908 | \$ | $(5,067)$ | (6.5)\% |

The decrease in research and development expenses in 2016 compared to 2015 was attributable to $\$ 2.5$ million of lower epreciation expense, $\$ 1.1$ million of lower expense for product development (i.e., third-party development, prototype and test equipment costs), $\$ 1.0$ million of lower facilities-related expenses and $\$ 0.5$ million of lower employee-related expenses. The decrease in employee-related expenses was attributable to $\$ 0.4$ million of lower expense in connection with our company wide cash bonus program, and $\$ 0.4$ million of lower stock-based compensation expense, partially offset by a $\$ 0.3$ million increase in salary and related expenses.

Some aspects of our research and development efforts require significant short-term expenditures, the timing of which may cause significant variability in our expenses. We believe that rapid technological innovation is critical to our long-term uccess, and we are tailoring our investments to meet the requirements of our customers and market. We believe that our esearch and development expenses in 2017 will increase from 2016 levels due to the full year impact in 2017 of Taqua research and development costs and our increased investment in our security strategy, partially offset by cost reduction resulting from our 2016 Restructuring Initiative and Taqua Restructuring Initiative

Sales and Marketing Expenses. Sales and marketing expenses consist primarily of salaries and related personnel costs, ommissions, travel and entertainment expenses, promotions, customer trial and evaluations inventory and other marketing and sales support expenses. Sales and marketing expenses for the years ended December 31, 2016 and 2015 were as follows
(in thousands, except percentages):

|  | Year endedDecember 31, |  |  | $\begin{gathered} \text { Decrease } \\ \text { from prior year } \\ \hline \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | \$ | \% |
| \$ | 68,539 | \$ | 72,841 | \$ | $(4,302)$ | (5.9)\% |

The decrease in sales and marketing expenses in 2016 compared to 2015 was attributable to $\$ 5.0$ million of lowe employee-related expenses, $\$ 1.0$ million of lower consulting fees, $\$ 0.4$ million of lower facilities-related expenses and $\$ 0.3$ million of lower amortization of acquired intangible assets. These decreases were partially offset by $\$ 0.6$ million of higher marketing and trade show expenses and $\$ 1.8$ million of net increases in other sales and marketing expenses. The decrease in employee-related expenses was attributable to $\$ 2.3$ million of lower salary and commissions and related expenses, $\$ 1.8$ million of lower employee travel, training and related expenses, $\$ 0.8$ million of lower stock-based compensation expense and $\$ 0.1$ million of lower expense in connection with our company-wide cash bonus program.

We believe that our sales and marketing expenses will increase in 2017 from 2016 levels due to the full year impact of the nclusion of Taqua in 2017, partially offset by reductions resulting from the 2016 Restructuring Initiative and the Taqua Restructuring Initiative.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related ersonnel costs for executive and administrative personnel, recruiting expenses and audit, legal and other professional fees. General and administrative expenses for the years ended December 31, 2016 and 2015 were as follows (in thousands, excep percentages)


The decrease in general and administrative expenses in 2016 compared to 2015 was primarily attributable to $\$ 3.3$ million of lower employee-related expenses, $\$ 0.6$ million of lower depreciation expense and $\$ 0.5$ million of lower professional fees i.e., legal, audit and outside services), partially offset by $\$ 0.5$ million of higher expense related to patent litigation settlemen costs. The decrease in employee-related expenses was attributable to $\$ 2.1$ million of lower stock-based compensation xpense, $\$ 0.8$ million of lower salary and related expenses and $\$ 0.4$ million of lower expense in connection with our Company-wide cash bonus program

We believe that our general and administrative expenses will be relatively flat in 2017 compared to 2016
Acquisition-Related Expenses. Acquisition-related expenses include those expenses related to business acquisitions that would not otherwise have been incurred by us. These expenses include professional and services fees, such as legal, audit, consulting, paying agent and other fees. We recorded $\$ 1.2$ million of acquisition-related expenses in 2016 in connection with he acquisition of Taqua and $\$ 0.1$ million of acquisition-related expenses in 2015 in connection with the acquisition of the SDN Business.

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

We recorded restructuring expense aggregating $\$ 2.7$ million in 2016, comprised of $\$ 1.5$ million for severance and related costs under our 2016 Restructuring Initiative, $\$ 1.2$ million related to our Taqua Restructuring Initiative and $\$ 67,000$ for a change in estimate related to severance costs under our 2015 Restructuring Initiative. The expense recorded in connection with our Taqua Restructuring Initiative was comprised of $\$ 1.0$ million for severance and related costs and $\$ 0.2$ million for the elimination of excess facilities

We recorded $\$ 2.1$ million of restructuring expense in 2015 , comprised of $\$ 3.8$ million of expense for severance and related costs in connection with our 2015 Restructuring Initiative and $\$ 0.1$ million of incremental expense in connection with our previous restructuring initiative related to vacating our Rochester, New York facility. These amounts were partially offse by reversals of $\$ 1.4$ million in connection with our Fremont, California facility and $\$ 0.3$ million in connection with our Dulles, Virginia facility, representing settlements with the respective landlords to vacate the facilities for amounts that were
lower than had previously been accrued, and $\$ 0.1$ million in connection with changes in the amounts of severance ultimately paid to certain individuals.

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

Interest Income, net. Interest income and interest expense for the years ended December 31, 2016 and 2015 were as follows (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | Increase (decrease) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | \$ |  | \% |
| Interest income | \$ | 866 | \$ | 406 | \$ | 460 | 113.3 \% |
| Interest expense |  | (97) |  | (199) |  | (102) | (51.3)\% |
| Interest income, net | \$ | 769 | S | 207 | \$ | 562 | 271.5 \% |

Interest income consisted of interest earned on our cash equivalents, marketable securities and investments. Interest expense was related to interest on capital lease obligations and expense related to the amortization of debt issuance costs in connection with our revolving credit facility.

Other Income, Net. In July 2016, we sold the NET domain name to a third party and recognized a gain, net of commission and fees, of $\$ 0.8$ million, and in December 2016, we sold a block of IP addresses which we had acquired in connection with our acquisition of PT and recognized a gain, net of commission and fees, of $\$ 0.5$ million. We recorded $\$ 0.9$ million of income in 2015 related to the sale of a domain name we had acquired in connection with our acquisition of PT.

Income Taxes. We recorded provisions for income taxes of $\$ 2.5$ million in 2016 and $\$ 2.0$ million in 2015, primarily related to foreign operations. The increase in 2016 was primarily the result of settling a foreign tax audit, which accounted for $\$ 0.6$ million of incremental income tax expense in 2016 compared to 2015. The income tax benefits from the deferred tax assets recorded in connection with our current year domestic losses have been offset by an increase in the valuation allowance.
During 2016 and 2015, we performed an analysis to determine if, based on all available evidence, we considered it more During 2016 and 2015, we performed an analysis to determine if, based on all available evidence, we considered it more likely than not that some portion or all of the recorded deferred tax assets will not be realized in a future period. As a result of related to our cumulative losses and other factors. Accordingly, we maintained a valuation against our domestic deferred tax related
asset.

## Years Ended December 31, 2015 and 2014

Revenue. Revenue for the years ended December 31, 2015 and 2014 was as follows (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | $\begin{gathered} \text { Decrease } \\ \text { from prior year } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 201 |  | 014 |  | \$ | \% |
| Product | \$ | 141,913 | \$ | 182,455 | \$ | $(40,542)$ | (22.2)\% |
| Service |  | 107,121 |  | 113,871 |  | $(6,750)$ | (5.9)\% |
| Total revenue | \$ | 249,034 | \$ | 296,326 | \$ | $(47,292)$ | (16.0)\% |

The decrease in product revenue in 2015 compared to 2014 was primarily the result of lower revenue recognized from sales to one of our historically largest customers and approximately $\$ 16$ million of lower sales of certain older product offerings to other customers who continue to migrate to an all-IP network. The sale of the MPS business in June 2014 resulted in approximately $\$ 3$ million of lower revenue in 2015 compared to the prior year. These decreases were partially
offset by an increase of approximately $\$ 3$ million of sales of our next generation products (our SBC 5100 , SBC 5200 SBC offset by an increase of approximately $\$ 3$ million of sales of our next generation products (our SBC 5100, SBC 5200, SBC 7000 and our virtualized software-based SWe suite of products).

In 2015, approximately $24 \%$ of our product revenue recognized was from indirect sales through our channel partner program, compared to approximately $27 \%$ of our product revenue recognized from indirect sales in 2014 .

In both 2015 and 2014, our product revenue from sales to enterprise customers was approximately $19 \%$ of our total product revenue. These sales were made both through our direct sales team and indirect sales channel partners.

Service revenue for the years ended December 31, 2015 and 2014 was comprised of the following (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | $\begin{gathered} \text { Decrease } \\ \text { from prior year } \\ \hline \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2014 |  | \$ |  | \% |
| Maintenance | \$ | 89,280 | \$ | 90,003 | \$ | (723) | (0.8)\% |
| Professional services |  | 17,841 |  | 23,868 |  | $(6,027)$ | (25.3)\% |
| Total service revenue | \$ | 107.121 | S | 113,871 | \$ | (6,750) | (5.9)\% |

Our maintenance revenue decreased slightly in 2015 compared to 2014, primarily due to customer mix, including merger activity among certain of our customers, and the timing of product shipments in 2015. This decrease was partially offset by the growth of our installed customer base and the timing of maintenance renewals.

The following customer contributed $10 \%$ or more of our revenue in each of the years ended December 31, 2015 and
and 2014:


International revenue was approximately $29 \%$ of total revenue in both 2015 and 2014.
Our deferred product revenue was $\$ 12.5$ million at December 31, 2015 and $\$ 9.1$ million at December 31, 2014. Our deferred service revenue was $\$ 33.6$ million at December 31, 2015 and $\$ 35.9$ million at December 31, 2014.

Cost of Revenue/Gross Margin. Cost of revenue and gross margins for the years ended December 31, 2015 and 2014 were as follows (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | $\begin{gathered} \text { Decrease } \\ \text { from prior year } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2014 |  | S | \% |
| Cost of revenue |  |  |  |  |  |  |
| Product | \$ | 50,460 | \$ | 60,284 | \$ $(9,824)$ | (16.3)\% |
| Service |  | 36,917 |  | 42,637 | $(5,720)$ | (13.4)\% |
| Total cost of revenue | \$ | 87.377 | \$ | 102.921 | $\underline{\text { \$(15.544) }}$ | (15.1)\% |
| Gross margin |  |  |  |  |  |  |
| Product |  | 64.4\% |  | 67.0\% |  |  |
| Service |  | 65.5\% |  | 62.6\% |  |  |
| Total gross margin |  | 64.9\% |  | 65.3\% |  |  |

The decrease in product gross margin in 2015 compared to 2014 was primarily due to lower product revenue against certain fixed costs, coupled with the impact of $\$ 6.4$ million of expenses related to reserves for both inventory and inventory-
related purchase commitments for certain end-of-life products, which decreased our product gross margin in the aggregate by related purchase commitments for certain end-of-life products, which decreased our product gross margin in the aggregate
approximately six percentage points. This decrease was partially offset by changes in customer and product mix, which approximately six percentage points. This decrease was partially offset by changes in customer and product mix, which increased our product gross margin by approximately three percentage points, and lower manufacturing-related costs resulting
from our 2015 Restructuring Initiative, which increased our product gross margin by approximately one-half of one percent

The increase in service gross margin in 2015 compared to 2014 was primarily attributable to lower fixed service costs and lower third-party service costs, each of which increased our service gross margin by approximately one and one-half percentage points. The reduction in our fixed service costs was primarily the result of our 2015 Restructuring Initiative.

Research and Development Expenses. Research and development expenses for the years ended December 31, 2015 and 2014 were as follows (in thousands, except percentages):

$\frac{$|  Year ended  |
| :---: |
|  December 31,  |}{$\frac{2015}{\$ 77,908} \frac{2014}{\$ 79,396}$}$\xlongequal{\$(1,488)} \frac{$|  Decrease  |
| :---: |
|  from prior year  |}{$\frac{\%}{(1.9) \%}$}

The decrease in research and development expenses in 2015 compared to 2014 was attributable to $\$ 2.9$ million of lower mployee-related costs, partially offset by $\$ 1.2$ million of higher expense for product development and $\$ 0.2$ million of net increases in other research and development expenses. The decrease in employee-related expenses in 2015 was attributable to $\$ 3.0$ million of lower salary and related expenses, $\$ 0.3$ million of lower stock-based compensation expense and $\$ 0.1$ million of lower employee travel and related expenses. These decreases were partially offset by $\$ 0.5$ million of higher expense related to our Company-wide cash bonus program. Our lower employee-related expenses were primarily due to reduced headcount in connection with our 2015 Restructuring Initiative.

Sales and Marketing Expenses. Sales and marketing expenses for the years ended December 31, 2015 and 2014 were as follows (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | $\begin{gathered} \text { Decrease } \\ \text { from prior year } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2014 |  | S | \% |
| \$ | 72,841 | \$ | 80,141 | \$ | $(7,300)$ | (9.1)\% |

The decrease in sales and marketing expenses in 2015 compared to 2014 was attributable to $\$ 6.0$ million of lower employee-related expenses, $\$ 0.9$ million of lower marketing and trade show expenses, $\$ 0.4$ million of lower expense related to evaluation equipment at customer sites, $\$ 0.4$ million of lower facilities-related expense, $\$ 0.2$ million of lower amortization expense related to acquired intangible assets and $\$ 0.3$ million of net decreases in other sales and marketing expenses. These decreases were partially offset by $\$ 0.9$ million of higher consulting expense. The decrease in employee-related expenses was and and related expenses, partially offse by $\$ 0.7$ mility The lower employee-related expenses were primarily due to reduced headcount and related expenses in connection with ou 2015 Restructuring Initiative.

General and Administrative Expenses. General and administrative expenses for the years ended December 31, 2015 and 2014 were as follows (in thousands, except percentages):

| Year ended <br> December 31, |
| :---: |
| $\frac{\mathbf{2 0 1 5}}{\$ 39,846} \frac{\mathbf{2 0 1 4}}{\$ 43,937}$ |

The decrease in general and administrative expenses in 2015 compared to 2014 was attributable to $\$ 2.0$ million of lowe employee-related expenses, $\$ 1.1$ million of lower expense related to foreign currency translation, the absence in 2015 of $\$ 0.4$ million of divestiture costs related to the sale of the MPS business in 2014 and $\$ 2.3$ million of net reductions in other general and administrative expenses. These reductions were partially offset by $\$ 1.7$ million of higher professional and consulting fees. The decrease in employee-related expenses resulted from $\$ 1.9$ million of lower stock-based compensation expense, $\$ 1.0$ million of lower salary and related expenses and $\$ 0.3$ million of lower employee travel and related expenses. These decreases were partially offset by $\$ 1.2$ million of higher expense related to our Company-wide cash bonus program. Our lower employee-related expenses were primarily due to reduced headcount and related expenses in connection with our 2015 Restructuring Initiative.

Acquisition-Related Expenses. We recorded $\$ 0.1$ million of acquisition-related expenses in 2015 for professional fees, primarily legal fees, in connection with the acquisition of the SDN Business. We recorded $\$ 1.6$ million of acquisition-related expenses in 2014, comprised of $\$ 1.3$ million related to PT and $\$ 0.3$ million related to the SDN Business.

Restructuring Expense. Our restructuring expense of $\$ 2.1$ million in 2015 was comprised of $\$ 3.8$ million of expense for severance and related costs in connection with our 2015 Restructuring Initiative and $\$ 0.1$ million of incremental expense in connection with our previous restructuring initiative related to vacating our Rochester, New York facility. These amounts were partially offset by reversals of $\$ 1.4$ million in connection with our Fremont, California facility and $\$ 0.3$ million in connection with our Dulles, Virginia facility, representing settlements with the respective landlords to vacate the facilities for mounts that were lower than had previously been accrued, and $\$ 0.1$ million in connection with changes in the amounts of severance ultimately paid to certain individuals. We recorded $\$ 5.6$ million of restructuring expense in 2014, comprised of $\$ 3.6$ million for severance and related costs, $\$ 1.8$ million for facilities and $\$ 0.2$ million for the write-off of fixed assets related to our restructured facilities. Of this amount, $\$ 2.3$ million was recorded in connection with the PT acquisition, comprised of $\$ 1.7$ million for severance and related costs, $\$ 0.5$ million related to PT's former corporate headquarters in New York and $\$ 0$. million for the write-off of assets in connection with the PT facility.

Interest Income, net. Interest income and interest expense for the years ended December 31, 2015 and 2014 were a ollows (in thousands, except percentages):

|  | Year ended December 31, |  |  |  | Increase (decrease) from prior year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 14 |  | \$ |  | \% |
| Interest income | \$ | 406 | \$ | 326 | \$ | 80 | 24.5 \% |
| Interest expense |  | (199) |  | (251) |  | (52) | (20.7)\% |
| Interest income, net | \$ | 207 | \$ | 75 | S | 132 | 176.0 \% |

Interest expense was related to interest on capital lease obligations and included expense related to the amortization of debt issuance costs in connection with our revolving credit facility. Interest expense in 2014 also included interest on the debt assumed in connection with the acquisition of Network Equipment Technologies, Inc. ("NET").

Other Income, Net. We recorded $\$ 0.9$ million of income in October 2015 related to the sale of a domain name we had cquired in connection with our acquisition of PT. We recorded $\$ 2.25$ million of income in 2014 related to the settlement of a litigation matter in March 2014 in which we recovered a portion of our losses related to the impairment of certain prepaid oyalties that we had written off in 2012

Income Taxes. We recorded provisions for income taxes of $\$ 2.0$ million in 2015 and $\$ 2.2$ million in 2014, primarily related to foreign operations. The income tax benefits from the deferred tax assets recorded in connection with our domestic losses were offset by an increase in the valuation allowance. During 2015 and 2014, we performed an analysis to determine if, based on all available evidence, we considered it more likely than not that some portion or all of the recorded deferred tax ssets will not be realized in a future period. As a resut of our evaluations, we concuded that here was insufficient positive vidence to overo. we maintained a valuation against our domestic deferred tax asset.

## Off-Balance Sheet Arrangements

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

## Liquidity and Capital Resources

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

|  | Year ended December 31 <br> December 31, |  | Change |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 |  |
| Net loss | \$ (13,932) | \$ (31,895) | \$ 17,963 |
| Adjustments to reconcile net loss to cash flows used in operating activities | 35,061 | 40,735 | $(5,674)$ |
| Changes in operating assets and liabilities | $(1,937)$ | 11,029 | $(12,966)$ |
| Net cash provided by operating activities | \$ 19,192 | \$ 19,869 | \$ (677) |
| Net cash used in investing activities | S (27,347) | \$ (4,585) | S(22.762) |
| Net cash used in financing activities | \$ (9,870) | \$ (6,202) | \$ (3,668) |

Our cash, cash equivalents and short- and long-term investments totaled $\$ 126.1$ million at December 31, 2016 and $\$ 142.2$ million at December 31, 2015. We had cash and marketable securities held by our foreign subsidiaries aggregating approximately $\$ 5$ million at December 31, 2016 and $\$ 4$ million at December 31, 2015. We do not intend to repatriate these funds, and as such, they are not available to fund our domestic operations. If we were to repatriate the funds, they would likely be treated as income for U.S. tax purposes, fully offset by our net operating losses. We do not believe this will have a material impact on our liquidity

We entered into a credit agreement by and among the Company, as Borrower, Bank of America, N.A. ("Bank of America"), as Administrative Agent, Swing Line Lender and L/C Issuer, and the other lenders from time to time party thereto on June 27, 2014 (the "Credit Agreement"), which agreement was amended by a First Amendment to Credit Agreement on June 26, 2015 (the "First Amendment") and further amended by a Second Amendment to Credit Agreement on June 13, 2016 (the "Second Amendment" and collectively with the Credit Agreement and the First Amendment, the "Amended Credit

Agreement"). Certain terms of the Credit Agreement have been amended by the Second Amendment, including, among othe things: (i) an increase of the commitments from $\$ 15$ million to $\$ 20$ million; (ii) an extension of the maturity date from June 30 2016 to June 30, 2017; (iii) a reduction to the aggregate amount of cash and cash equivalents that the Loan Parties (as defin below) are required to hold at any time from $\$ 85$ million to $\$ 50$ million; and (iv) a reduction of the commitment fee on the select the interest rates under the credit facility from among the following options: (i) the Eurodollar Rate (which is defined as the rate per annum equal to the London Interbank Offered Rate plus $1.5 \%$ per annum) for a Eurodollar Rate Loan; and (ii) the highest of (a) the Federal Funds Rate plus $1 / 2$ of $1 \%$, (b) the rate of interest in effect on the borrowing date as publicly announced from time to time by Bank of America as its prime rate, and (c) the monthly Eurodollar Rate plus 1\%. Our obligations under the Amended Credit Agreement are guaranteed by Sonus International, Inc., Sonus Federal, Inc., Taqua and NET (collectively with the Company, the "Loan Parties") pursuant to a Master Continuing Guaranty and are secured by the assets of the Loan Parties pursuant to a Security and Pledge Agreement. We did not have any amounts outstanding under the Amended Credit Agreement at December 31, 2016.

The Amended Credit Agreement contains affirmative, negative and financial covenants customary for financings of this type. The negative covenants include limitations on liens, indebtedness, fundamental changes, dispositions, restricted payments, investments, transactions with affiliates, certain restrictive agreements and compliance with sanctions laws and regulations. The total revenues of the Loan Parties cannot be less than an aggregate of $\$ 50$ million as of the last day of the Loan Parties' fiscal quarter, computed on a fiscal quarterly basis. The credit facility will become due on June 30, 2017, subject to acceleration upon certain specified events of default, including, without limitation, payment defaults, defaults in the performance of affirmative and negative covenants, the inaccuracy of representations or warranties, bankruptcy and insolvencyrelated defaults, defaults relating to judgments, an ERISA Event (as defined in the Credit Agreement), the failure to pay specified indebtedness and a change of control default. We did not have any amounts outstanding under the Credit Agreement at December 31, 2016

On July 29, 2013, we announced that our Board of Directors had authorized a stock buyback program to repurchase up to $\$ 100$ million of our common stock from time to time on the open market or in privately negotiated transactions. The stock buyback program is being funded using our working capital. During the year ended December 31, 2016, we repurchased and retired 1.3 million shares under our stock buyback program for $\$ 9.5$ million in the aggregate, including transaction fees During the year ended December 31, 2015, we repurchased and retired 0.6 million shares for $\$ 7.9$ million, including transaction fees.

On March 20, 2014, we announced the commencement of an underwritten public offering of 7.5 million shares of our common stock on behalf of Galahad Securities Limited and its affiliated entities (collectively, the "Legatum Group"). The underwriter of the offering was granted a 30 -day option to purchase up to 1.125 million additional shares from the Legatum Group. The Legatum Group received all the proceeds from the underwritten offering; no shares in the underwritten offering were sold by us or any of our officers or directors. In addition, we purchased 4.3 million shares from the underwriter for $\$ 75.3$ million in the aggregate, including $\$ 0.3$ million of transaction fees. We funded the share repurchase with cash on hand. The repurchased shares were retired upon completion of the transaction.

Our operating activities provided $\$ 19.2$ million of cash in 2016 and $\$ 19.9$ million of cash in 2015.
Cash provided by operating activities in 2016 was primarily the result of decreases in inventory and other operating assets and higher deferred revenue, partially offset by lower accrued expenses and accounts payable, higher accounts receivable and our net loss. The decrease in accrued expenses primarily relates to lower accruals in connection with our Company-wide cash bonus program, for which we changed the timing of bonus payments in 2016 such that a portion of the bonus was paid in August 2016 based on our results against certain internal goals for the first half of the year. The remaining portion of the bonus amounts, if earned, is expected to be paid in March 2017 based on our results for the second half of 2016. Accordingly, the reduction in the bonus accrual represents the payments made to employees in August 2016. The increase in accounts receivable primarily relates to higher revenue in 2016 compared to 2015, partially offset by the results of our continued focus on our collections efforts. Deferred revenue balances will fluctuate as a result of timing of invoicing and revenue recognition. Our net loss, adjusted for non-cash items such as depreciation, amortization, stock-based compensation, losses on the disposal of equipment, gains on the sale of a domain name and a block of IPv4 addresses, and deferred income taxes, provided $\$ 21.1$ million of cash.

Cash provided by operating activities in 2015 was primarily the result of decreases in accounts receivable and other operating assets and higher deferred revenue, partially offset by lower accrued expenses and accounts payable, higher inventories and our net loss. The decrease in accounts receivable primarily reflects our focused collections efforts, coupled with the impact of lower revenue in 2015 compared to 2014. The decrease in other operating assets was primarily the result of
lower prepaid expenses. The decrease in accrued expenses was primarily attributable to our reduced restructuring accrual reflecting both payments and reversals of previously recorded amounts, partially offset by higher amounts accrued for employee compensation and related costs, including accrued bonus, commissions and employee stock purchase plan amounts disposal of equipment, the gain on the sale of a domain name and deferred income taxes, provided $\$ 8.8$ million of cash.

Our investing activities used $\$ 27.3$ million of cash in 2016 and $\$ 4.6$ million of cash in 2015. In 2016, we used $\$ 20.7$ million of cash, net of cash acquired, for business acquisitions, $\$ 4.7$ million of cash used for the purchase of property and
equipment and $\$ 3.3$ million of net investments in marketable securities. These amounts were partially offset by $\$ 1.3$ million of cash proceeds from the sale of a domain name and a block of IP addresses that we had previously acquired. The amount used for business acquisitions was comprised of $\$ 19.9$ million, net of cash acquired, for the acquisition of Taqua and $\$ 0.8$ million paid as the final consideration installment for the SDN Business. The 2015 amount was comprised of $\$ 10.9$ million of cash paid, net of cash acquired, for the acquisition of the SDN Business and $\$ 7.8$ million of cash used for the purchase of property and equipment. These amounts were partially offset by $\$ 13.2$ million of net maturities of marketable securities and $\$ 0.9$ million of cash received from the sale of a domain name acquired in connection with the PT acquisition.

Our financing activities used $\$ 9.9$ million of cash in 2016 and $\$ 6.2$ million of cash in 2015. The 2016 amount wa comprised of $\$ 9.5$ million used for the repurchase of common stock under our stock buyback program, $\$ 1.8$ million used to pay withholding obligations related to the net share settlement of restricted and performance-based stock grants upon vesting and approximately $\$ 43,000$ for payments on our capital leases for office equipment. These amounts were partially offset by $\$ 1.4$ million of proceeds from the sale of our common stock in connection with our Amended and Restated 2000 Employee Stock Purchase Plan, as amended ("ESPP"), and $\$ 0.2$ million of proceeds from the exercise of stock options. The 2015 amount was comprised of $\$ 7.9$ million used for the repurchase of common stock under our stock buyback program, $\$ 2.3$ million used to pay withholding obligations related to the net share settlement of restricted and performance-based stock grants upon vesting and $\$ 0.1$ million for payments on our capital leases for office equipment. These amounts were partially offset by $\$ 2.4$ million of proceeds from the sale of our common stock in connection with our ESPP and $\$ 1.8$ million of proceeds from the exercise of stock options.

## Contractual Obligations

Our contractual obligations (both principal and interest) at December 31, 2016 consisted of the following (in thousands)

|  | Payments due by period |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | $\begin{gathered} \text { Less than } \\ 1 \text { year } \\ \hline \end{gathered}$ |  | 1-3 years |  | 3-5 years |  | More than 5 years |  |
| Capital lease obligations | \$ | 134 | \$ | 46 | \$ | 83 | \$ | 5 | \$ | - |
| Operating lease obligations * |  | 11,193 |  | 4,600 |  | 5,687 |  | 906 |  | - |
| Purchase obligations |  | 780 |  | 422 |  | 358 |  | - |  | - |
| Restructuring severance obligations |  | 1,049 |  | 1,049 |  | - |  | - |  | - |
| Uncertain tax positions ** |  | 8,969 |  | 8,969 |  | - |  | - |  | - |
|  | \$ | 22,125 | \$ | 15,086 | \$ | 6,128 | \$ | 911 | \$ | - |

* Includes restructuring payments aggregating $\$ 218,000$, comprised of $\$ 156,000$ due in less than one year and $\$ 62,000$ due in one to three years.
** This liability is not subject to fixed payment terms and the amount and timing of payments, if any, that we will make related to this liability are not known. See Note 17 to our consolidated financial statements appearing in this Annual Report on Form 10-K for additional information.
Based on our current expectations, we believe our current cash, cash equivalents, marketable debt securities and longterm investments will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at leas twelve months, including any future stock repurchases under the aforementioned stock buyback program. It is difficult to

 demand litigation Crs, in in min activities. See Note 21 to our consolidated financial statements for a description of our other contingencies.


## Recent Accounting Pronouncements

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2017-04, which simplifies the accounting for goodwill impairments by eliminating step two from the goodwill impairment test. Instead, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. ASU 2017-04 also clarifies the requirements for excluding and allocating foreign currency translation adjustments to reporting units related to an entity's testing of reporting units for goodwill impairment, clarifies that an entity should consider income tax effects form any to
deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable ASU 2017-04 is effective for us beginning January 1,2020 for both interim and annual reporting periods, with early adoption permitted. We are currently assessing the potential impact of the adoption of ASC 2017-04 on our consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory, ("ASU 2016-16"), which removes the prohibition in Accounting Standards Codification ("ASC") 740, Income Taxes, against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is intended to reduce the complexity of accounting principles generally accepted in the United States ("GAAP") and diversity in practice related to the tax consequences of certain types of intra-entity asset transfers, particularly those involving IP. ASU 2016-16 is effective for us beginning January 1, 2019 for both interim and annual reporting periods. We do not believe that the adoption of this standard will have a material impact on our consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15"), which amends the guidance in ASC 230 on the classification of certain cash receipts and payments in the statement of cash flows. The primary purpose of ASU 2016-15 is to reduce the diversity in practice that has resulted from the lack of consistent principles on this topic. ASU 2016-15 adds or clarifies guidance on eight cash flow issues, including debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or
certain other debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies, distributions received from equity method investees, beneficial interests in securitization transactions and separately identifiable cash flows and application of the predominance principle. ASU 2016-15 is effective for us beginning January 1, 2018 for both interim and annual reporting periods, with early adoption permitted. Entities must apply the guidance retrospectively to all periods presented but may apply it prospectively from the earliest date practicable if retrospective application would be impracticable. We do not expect that the adoption of ASU 2016-15 will have a material impact on our consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"), which adds an impairment model that is based on expected losses rather than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for us beginning January 1 , 2020 for both interim and annual reporting periods, with early adoption permitted. We do not expect that the adoption of ASU 2016-13 will have a material impact on our consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09"), which simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures and statutory tax withholding requirements, as well as classification in the statement of cash flows. ASU 2016-09 was effective for us beginning January 1, 2017 for both interim and annual reporting periods. Under ASU 2016-09, we will now recognize unrealized excess tax benefits. Due to the full valuation allowance on our federal and state income taxes, we do not expect that the adoption if ASU 2016-09 will impact our accounting for income taxes. Without the valuation allowance, we estimate that we would recognize a deferred tax asset approximating $\$ 6$ million upon adoption of ASU 2016-09. We have elected to continue to apply forfeiture rates to our expense attribution related to stock options, restricted stock awards and restricted stock units, as we believe that such continued application results in more accurate expense attribution over the life of these equity grants.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) Section A - Leases: Amendments to the FASB Accounting Standards Codification ("ASU 2016-02"), its new standard on accounting for leases. ASU 2016-02 introduces a lessee model that brings most leases onto the balance sheet. The new standard also aligns many of the underlying principles of the new lessor model with those in ASC 606, the FASB's new revenue recognition standard (i.e., those related to evaluating when profit can be recognized). Furthermore, ASU 2016-02 addresses other concerns related to the current leases model. For example, ASU 2016-02 eliminates the current GAAP requirement for an entity to use bright-line tests in determining lease
classification. ASU 2016-02 is effective for us for both interim and annual periods beginning January 1, 2019. We are currently assessing the potential impact of the adoption of ASU 2016-02 on our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes ("ASU 2015-17"), which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent in the consolidated balance sheet. which requires entities to present deferred tax assets and deferred tax assets and deferred tax liabilities is still required under ASU 2015-17. ASU 2015-17 is effective for us for our annual report for the year ending December 31, 2018 and for interim period reporting beginning January 1, 2019, with early adoption permitted. We elected to early-adopt ASU 2015-17 prospectively and accordingly, reclassified our net current deferred tax asset totaling $\$ 1.0$ million to our noncurrent net deferred tax asset as of December 31, 2015. No prior periods were retrospectively adjusted. The early adoption of ASU 2015-17 did not have a material impact on our consolidated financial statements.

In September 2015, the FASB issued ASU 2015-16, Simplifying the Accounting for Measurement-Period Adjustments ("ASU 2015-16"), which eliminates the requirement to restate prior periods to reflect adjustments made to provisional amounts recognized in a business combination. Under ASU 2015-16, an acquirer must recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined, rather than retrospectively, as had previously been required. ASU 2015-16 also requires acquirers to present separately on the face of the income statement, or disclose in the notes, the portion of the amount recorded in current period earnings by line item
that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date. ASU 2015-16 was effective for us as of January 1, 2016. The adoption of ASU 2015-16 did not have a material impact on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory ("ASU 2015-11"), which simplifies the measurement of inventory by requiring entities to measure most inventory at the lower of cost and net realizable value, replacing the previous requirement to measure most inventory at the lower of cost or market. ASU 2015-11 does not apply to inventories that are measured by using either the last-in, first-out method or the retail inventory method. ASU 2015-11 is effective for us for both interim and annual reporting periods beginning January 1, 2017. The adoption of ASU 2015-11 is not expected to have a material impact on our consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern ("ASU 2014-15"), which provides guidelines for determining when and how to disclose going concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity's ability to continue as a going concern. ASU 2014-15 was effective for us for annual periods beginning January 1, 2017, and interim periods thereafter, with early adoption permitted. The adoption of ASU 2014-15 is not expected to have a material impact on our consolidated financial statements.

In June 2014, the FASB issued ASU 2014-12, Compensation - Stock Compensation (Topic 718): Accounting for ShareBased Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period (a consensus of the FASB Emerging Issues Task Force) ("ASU 2014-12"). ASU 2014-12 clarifies that entities should treat performance targets that can be met after the requisite service period of a share-based payment award as performance conditions that affect vesting. Therefore, an entity would not record compensation expense (measured as of the grant date without taking into account the effect of the performance target) related to an award for which transfer to the employee is contingent on the entity's satisfaction of a performance target until it becomes probable that the performance target will be met. ASU 2014-12 does not contain any new disclosure requirements. ASU 2014-12 was effective for us as of January 1, 2016. The adoption of ASU 2014-12 did not have a material impact on our consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"), its final standard on revenue from contracts with customers. ASU 2014-09 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In applying the revenue model to contracts within its scope, an entity identifies the contract(s) with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to the performance obligations in the contract and recognizes revenue when (or as) the entity satisfies a performance obligation. ASU 2014-09 applies to all contracts with customers that are within the scope of other topics in the FASB ASC. Certain of ASU 2014-09's provisions also apply to transfers of nonfinancial assets, including in-substance nonfinancial assets that are not an output of an entity's ordinary activities (i.e., property, plant and equipment; real
estate; or intangible assets). Existing accounting guidance applicable to these transfers has been amended or superseded. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date ("ASU 2015-14"), which defers the original effective date of interim and annual reporting periods by one year. As a result, the Company will not be required to apply the new revenue standard until annual reporting periods beginning after Revenue Gross Versus Net) ("ASU 2016-08") to clarify certain aspects of the principal-versus-agent guidance in its new revenue recognition standard in response to feedback received from the FASB-International Accounting Standards Board join revenue recognition transition resource group. ASU 2016-08 clarifies the implementation guidance on principal-versus-agent considerations regarding how an entity determines whether it is a principal or an agent for each specified good or service promised to the customer and how an entity determines the nature of each specified good or service. ASU 2016-08 also provides clarification regarding the application of the principal-versus-agent guidance. In April 2016, the FASB issued ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing ("ASU 2016-10"), which amends certain aspects of the guidance in ASU 2014-09 on identifying performance obligations, including immaterial promised goods or services, shipping and handling activities and identifying when promises represent performance obligations; and licensing implementation guidance, including determining the nature of an entity's promise in granting a license, sales-based and usage-based royalties, restrictions of time, geographical location and use, and renewals of licenses that provide a right to use IP. In May 2016, the FASB issued ASU 2016-11, Revenue Recognition (Topic 605) and Derivatives and Hedging (Topic 815) ("ASU 2016-11"), which rescinds certain SEC guidance from the Codification in response to announcements made by the SEC staff at the Emerging Issues Task Force's March 3, 2016 meeting, and which supersedes certain SEC observer comments on the topics of revenue and expense recognition for freight services in process, accounting for shipping and handling fees and costs, accounting for consideration given by a vendor to a customer and accounting for gasbalancing arrangements upon the adoption of ASU 2014-09. In May 2016, the FASB issued ASU 2016-12, Revenue from Contracts with Customers (Topic 606) ("ASU 2016-12"), which amends certain aspects of ASU 2014-09, including regarding and modifications and completed contracts at transition. ASU 2016-08, ASU 2016-10, ASU 2016-11 and ASU 2016-12 are effective at the same time as ASU 2014-09 (as amended by ASU 2015-14). We continue to assess the potential impact of the adoption of these ASUs on our consolidated financial statements, and currently believe that such adoption will, in general, accelerate the recognition of revenue (i.e., more revenue will be recognized upon delivery than is currently recognized ratably or upon payment) compared to the current standards in effect, particularly, sales of software-only products and sales to option.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to a variety of market risks, including changes in interest rates affecting the return on our investments and foreign currency fluctuations.

At December 31, 2016, our cash, cash equivalents, marketable securities and long-term investments totaled \$126.1 million. We maintain an investment portfolio of various holdings, types and maturities which may include money market funds, commercial paper, corporate notes, certificates of deposit and government debt securities. A sharp rise in market interest rates could have a material adverse impact on the fair value of our investment portfolio. Conversely, declines in market interest rates could have a material impact on the interest eatnings of our investment portfolio. We do not currently hedge these interest rate exposures. We place our investments with high quality issuers and have policies limiting, among other things, the amount of credit exposure to any one issuer. We seek to limit default risk by purchasing only investment grade securities. We manag potential losses in fair value by investing in relatively short-term investments, thereby allowing us to hold our investments maturity. A hypothetical movement of plus or minus 50 basis points in market interest rates could affect the value of our investment portfolio by approximately $\$ 0.4$ million for the year ended December 31, 2016. However, we have the ability to hold our investments until maturity, and therefore do not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

Based on a hypothetical $10 \%$ adverse movement in all foreign currency exchange rates, our revenue for the year ended December 31, 2016 would have been adversely affected by approximately $\$ 1.0$ million and our net loss for the year ended December 31, 2016 would have been adversely affected by approximately $\$ 0.9$ million, although the actual effects may differ materially from this hypothetical analysis.

## Item 8. Financial Statements and Supplementary Dat

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2016 and 2015
Consolidated Statements of Operations for the years ended December 31, 2016, 2015 and 2014
Consolidated Statements of Comprehensive Loss for the years ended December 31, 2016, 2015 and 2014

Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014 63 Notes to Consolidated Financial Statements

## SONUS NETWORKS, INC. Consolidated Balance Sheets (in thousands, except share and per share data)

## To the Board of Directors and Stockholders of

Sonus Networks, Inc.
Westford, Massachusetts
We have audited the accompanying consolidated balance sheets of Sonus Networks, Inc. and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.
We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An aud. also includs assssing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Sonus Networks, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 27, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.
/s/ Deloitte \& Touche LLP

Boston, Massachusett
February 27, 2017

|  | $\underset{2016}{\text { December }^{21},}$ | ${ }_{2015}^{\text {December 31, }}$ |
| :---: | :---: | :---: |
| Assets |  |  |
| Current assets: |  |  |
| Cash and cash equivalents | \$ 31,923 | 50,111 |
| Marketable securities | 61,836 | 58,533 |
| Accounts receivable, net | 53,862 | 51,533 |
| Inventory | 18,283 | 23,111 |
| Other current assets | 12,010 | 11,853 |
| Total current assets | 177,914 | 195,141 |
| Property and equipment, net | 11,741 | 13,620 |
| Intangible assets, net | 30,197 | 26,087 |
| Goodwill | 49,393 | 40,310 |
| Investments | 32,371 | 33,605 |
| Deferred income taxes | 1,542 | 1,879 |
| Other assets | 4,901 | 2,249 |
|  | \$ 308,059 | \$ 312,891 |
| Liabilities and Stockholders' Equity |  |  |
| Current liabilities: |  |  |
| Accounts payable | \$ 6,525 | \$ 5,949 |
| Accrued expenses | 25,886 | 31,963 |
| Current portion of deferred revenue | 43,504 | 38,716 |
| Current portion of long-term liabilities | 1,154 | 821 |
| Total current liabilities | 77,069 | 77,449 |
| Deferred revenue | 7,188 | 7,374 |
| Deferred income taxes | 3,047 | 2,282 |
| Other long-term liabilities | 1,633 | 2,760 |
| Total liabilities | 88,937 | 89,865 |
| Commitments and contingencies (Note 21) |  |  |
| Stockholders' equity: |  |  |
| Preferred stock, \$0.01 par value; $5,000,000$ shares authorized, none issued and outstanding | - | - |
| Common stock, $\$ 0.001$ par value; $120,000,000$ shares authorized; $49,041,881$ shares issued and outstanding at December 31, 2016; 49,473,789 shares issued and outstanding at December 31, 2015 | 49 | 49 |
| Additional paid-in capital | 1,250,744 | 1,240,803 |
| Accumulated deficit | $(1,037,174)$ | $(1,023,242)$ |
| Accumulated other comprehensive income | 5,503 | 5,416 |
| Total stockholders' equity | 219,122 | 223,026 |
|  | \$ 308,059 | \$ 312,891 |

SONUS NETWORKS, INC.
Consolidated Statements of Operations (in thousands, except per share data)

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Revenue: |  |  |  |  |  |  |
| Product | \$ | 146,381 | \$ | 141,913 | \$ | 182,455 |
| Service |  | 106,210 |  | 107,121 |  | 113,871 |
| Total revenue |  | 252,591 |  | 249,034 |  | 296,326 |
| Cost of revenue: |  |  |  |  |  |  |
| Product |  | 47,367 |  | 50,460 |  | 60,284 |
| Service |  | 37,613 |  | 36,917 |  | 42,637 |
| Total cost of revenue |  | 84,980 |  | 87,377 |  | 102,921 |
| Gross profit |  | 167,611 |  | 161,657 |  | 193,405 |
| Operating expenses: |  |  |  |  |  |  |
| Research and development |  | 72,841 |  | 77,908 |  | 79,396 |
| Sales and marketing |  | 68,539 |  | 72,841 |  | 80,141 |
| General and administrative |  | 35,948 |  | 39,846 |  | 43,937 |
| Acquisition-related |  | 1,152 |  | 131 |  | 1,558 |
| Restructuring |  | 2,740 |  | 2,148 |  | 5,625 |
| Total operating expenses |  | 181,220 |  | 192,874 |  | 210,657 |
| Loss from operations |  | $(13,609)$ |  | $(31,217)$ |  | $(17,252)$ |
| Interest income, net |  | 769 |  | 207 |  | 75 |
| Other income, net |  | 1,424 |  | 1,122 |  | 2,536 |
| Loss before income taxes |  | $(11,416)$ |  | $(29,888)$ |  | (14,641) |
| Income tax provision |  | $(2,516)$ |  | $(2,007)$ |  | $(2,214)$ |
| Net loss | \$ | (13.932) | \$ | (31.895) | \$ | (16.855) |
| Loss per share: |  |  |  |  |  |  |
| Basic | \$ | (0.28) | \$ | (0.64) | \$ | (0.34) |
| Diluted | \$ | (0.28) | \$ | (0.64) | \$ | (0.34) |
| Shares used to compute loss per share: |  |  |  |  |  |  |
| Basic |  | 49,385 |  | 49,560 |  | 50,245 |
| Diluted |  | 49,385 |  | 49,560 |  | 50,245 |

See notes to the consolidated financial statements.

## SONUS NETWORKS, INC.

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Net loss | \$ | $(13,932)$ | \$ | $(31,895)$ | \$ | $(16,855)$ |
| Other comprehensive income (loss), net of tax: |  |  |  |  |  |  |
| Foreign currency translation adjustments |  | 54 |  | 9 |  | (426) |
| Unrealized loss on available-for-sale marketable securities |  | 33 |  | (15) |  | (142) |
| Less: Reclassification adjustment for (gains) losses included in net loss |  | 18 |  | - |  | (46) |
| Other comprehensive income (loss), net of tax |  | 105 |  | (6) |  | (614) |
| Comprehensive loss, net of tax | \$ | (13.827) | \$ | (31.901) | S | (17.469) |

[^3]SONUS NETWORKS, INC.
Consolidated Statements of Stockholders' Equity
(in thousands, except share data)

## SONUS NETWORKS, INC. <br> Consolidated Statements of Cash Flows <br> (in thousands)

|  | Common Stock |  |  | $\begin{gathered} \text { Additional } \\ \text { Paid-in } \\ \text { Capital } \\ \hline \end{gathered}$ |  | AccumulatedDeficit |  | $\begin{gathered} \text { Accumulated } \\ \text { Other } \\ \text { Comprehensive } \\ \text { Income (Loss) } \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Total } \\ \begin{array}{c} \text { Stockholders' } \\ \text { Equity } \end{array} \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shares | Amount |  |  |  |  |  |  |  |  |  |
| Balances, January 1,2014 | 53,245,218 | \$ | 53 | \$ | 1,280,655 | \$ | $(974,492)$ | \$ | 6,036 | s | 312,252 |
| Issuance of common stock in connection with employee stock purchase plan | 180,502 |  |  |  | 2,882 |  |  |  |  |  | 2,882 |
| Exercise of stock options | 806,385 |  | 1 |  | 10,116 |  |  |  |  |  | 10,117 |
| Vesting of restricted stock | 428,674 |  |  |  |  |  |  |  |  |  | - |
| Vesting of performance-based stock awards | 136,526 |  |  |  |  |  |  |  |  |  | - |
| Shares of restricted stock returned to the Company under net share settlements to satisfy tax withholding obligations | $(142,399)$ |  |  |  | $(2,442)$ |  |  |  |  |  | $(2,442)$ |
| Stock-based compensation expense |  |  |  |  | 23,914 |  |  |  |  |  | 23,914 |
| Repurchase of common stock | $(5,297,873)$ |  | (5) |  | $(93,219)$ |  |  |  |  |  | (93,224) |
| Assumption of equity awards in connection with acquisition of Performance Technologies, Incorporated |  |  |  |  | 1,671 |  |  |  |  |  | 1,671 |
| Other comprehensive loss |  |  |  |  |  |  |  |  | (614) |  | (614) |
| Reclassification of liability to equity for cash bonuses converted to equity awards |  |  |  |  | 2,649 |  |  |  |  |  | 2,649 |
| Net loss |  |  |  |  |  |  | $(16,855)$ |  |  |  | (16,855) |
| Balances, December 31, 2014 | 49,357,033 |  | 49 |  | 1,226,226 |  | $(991,347)$ |  | 5,422 |  | 240,350 |
| Issuance of common stock in connection with employee stock purchase plan | 233,659 |  |  |  | 2,378 |  |  |  |  |  | 2,378 |
| Exercise of stock options | 155,478 |  |  |  | 1,757 |  |  |  |  |  | 1,757 |
| Vesting of restricted stock awards | 491,739 |  | 1 |  |  |  |  |  |  |  | 1 |
| Vesting of performance-based stock awards and units | 45,901 |  |  |  |  |  |  |  |  |  | - |
| Shares of restricted stock returned to the Company under net share settlements to satisfy tax withholding obligations | (167,634) |  |  |  | $(2,344)$ |  |  |  |  |  | $(2,344)$ |
| Repurchase of common stock | $(642,387)$ |  | (1) |  | $(7,916)$ |  |  |  |  |  | $(7,917)$ |
| Stock-based compensation expense |  |  |  |  | 21,699 |  |  |  |  |  | 21,699 |
| Reclassification of equity to liability for equity awards converted to cash bonuses |  |  |  |  | (997) |  |  |  |  |  | (997) |
| Other comprehensive loss |  |  |  |  |  |  |  |  | (6) |  | (6) |
| Net loss |  |  |  |  |  |  | (31,895) |  |  |  | (31,895) |
| Balances, December 31, 2015 | 49,473,789 |  | 49 |  | 1,240,803 |  | $(1,023,242)$ |  | 5,416 |  | 223,026 |
| Issuance of common stock in connection with employee stock purchase plan | 225,031 |  |  |  | 1,360 |  |  |  |  |  | 1,360 |
| Exercise of stock options | 23,070 |  |  |  | 153 |  |  |  |  |  | 153 |
| Vesting of restricted stock awards and units | 792,773 |  | 1 |  | (1) |  |  |  |  |  | - |
| Vesting of performance-based stock awards and units | 18,438 |  |  |  |  |  |  |  |  |  | - |
| Shares of restricted stock returned to the Company under net share settlements to satisfy tax withholding obligations | $(231,620)$ |  |  |  | $(1,810)$ |  |  |  |  |  | $(1,810)$ |
| Repurchase of common stock | $(1,259,600)$ |  | (1) |  | $(9,529)$ |  |  |  |  |  | $(9,530)$ |
| Stock-based compensation expense |  |  |  |  | 19,768 |  |  |  |  |  | 19,768 |
| Other comprehensive income |  |  |  |  |  |  |  |  | 87 |  | 87 |
| Net loss |  |  |  |  |  |  | (13,932) |  |  |  | (13,932) |
| Balances, December 31, 2016 | 49,041,881 | s | 49 | \$ | 1,250,744 | \$ | $(1,037,174)$ | s | 5,503 | \$ | 219,122 |

See notes to the consolidated financial statements.

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Cash flows from operating activities: |  |  |  |  |  |  |
| Net loss | \$ | (13,932) | \$ | $(31,895)$ | \$ | $(16,855)$ |
| Adjustments to reconcile net loss to cash flows provided by operating activities: |  |  |  |  |  |  |
| Depreciation and amortization of property and equipment |  | 7,970 |  | 11,961 |  | 11,488 |
| Amortization of intangible assets |  | 7,500 |  | 7,107 |  | 4,597 |
| Stock-based compensation |  | 19,768 |  | 21,699 |  | 23,914 |
| Loss on disposal of property and equipment |  | 33 |  | 112 |  | 292 |
| Gain on sale of domain names and IPv4 address blocks |  | $(1,298)$ |  | (896) |  | - |
| Deferred income taxes |  | 1,088 |  | 752 |  | 88 |
| Changes in operating assets and liabilities: |  |  |  |  |  |  |
| Accounts receivable |  | (851) |  | 11,369 |  | 4,771 |
| Inventory |  | 4,858 |  | $(1,001)$ |  | 5,414 |
| Other operating assets |  | 506 |  | 4,915 |  | 5,077 |
| Accounts payable |  | (821) |  | $(1,257)$ |  | $(3,759)$ |
| Accrued expenses and other long-term liabilities |  | $(7,778)$ |  | $(4,134)$ |  | 1,657 |
| Deferred revenue |  | 2,149 |  | 1,137 |  | $(7,439)$ |
| Net cash provided by operating activities |  | 19,192 |  | 19,869 |  | 30,042 |
| Cash flows from investing activities: |  |  |  |  |  |  |
| Purchases of property and equipment |  | $(4,626)$ |  | (7,792) |  | $(9,541)$ |
| Business acquisitions, net of cash acquired |  | $(2,669)$ |  | $(10,897)$ |  | $(35,022)$ |
| Divestiture of business |  | - |  | - |  | 2,000 |
| Purchases of marketable securities |  | $(78,528)$ |  | (54,772) |  | $(112,800)$ |
| Sale/maturities of marketable securities |  | 75,178 |  | 67,980 |  | 179,365 |
| Proceeds from the sale of fixed assets |  | - |  | - |  | 268 |
| Proceeds from the sale of domain name |  | 1,298 |  | 896 |  | - |
| Net cash (used in) provided by investing activities |  | (27,347) |  | (4,585) |  | 24,270 |
| Cash flows from financing activities: |  |  |  |  |  |  |
| Proceeds from sale of common stock in connection with employee stock purchase plan |  | 1,360 |  | 2,378 |  | 2,882 |
| Proceeds from exercise of stock options |  | 153 |  | 1,757 |  | 10,117 |
| Payment of tax withholding obligations related to net share settlements of restricted stock awards |  | $(1,810)$ |  | $(2,344)$ |  | $(2,442)$ |
| Repurchase of common stock |  | $(9,530)$ |  | $(7,917)$ |  | $(93,224)$ |
| Principal payments of capital lease obligations |  | (43) |  | (76) |  | (84) |
| Payment of debt |  | - |  | - |  | $(2,380)$ |
| Net cash used in financing activities |  | (9,870) |  | $(6,202)$ |  | (85,131) |
| Effect of exchange rate changes on cash and cash equivalents |  | (163) |  | (128) |  | (447) |
| Net (decrease) increase in cash and cash equivalents |  | $(18,188)$ |  | 8,954 |  | $(31,266)$ |
| Cash and cash equivalents, beginning of year |  | 50,111 |  | 41,157 |  | 72,423 |
| Cash and cash equivalents, end of year | s | 31,923 | s | 50,111 | \$ | 41,157 |
| Supplemental disclosure of cash flow information: |  |  |  |  |  |  |
| Interest paid | \$ | 41 | s | 64 | \$ | 89 |
| Income taxes paid | \$ | 1,249 | \$ | 1,430 | \$ | 2,247 |
| Income tax refunds received | \$ | 511 | \$ | 357 | \$ | 94 |
| Supplemental disclosure of non-cash investing activities: |  |  |  |  |  |  |
| Capital expenditures incurred, but not yet paid | \$ | 277 | \$ | 375 | \$ | 411 |
| Property and equipment acquired under capital lease | \$ | 36 | \$ | 137 | \$ | - |
| Business acquisition purchase consideration - assumed equity awards | \$ | - | \$ | - | \$ | 1,671 |
| Supplemental disclosure of non-cash financing activities: |  |  |  |  |  |  |
| Total fair value of restricted stock awards, restricted stock units, performance-based stock awards and performance-based stock units on date vested | \$ | 10,376 | s | 9,138 | S | 8,425 |

## (1) NATURE OF THE BUSINESS

Sonus Networks, Inc. ("Sonus" or the "Company") is a leading provider of networked solutions for communication service providers (e.g., telecommunications, wireless and cable service providers) and enterprises to help them secure and unify their real-communications infrastructures. Sonus helps many of the world's leading communications service providers and enterprises embrace the next generation of Session Initiation Protocol ("SIP") and 4G/LTE (Long Term Evolution)-based solutions, including Voice over Internet Protocol ("VoIP"), Voice over WiFi ("VoWiFi"), video and Unified Communications ("UC") through secure, reliable and scalable Internet Protocol ("IP") networks. Sonus' products include session border controllers ("SBCs"), diameter signaling controllers ("DSCs") and VoWiFi solutions, which are supported by a global service team with experience in design, deployment and maintenance of some of the world's largest IP networks.

Sonus' communications solutions provide a secure way for its customers to link and leverage multivendor, multiprotocol communications systems and applications across their networks, around the world and in a rapidly changing ecosystem of IPenabled devices such as smartphones and tablets. Sonus' solutions help realize the intended value and benefits of UC platforms by allowing disparate communications environments, commonplace in most enterprises today, to work seamlessly together. Likewise, Sonus' solutions facilitate the evolution to cloud-based delivery of UC solutions.

Sonus utilizes both direct and indirect sales channels to reach its target customers. Customers and prospective customers in the service provider space are traditional and emerging communications service providers, including long distance carriers, local exchange carriers, Internet service providers, wireless operators, cable operators, international telephone companies carriers that provide services to other carriers. Enterprise customers and target enterprise customers include financia institutions, retailers, state and local governments, and other multinational corporations.

## (2) BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Basis of Presentation

The consolidated financial statements have been prepared in United States dollars, in accordance with accounting principles generally accepted in the United States ("GAAP").

On September 26, 2016 (the "Taqua Acquisition Date"), the Company acquired Taqua, LLC ("Taqua"), a leading supplier of IP communications systems, applications and services to mobile and fixed operators. The financial results of Taqua are included in the Company's consolidated financial statements starting on the Taqua Acquisition Date.

On January 2, 2015 (the "Treq Asset Acquisition Date"), the Company acquired from Treq Labs, Inc. ("Treq") certain assets related to Treq's business of designing, developing, marketing, selling, servicing and maintaining software-defined networking ("SDN") technology, SDN controller software and SDN management software (the "SDN Business"). The financial results of the SDN Business are included in the Company's consolidated financial statements starting on the Treq Asset Acquisition Date

On February 19, 2014 (the "PT Acquisition Date"), the Company completed the acquisition of Performance Technologies, Incorporated ("PT"). The financial results of PT are included in the Company's consolidated financial statements for the periods subsequent to the PT Acquisition Date

## Significant Accounting Policie

## Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Sonus and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

## Use of Estimates and Judgments

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

## Business Combinations

The Company recognizes identifiable assets acquired and liabilities assumed at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed and represents the expected future economic benefits arising from other assets acquired in the business combination that are not individually identified and separately recognized. 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, its 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 that it identifies adjustments to the preliminary purchase price allocation. Upon the conclusion of the measurement period or fina determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of operations

## Revenue Recognition

The Company recognizes revenue from sales when persuasive evidence of an arrangement exists, delivery has occurred the sale price is fixed or determinable, and collectability of the related receivable is reasonably assured. In instances where customer acceptance is required, revenue is deferred until the acceptance has been achieved. When fees for products or services are not fixed and determinable, the Company defers the recording of receivables, deferred revenue and revenue until such time as the fees become due or are collected.

Revenue from maintenance and support services is recognized ratably over the service period. Maintenance revenue is deferred until the associated product is accepted by the customer and all other revenue recognition criteria have been met. Maintenance and support services include telephone support, return and repair support and unspecified rights to product upgrades and enhancements. Revenue from other professional services is typically recognized as the services are delivered if all other revenue recognition criteria have been met.

The Company's products typically have both software and non-software components that function together to deliver the products' essential functionality. In addition, hardware sold generally cannot be used apart from the software. Therefore, the Company considers its principal products to be both software and hardware-related. Many of the Company's sales involve multiple element arrangements that include product, maintenance and various professional services. The Company recognize revenue in accordance with the provisions of Accounting Standards Codification ("ASC") 605-25, Revenue Recognition -Multiple-Element Arrangements ("ASC $605-25^{\prime}$ ) for transactions that include both hardware and software components. The Company recognizes revenue from stand-alone software sales under the software revenue recognition guidance in ASC 985-605, Software - Revenue Recognition ("ASC 985-605"). The Company limits the amount of revenue recognized fo delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations, or subject to customer-specific return or refund privileges.

For multiple-element arrangements that include both software-only products and non-software products, the Company allocates the total arrangement consideration to the software-only deliverables as a group and to the individual non-software deliverables based on their relative selling prices. If an undelivered element (such as maintenance and support services) relates to both the software-only and non-software deliverables, the Company bifurcates the consideration allocated to the undelivered
element (such as maintenance and support services) into a non-software component and the software-only component using the relative selling price method. The consideration allocated to the non-software and software-only deliverables is recognized in accordance with the guidance as discussed in this note.

Under ASC 985-605, revenue for any undelivered elements that are considered not essential to the functionality of the product and for which vendor-specific objective evidence of selling price ("VSOE") has been established is deferred and recognized upon delivery utilizing the residual method. If the Company has undelivered product for which VSOE has not been established, it defers all revenue on the entire arrangement until VSOE is established or until such elements are delivered, provided that all other revenue recognition criteria are met. If the Company has undelivered services for which VSOE has not been established, the entire arrangement is recognized as revenue over the longest remaining service period from the point in time that all services have commenced and all products have been delivered, provided that all other revenue recognition criteria are met.

For transactions that include multiple elements, arrangement consideration is allocated to each element based on the relative selling prices of all of the elements in the arrangement using the fair value hierarchy as required by ASC 605-25.

The Company establishes VSOE based upon the price charged when the same element is sold separately or established by management having the relevant pricing authority. The Company has VSOE for its maintenance and support services and certain professional services. When VSOE exists it is used to determine the selling price of a deliverable. The Company has not been able to establish VSOE of any of its products and for certain of its services because the Company has not sold such products or services on a stand-alone basis, has not priced its products or services within a narrow range, or has limited sales history.

When VSOE is not established, the Company attempts to establish the selling price of each element based on third-party evidence of selling price ("TPE"). The Company's solution typically differs from that of its peers as there are no similar or interchangeable competitor products or services. The Company's various product, service and maintenance offerings contain significant level of unique features and functionality and therefore, comparable pricing of competitors' products and services with similar functionality cannot be obtained. Accordingly, the Company is not able to determine TPE for its products or services.

When the Company is unable to establish selling price using VSOE or TPE, the Company uses estimated selling price ("ESP") in its allocation of arrangement consideration for the relevant deliverables. The objective of ESP is to determine the price at which the Company would transact a sale if a product or service was sold on a stand-alone basis. The Company determines ESP for its products and certain services by considering multiple factors including, but not limited to, overal market conditions, including geographic or regional-specific market factors, profit objectives and historical pricing practices for such deliverables. The determination of ESP is a formal process within the Company that includes review and approval by the Company's management.

Deferred revenue typically includes customer deposits and amounts associated with partial product shipments and maintenance or service contracts. Deferred revenue expected to be recognized as revenue more than one year subsequent to the balance sheet date is reported as a component of long-term liabilities in the consolidated balance sheets. The Company defers recognition of incremental direct costs, such as cost of goods, third-party installations and commissions, until recognition of the related revenue. Such costs are classified as current assets if the deferred revenue is initially classified as current and noncurrent assets if the related deferred revenue is initially classified as long-term.

The Company excludes any taxes assessed by a governmental authority that are directly imposed on a revenue-producing transaction (i.e., sales, use and value added) from its revenue and costs. Reimbursement received for out-of-pocket expenses and shipping costs is recorded as revenue.

The Company sells the majority of its products directly to its end customers. For products sold to resellers and distributors, the Company recognizes revenue on a sell-through basis.

## Financial Instrument

The carrying amounts of Sonus' financial instruments, which include cash equivalents, investments, accounts receivable

SONUS NETWORKS, INC.

All investments in marketable securities are classified as available-for-sale and are reported at fair value, with unrealized gains and losses excluded from earnings and reported, net of tax, in Accumulated other comprehensive loss, which is a component of stockholders' equity. Unrealized losses that are determined to be other-than-temporary, based on current and expected market conditions, are recognized in earnings. Declines in fair value determined to be credit-related are charged to earnings. The cost of marketable securities sold is determined by the specific identification method.

Financial instruments with remaining maturities or that are due within one year from the balance sheet date are classified as current. Financial instruments with remaining maturities or that are payable more than one year from the balance sheet date are classified as noncurrent.

## Cash and Cash Equivalents

Cash equivalents are stated at fair value. Cash equivalents are liquid securities that have remaining maturities of three months or less at the date of purchase.

## Restricted Cash

The Company classifies as restricted cash all cash pledged as collateral to secure long-term obligations and all cash whose use is otherwise limited by contractual provisions. Restricted cash is recorded within other assets on the consolidated balance sheet.

## Foreign Currency Translation

For foreign subsidiaries where the functional currency is the local currency, assets and liabilities are translated into U.S. dollars at the current exchange rate on the balance sheet date. Revenue and expenses are translated at average rates of exchange prevailing during each period. Translation adjustments for these subsidiaries are included in Accumulated other comprehensive loss. The primary component of Accumulated other comprehensive loss at both December 31, 2016 and 2015 was cumulative translation adjustments.

For foreign subsidiaries where the functional currency is the U.S. dollar, monetary assets and liabilities are translated into U.S. dollars at the current exchange rate on the balance sheet date. Nonmonetary assets and liabilities are remeasured into U.S. dollars at historical exchange rates. Revenue and expense items are translated at average rates of exchange prevailing during each period.

Realized and unrealized foreign currency gains and losses arising from transactions denominated in currencies other than the subsidiary's functional currency are reflected in earnings with the exception of intercompany transactions considered to be of a long-term investment nature

The components of foreign currency transaction gains (losses) are reported as a component of General and administrative expenses in the consolidated statements of operations. The Company recognized net transaction losses of $\$ 0.3$ million for the year ended December 31, 2016 and $\$ 0.4$ million for the year ended December 31, 2015. The Company recognized a net transaction gain of $\$ 1.6$ million for the year ended December 31, 2014.

## Inventory

Inventory is recorded at the lower of cost or market value using the first-in, first-out convention. The Company reduces the carrying value of inventory for those items that are potentially excess, obsolete or slow-moving based on changes in customer demand, technology developments or other economic factors.

Sonus writes down evaluation equipment at the time of shipment to its customers, as it is probable that the inventory value will not be realized.

Deferred product costs represent deferred cost of revenue for product shipments to customers prior to satisfaction of Sonus' revenue recognition criteria. The Company classifies inventory that is not expected to be consumed within one yea from the balance sheet date as noncurrent and includes such inventory as a component of Other assets.

## Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Expenditures for maintenance and repairs are charged to expense as incurred. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets, which range from two to five years. Leasehold improvements are amortized over the lesser of the lease term or five years. When an asset is sold or retired, the cost and related accumulated depreciation or amortization are eliminated, and the resulting gain or loss, if any, is recognized in income (loss) from operations in the consolidated statement of operations. The Company reviews property and equipment for impairment in the same manner as intangible assets discussed below.

Software development costs associated with internal use software are incurred in three stages of development: the preliminary project stage, the application development stage and the post-implementation stage. Costs incurred during the preliminary project and post-implementation stages are expensed as incurred. Certain qualifying costs incurred during the application development stage are capitalized as property and equipment. Internal use software is amortized on a straight-line basis over its estimated useful life of three years, beginning when the software is ready for its intended use.

## Intangible Assets and Goodwill

Intangible assets are comprised of certain intangible assets arising from the 2012 acquisition of NET, comprised of developed technology, customer relationships and internal use software, which are amortized over their estimated useful lives of three to five years; the 2014 acquisition of PT, comprised of developed technology and customer relationships, which are amortized over their estimated useful lives of six to seven years; the 2015 acquisition of the SDN Business, comprised of developed technology, which is amortized over its estimated useful life of seven years and the September 2016 acquisition of six to eight years. Intangible assets are reviewed for impairment when events or changes in circumstances indicate that their carrying amounts may not be recoverable based upon the estimated undiscounted cash flows. Recoverability of intangible assets with estimated lives and other long-lived assets is measured by a comparison of the carrying amount of an asset or ass group to future net undiscounted cash flows expected to be generated by the asset or asset group. If these comparisons indicate that an asset is not recoverable, the Company will recognize an impairment loss for the amount by which the carrying value of the asset or asset group exceeds the related estimated fair value. Estimated fair value is based on either discounted future operating cash flows or appraised values, depending on the nature of the asset. See Note 9 for additional information regarding the Company's intangible assets.

Goodwill is recorded when the consideration for an acquisition exceeds the fair value of net tangible and identifiable intangible assets acquired. Goodwill is not amortized, but instead is tested for impairment at least annually or if indicators of potential impairment exist by comparing the fair value of the Company's reporting unit to its carrying value.

The Company's annual testing for impairment of goodwill is completed as of November 30. The Company operates as a single operating segment with one reporting unit and consequently evaluates goodwill for impairment based on an evaluation of the fair value of the Company as a whole. The Company performed its step one assessments as proscribed by Intangibles Goodwill and Other (ASC Topic 350) for each of the years ended December 31, 2016, 2015 and 2014 and concluded each yea that it was not more likely than not that the fair value of the Company's reporting unit was less than its carrying value.

## Other Assets

Other assets are primarily comprised of the long-term portion of deferred cost of goods sold, prepaid expenses and deposits.

## Stock-Based Compensation

The Company's stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which generally represents the vesting period, and includes an estimate
of the awards that will be forfeited

The Company uses the Black-Scholes valuation model for estimating the fair value on the date of grant of stock options. The fair value of stock option awards is affected by the Company's stock price as well as valuation assumptions, including the volatility of Sonus' stock price, expected term of the option, risk-free interest rate and expected dividends.

In 2015, the Company began to grant performance-based stock units ("PSUs") that include a market condition to certain of its executives. The Company uses a Monte Carlo simulation approach to model future stock price movements based upon the risk-free rate of return, the volatility of each entity and the pair-wise covariance between each entity. These results are then used to calculate the grant date fair values of the PSUs.

## Research and Development Costs

Research and development costs are expensed as incurred.

## Software Development Cost

The costs for the development of new software and substantial enhancements to existing software are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized until the product is available for general release. The Company has determined that technological feasibility is established at the time working model of the software is completed. The Company's process for developing software is essentially completed concurrently with the establishment of technological feasibility. Accordingly, no costs have been capitalized to date.

## Concentrations of Credit Risk and Single Source Suppliers

The financial instruments that potentially subject Sonus to concentrations of credit risk are cash, cash equivalents investments and accounts receivable. The Company's cash equivalents and investments were managed by one financial institution at December 31, 2016 and two financial institutions at December 31, 2015

Certain components and software licenses from third parties used in Sonus' products are procured from single sources of supply. The failure of a supplier, including a subcontractor, to deliver on schedule could delay or interrupt Sonus' delivery of products and thereby materially adversely affect Sonus' revenues and operating results.

Sonus had four contract manufacturers at December 31, 2016, of which one is primarily replied upon. Failure to manage the activities of these manufacturers or any disruption in these relationships could result in the disruption in the supply of its products and in delays in the fulfillment of the Company's customer orders.

## Advertising Costs

Advertising costs are expensed as incurred and included as a component of Sales and marketing expense in the Company's consolidated statements of operations. Advertising expenses were $\$ 0.1$ million for the year ended December 31, 2016, $\$ 0.9$ million for the year ended December 31, 2015 and $\$ 1.5$ million for the year ended December 31, 2014

## Operating Segments

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

## Loss Contingencies and Reserves

Loss Contingencies. Sonus is subject to ongoing business risks arising in the ordinary course of business that affect the estimation process of the carrying value of assets, the recording of liabilities and the possibility of various loss contingencies.

An estimated loss contingency is accrued when it is probable that a liability has been incurred or an asset has been impaired and the amount of loss can be reasonably estimated. Sonus regularly evaluates current information available to determine whether such amounts should be adjusted and records changes in estimates in the period they become known.

Allowance for Doubtful Accounts. Sonus establishes billing terms at the time it negotiates purchase agreements with its customers. Sonus monitors its outstanding receivables for timely payments and potential collection issues. An allowance for doubtful accounts is estimated based on Sonus' assessment of the collectability of specific customer accounts.

Accrual for Royalties. Sonus accrues for royalties for technology that it licenses from vendors based on established royalty rates and usage. In certain cases, Sonus has been contacted by third parties who claim that Sonus' products infringe on certain intellectual property of the third party. Sonus evaluates these claims and accrues amounts only when it is probable that the obligation has been incurred and the amounts are reasonably estimable.

Reserve for Litigation and Legal Fees. Sonus is subject to various legal claims. Sonus reserves for legal contingencies and legal fees when it is probable that a loss has been incurred and the amounts are reasonably estimable.

## Accounting for Income Taxes

Deferred tax assets and liabilities are recognized for the expected future consequences of events that have been reflected in the consolidated financial statements. Deferred tax assets and liabilities are determined based on the differences between the book and tax bases of assets and liabilities and operating loss carryforwards, using tax rates expected to be in effect for the years in which the differences are expected to reverse. Such differences arise primarily from stock-based compensation, depreciation, accruals and reserves, acquired intangible assets, deferred revenue, tax credits, net operating loss carryforwards and allowances for accounts receivable. Sonus records valuation allowances to reduce deferred income tax assets to th amount that is more likely than not to be realized.

Sonus has not provided for U.S. income taxes on the undistributed earnings of non-U.S. subsidiaries, as the Company plans to permanently reinvest these amounts. Cumulative undistributed foreign earnings were approximately $\$ 28$ million each of December 31, 2016 and December 31, 2015. Generally, the undistributed foreign earnings become subject to U.S taxation upon the remittance of dividends and under certain other circumstances. The Company has been taxed on certain earnings of its non-U.S. subsidiaries. Previously taxed earnings were approximately $\$ 16$ million at each of December 31, 2016 and December 31, 2015. Thus, $\$ 12$ million of the undistributed earnings at each of December 31, 2016 and December 31, 2015 are subject to U.S. income taxes on undistributed earnings. The Company's non-U.S. subsidiaries had cash balances aggregating approximately $4 \%$ of the Company's total cash and investments, which the Company believes is indicative of its policy of reinvesting the undistributed earnings of its subsidiaries. The Company has a significant federal net operating loss ("NOL") carryforward which could be offset upon a distribution depending on the timing of such distribution. The Company does not believe it is practicable to estimate with reasonable accuracy the hypothetical amount of the unrecognized deferred tax liability on its undistributed foreign earnings given the large number of tax jurisdictions involved and the many factors and assumptions required to estimate the amount of the U.S. federal income tax on the undistributed earnings after reduction for the available foreign tax credits.

The Company determines whether it is more likely than not that a tax position will be sustained upon examination. If it is not more likely than not that a position will be sustained, no amount of the benefit attributable to the position is recognized. The tax benefit to be recognized of any tax position that meets the more likely than not recognition threshold is calculated as the largest amount that is more than $50 \%$ likely of being realized upon resolution of the contingency. The Company accounts for interest and penalties related to uncertain tax positions as part of its provision for income taxes.

## Recent Accounting Pronouncement

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU 2017-04, which simplifies the accounting for goodwill impairments by eliminating step two from the goodwill impairment test. Instead, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. ASU 2017-04 also clarifies the requirements for excluding and allocating foreign currency translation adjustments to reporting units related to an entity's testing of reporting units for goodwill impairment, clarifies that an entity should consider income tax effects from any tax
deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable ASU 2017-04 is effective for the Company beginning January 1, 2020 for both interim and annual reporting periods, with early adoption permitted. The Company is currently assessing the potential impact of the adoption of ASC 2017-04 on its consolidated financial statements.

In October 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-16 ("ASU 2016-16"), which removes the prohibition in Accounting Standards Codification ("ASC") 740, Income Taxes, against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is intended to reduce the complexity of GAAP and diversity in practice related to the tax consequences of certain types of intra-entity ass transfers, particularly those involving IP. ASU 2016-16 is effective for the Company beginning January 1, 2019 for both interim and annual reporting periods. The Company does not believe that the adoption of this standard will have a materia impact on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15"), which amends the guidance in ASC 230 on the classification of certain cash receipts and payments in the statement of cash flows. The primary purpose of ASU 2016-15 is to reduce the diversity in practice that has resulted from the lack of consistent principles on this topic. ASU 2016-15 adds or clarifies guidance on eigh cash flow issues, including debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or cash flow issues, including debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or
certain other debt instruments, contingent consideration payments made after a business combination, proceeds from the certain other debt instruments, contingent consideration payments made after a business combination, proceeds from the
settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies, distributions received from equity method investees, beneficial interests in securitization transactions and separately identifiable cash flows and application of the predominance principle. ASU 2016-15 is effective for the Company beginning January 1, 2018 for both interim and annual reporting periods, with early adoption permitted. Entities must apply the guidance retrospectively to al periods presented but may apply it prospectively from the earliest date practicable if retrospective application would be impracticable. The Company does not expect that the adoption of ASU 2016-13 will have a material impact on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"), which adds an impairment model that is based on expected losses rather the FASB believes will result in 2016-13, an entity recognizes as an allowance its estimate of expected Company beginning January 1,2020 for both interim and annual reporting periods, with early adoption permitted. The Company does not expect that the adoption of ASU 2016-13 will have a material impact on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09"), which simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures and statutory tax withholding requirements, as well as classification in the statement of cash flows. ASU 2016-09 was effective for the Company beginning January 1 , 2017 for both interim and annual reporting periods. Under ASU 2016-09, the Company will now recognize unrealized excess tax benefits. Due to the Company's full valuation allowance on its federal and state income taxes, the adoption of ASU 2016-09 will not impact the Company's accounting for income taxes. Without the valuation allowance, the Company estimates it would recognize a deferred tax asset approximating $\$ 6$ million upon adoption of ASU 2016-09. The Company has elected to continue to apply forfeiture rates to its expense attribution related to stock options, restricted stock awards and restricted stock units, as the Company believes that such continued application results in more accurate expense attribution over the life of these equity grants.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) Section A - Leases: Amendments to the FASB Accounting Standards Codification ("ASU 2016-02"), its new standard on accounting for leases. ASU 2016-02 introduces a lessee model that brings most leases onto the balance sheet. The new standard also aligns many of the underlying principles of the new lessor model with those in ASC 606, the FASB's new revenue recognition standard (i.e., those related to evaluating when profit can be recognized). Furthermore, ASU 2016-02 addresses other concerns related to the current leases model. Fo example, ASU 2016-02 eliminates the current GAAP requirement for an entity to use bright-line tests in determining lease classification. ASU 2016-02 is effective for the Company for both interim and annual periods beginning January 1,2019 . The Company is currently assessing the potential impact of the adoption of ASU 2016-02 on its consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes ("ASU 2015-17"), which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent in the condensed consolidated balance sheet. Netting of deferred tax assets and deferred tax liabilities is still required under ASU 2015-17. ASU 2015-17 is effective for the Company for its annual report for the year ending December 31, 2018 and for interim period reporting beginning January 1, 2019, with early adoption permitted. The Company elected to early-adopt ASU 2015-17 prospectively and accordingly, reclassified its net current deferred tax asset totaling $\$ 1.0$ million to its noncurrent net deferred tax asset as of December 31, 2015. No prior periods were retrospectively adjusted. The early adoption of ASU 2015-17 did not have a material impact on the Company's consolidated financial statements.

In September 2015, the FASB issued ASU 2015-16, Simplifying the Accounting for Measurement-Period Adjustments ("ASU 2015-16"), which eliminates the requirement to restate prior periods to reflect adjustments made to provisional amounts recognized in a business combination. Under ASU 2015-16, an acquirer must recognize adjustments to provisional amount that are identified during the measurement period in the reporting period in which the adjustment amounts are determined, rather than retrospectively, as had previously been required. ASU 2015-16 also requires acquirers to present separately on the face of the income statement, or disclose in the notes, the portion of the amount recorded in current period earnings by line item that would have been recorded in previous reporting periods if the adjustment to as of the acquisition date. ASU 2015-16 was effective for the Company as of January1, 2016. The adoption of ASU 2015-16 did not have a material impact on the Company's consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory ("ASU 2015-11"), which simplifies the measurement of inventory by requiring entities to measure most inventory at the lower of cost and net realizable value, replacing the previous requirement to measure most inventory at the lower of cost or market. ASU 2015-11 does not apply to inventories that are measured by using either the last-in, first-out method or the retail inventory method. ASU 2015-11 2015-11 is not expected to have a material impact on the Company's consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern ("ASU 2014-15"), which provides guidelines for determining when and how to disclose going concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity's ability to continue as a going thereafter, with early adoption permitted. The adoption of ASU 2014-15 is not expected to have a material impact on the Company's consolidated financial statements.

In June 2014, the FASB issued ASU 2014-12, Compensation - Stock Compensation (Topic 718): Accounting for ShareBased Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period (a consensus of the FASB Emerging Issues Task Force) ("ASU 2014-12"). ASU 2014-12 clarifies that entities should treat performance targets that can be met after the requisite service period of a share-based payment award as performance conditions that affect vesting. Therefore, an entity would not record compensation expense (measured as of the grant date without taking into account the effect of the performance target) related to an award for which transfer to the employee is contingent on the entity's satisfaction of a performance target until it becomes probable that the performance target will be met. ASU 2014-12 does not contain any new disclosure requirements. ASU 2014-12 was effective for the Company as of January 1, 2016. The adoption of ASU 2014-12 did not have a material impact on the Company's consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"), its final standard on revenue from contracts with customers. ASU 2014-09 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In applying the revenue model to contracts within its scope, an entity identifies the contract(s) with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to the performance obligations in the contract and recognizes revenue when (or as) the entity satisfies a performance obligation. ASU 2014-09 applies to all contracts with customers that are within the scope of
other topics in the FASB ASC. Certain of ASU 2014-09's provisions also apply to transfers of nonfinancial assets, including in-substance nonfinancial assets that are not an output of an entity's ordinary activities (i.e., property, plant and equipment; real estate; or intangible assets). Existing accounting guidance applicable to these transfers has been amended or superseded. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date ("ASU 2015-14"), which defers the original effective date of interim and annual reporting periods by one year. As a result, the Company will not be required to apply the new revenue standard until annual reporting periods beginning after December 15, 2017. In March 2016, the FASB issued ASU 2016-08, Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net) ("ASU 2016-08") to clarify certain aspects of the principal-versus-agent guidance in its new revenue recognition standard in response to feedback received from the FASB-International Accounting Standards Board joint revenue recognition transition resource group. ASU 2016-08 clarifies the implementation guidance on principal-versus-agent considerations regarding how an entity determines whether it is a principal or an agent for each specified good or service promised to the customer and how an entity determines the nature of each specified good or service. ASU 2016-08 also provides clarification regarding the application of the principal-versus-agent guidance. In April 2016, the FASB issued ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing ("ASU 2016-10"), which amends certain aspects of the guidance in ASU 2014-09 on identifying performance obligations, including immaterial promised goods or services, shipping and handling activities and identifying when promises represent performance obligations; and licensing implementation guidance, including determining the nature of an entity's promise in granting a license, sales-based and usage-based royalties, restrictions of time, geographical location and use, and renewals of licenses that provide a right to use IP. In May 2016, the FASB issued ASU 2016-11, Revenue Recognition (Topic 605) and Deriva
Hedging (Topic 815) ("ASU 2016-11"), which rescinds certain SEC guidance from the Codification in response to announcements made by the SEC staff at the Emerging Issues Task Force's March 3, 2016 meeting, and which supersedes certain SEC observer comments on the topics of revenue and expense recognition for freight services in process, accounting for shipping and handling fees and costs, accounting for consideration given by a vendor to a customer and accounting for gasbalancing arrangements upon the adoption of ASU 2014-09. In May 2016, the FASB issued ASU 2016-12, Revenue from Contracts with Customers (Topic 606) ("ASU 2016-12"), which amends certain aspects of ASU 2014-09, including regarding collectability, the presentation of sales tax and other similar taxes collected from customers, non-cash consideration, contract modifications and completed contracts at transition. ASU 2016-08, ASU 2016-10, ASU 2016-11 and ASU 2016-12 are effective at the same time as ASU 2014-09 (as amended by ASU 2015-14). The Company continues to assess the potentia impact of the adoption of these ASUs on its consolidated financial statements, and currently believes that such adoption will, in general, accelerate the recognition of revenue (i.e., more revenue will be recognized upon delivery than is currently recognized ratably or upon payment) compared to the current standards in effect, in particular, sales of software-only products and sales to customers currently accounted for on a cash basis. The Company currently expects to adopt these ASUs using the modified retrospective option.

## (3) BUSINESS ACQUISITIONS

## Taqua, LLC

On the Taqua Acquisition Date, the Company acquired Taqua, a privately-held company. Taqua enables the transformation of software-based service provider networks to deliver next-generation voice, video and messaging services, including VoIP, VoWiFi and Voice over Long-Term Evolution ("VoLTE"). The Company believes that the acquisition of Taqua will, among other things, accelerate the Company's mobile strategy by adding a Virtualized Mobile Core ("VMC") Platform and an IP Multimedia Subsystem ("IMS") Service Core and expand the Company's fixed portfolio by adding a Class 5 Softswitch (the T7000) for network transformation projects and a Multimedia Controller used in IP Peering applications (the T7100), both of which were complementary to Sonus' product offerings. In consideration for the acquisition of Taqua, Sonus paid $\$ 19.9$ million in cash to the sellers on the Taqua Acquisition Date, net of cash acquired. The Company also entered into an Earn-Out Agreement, dated as of September 26, 2016, with Taqua Holdings, LLC and Jeffrey L. Brawner, the seller representative in the transaction, under which there is the potential for additional cash payments of up to $\$ 65$ million in the aggregate to the sellers if certain annual revenue thresholds are exceeded as measured annually through 2020. The Company had initially recorded \$10.0 million of contingent consideration as of the Taqua Acquisition Date, with the estimate based on historical sales and probability weighted cash flows related to forecasted sales. Because there are unobservable inputs to the valuation methodology that are significant to the measurement of its fair value, namely, forecasted sales, the Company had categorized the earn-out at Level 3 within the fair value hierarchy. During the fourth quarter of 2016, the Company reassessed the historical and updated forecasted sales and accordingly, reversed the previous estimated contingent consideration such that as of December 31, 2016,
no incremental contingent consideration was recorded
The transaction has been accounted for as a business combination and the financial results of Taqua have been included in the Company's consolidated financial statements for the period subsequent to its acquisition.

As of December 31, 2016, the valuation of acquired assets, identifiable intangible assets and certain accrued liabilities is preliminary. The Company is still in the process of investigating the facts and circumstances existing as of the Taqua preliminary. The Company is still in the process of investigating the facts and circumstances existing as of the Taqua
Acquisition Date in order to finalize its valuation, particularly, short-term assets and liabilities, including accounts receivable inventory, accrued expenses and intangible assets. During the fourth quarter of 2016, the Company recorded changes to the initial preliminary purchase price allocation. The primary adjustments recorded in the fourth quarter of 2016 were the aforementioned reversal of the $\$ 10.0$ million of previously recorded contingent consideration, a reduction of $\$ 12.1$ million to the developed technology intangible asset and an increase of $\$ 5.5$ million to the customer relationship intangible asset. These adjustments, as well as other immaterial adjustments to other balance sheet accounts, resulted in a net reduction to goodwill of $\$ 2.7$ million. Based on this updated preliminary purchase price allocation, the Company recorded $\$ 9.1$ million of goodwill, which is primarily due to expected synergies between the combined companies and expanded market opportunities resultin from the expanded product offering portfolio. The goodwill is deductible for tax purposes. The Company expects to finalize the valuation of the assets acquired and liabilities assumed in the first half of 2017.

A summary of the preliminary allocation of the purchase consideration for Taqua as of December 31, 2016 is as follows (in thousands):

Fair value of consideration transferred:
Cash, net of cash acquired
Fair value of assets acquired and liabilities assumed:
Current assets

| Current assets | 3,347 |
| :--- | ---: |
| Property and equipment | 1,478 |

Property and equipmen
Intangible assets:
Developed technology 2,100

Goodwill
Other noncurrent assets $\quad 23$
Current liabilities $5,039)$

Long-term liabilities $\quad$| $\frac{(583)}{}$ |
| :--- |
| $\quad 19,919$ |

The valuation of the acquired intangible assets is inherently subjective and relies on significant unobservable inputs. The Company used an income approach to value the acquired developed technology and customer relationship intangible assets. The preliminary valuation for each of these intangible assets was based on estimated projections of expected cash flows to be generated by the assets, discounted to the present value at discount rates commensurate with perceived risk. The valuation assumptions take into consideration the Company's estimates of technology attrition and revenue growth projections. The Company is amortizing the identifiable intangible assets in relation to the expected cash flows from the individual intangible assets over their respective useful lives (see Note 9).

The Company's revenue for the year ended December 31, 2016 included $\$ 1.9$ million of revenue attributable to Taqua since the Taqua Acquisition Date. The inclusion of Taqua's operations for the period from the Taqua Acquisition Date to Decembe 31, 2016 in the Company's financial results for the year ended December 31, 2016 increased the Company's loss by $\$ 4.7$ million. The Company has not provided pro forma financial information, as the historical amounts are not significant to th Company's consolidated financial statements.

## SDN Business of Treq Labs, Inc.

On the Treq Asset Acquisition Date, the Company acquired from Treq the SDN Business. The SDN Business provide

SONUS NETWORKS, INC.

## otes to Consolidated Financial Statements (Continued)

solutions that optimize networks for voice, video and UC for both enterprise and service provider customers. The Company believes that the acquisition of the SDN Business has helped to accelerate Sonus' delivery of its SDN strategy. In consideration for the acquisition of the SDN Business, Sonus paid $\$ 10.1$ million in cash on the Treq Asset Acquisition Date, and an additional consideration payment of $\$ 750,000$ on each of July 2, 2015 and January 4, 2016. The Company also entered into an Earn-Out Agreement, dated as of January 2, 2015, with Treq and Karl F. May, the seller representative in the transaction (the "Earn-Out Agreement"), under which the Company agreed to issue up to an aggregate of 1.3 million shares of common stock over a three year period subsequent to the Treq Asset Acquisition Date if aggregate revenue thresholds of at least $\$ 60$ million are achieved by the SDN Business during that period, and up to an aggregate of an additional 2.2 million shares of common stock ( 3.5 million shares in total) if aggregate revenue thresholds of at least $\$ 150$ million are achieved by the SDN Business during that period. If the initial revenue thresholds are not met, no shares will be issued. Based on historical and forecasted sales, no incremental contingent consideration was recorded either initially as of the Treq Asset Acquisition Date or through December 31, 2016. Any shares issued pursuant to the Earn-Out Agreement will be issued in reliance on the exemption from registration available under Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), and will be subsequently registered for resale under the Securities Act by the Company.

The transaction has been accounted for as a business combination. The Company finalized its valuation of the identifiable intangible assets in the second quarter of fiscal 2015. Based on the purchase price allocation, the Company recorded $\$ 1.0$ million of goodwill, primarily due to expected synergies between the combined companies and expanded market opportunities. The goodwill is deductible for tax purposes.

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

Fair value of consideration transferred:
Cash, net of cash acquired
Fair value of assets acquired
Intangible assets:
In-process research and development $\$ \quad 9,100$ Developed technology

The valuation of the acquired intangible assets is inherently subjective and relies on significant unobservable inputs. The Company used an income approach to value the acquired in-process research and development and developed technology intangible assets. The valuation for each of these intangible assets was based on estimated projections of expected cash flows to be generated by the assets, discounted to the present value at discount rates commensurate with perceived risk. The valuation assumptions take into consideration the Company's estimates of technology attrition and revenue growth projections. In the three months ended September 25,2015 , the Company reclassified $\$ 7.5$ mifion of its in-process research and development intangible assets to its developed technology intangible assets. During the three months ended March 31, 2016, he Company reclassified the remaining $\$ 1.6$ miliion of in-process research and development intangible assets to its developed technology intangible assets. These amounts were reclassified from in-process research and development intangible assets to developed technology intangible assets in the periods that the related products became generally available and began to record amortization expense for such developed technology intangible assets. Accordingly, at December 31, 2016, the Company no longer had an in-process research and development intangible asset. The Company is amortizing the identifiable intangible assets in relation to the expected cash flows from the individual intangible assets over their respective useful lives (see Note 9)

The Company has not disclosed the amount of revenue or earnings of the SDN Business since the SDN Business Acquisition Date or pro forma financial information, as these amounts are not significant to the Company's consolidated financial statements

## Performance Technologies, Incorporated

On the PT Acquisition Date, the Company acquired all of the outstanding common stock of PT for cash consideration of On the PT Acquisition Date, the Company acquired all of the outstanding common stock of PT for cash consideration of
$\$ 35.0$ million, or $\$ 3.75$ per share of PT common stock. This acquisition has enabled Sonus to expand its solutions portfolio with signaling technology and acquire expertise to enable mobile service providers to offer new real-time multimedia services
through their mobile infrastructure. Delivering these services across the LTE next-generation mobile networks will requir adoption of the next-generation signaling technology known in the industry as Diameter Signal. The acquisition of PT has allowed Sonus to diversify its product portfolio with an integrated, virtualized Diameter and SIP-based solution and delive strategic value to service providers seeking to offer new multimedia services through mobile, cloud-based, real-time communications.

The transaction has been accounted for as a business combination and the financial results of PT have been included in the Company's consolidated financial statements starting on the PT Acquisition Date.

The Company finalized the valuation of acquired assets, identifiable intangible assets, uncertain tax liabilities and certain accrued liabilities in the fourth quarter of 2014. The Company recorded $\$ 8.8$ million of goodwill, primarily due to expected synergies between the combined companies and expanded market opportunities. The goodwill is not deductible for tax purposes.

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

## Fair value of consideration transferred:

## Cash, net of cash acquired

Fair value of assets acquired and liabilities assumed
Marketable securities
Other current assets
Property and equipmen
Intangible assets
Goodwill
Current liabilities

Other long-term liabilities

The valuation of the acquired intangible assets is inherently subjective and relies on significant unobservable inputs. The Company used an income approach to value the acquired developed technology and customer relationships intangible assets. The valuation for each of these intangible assets was based on estimated projections of expected cash flows to be generated by the assets, discounted to the present value at discount rates commensurate with perceived risk. The valuation assumptions take into consideration the Company's estimates of contract renewal, technology attrition and revenue growth projections. The Company is amortizing the identifiable intangible assets in relation to the expected cash flows from the individual intangible assets over their respective useful lives. These intangible assets have a weighted average useful life of 6.8 years (see Note 9 ).

The identifiable intangible assets recorded in connection with the PT acquisition are as follows (in thousands):

| Developed technology | $\$ \quad 13,200$ |
| :--- | :--- |
| Customer relationships | 3,900 |

The Company recognized revenue aggregating $\$ 14.6$ million in the period from the PT Acquisition Date through December 31, 2014. The Company has not disclosed the amount of earnings of PT since the PT Acquisition Date or pro forma financial information, as these amounts are not significant to the Company's consolidated financial statements.

## Sale of Multi-Protocol Server Busines

On June 20, 2014 (the "MPS Sale Date"), the Company sold its PT Multi-Protocol Server ("MPS") business for $\$ 2.0$ million, comprised of $\$ 0.2$ million of inventory, $\$ 0.1$ million of fixed assets, $\$ 0.2$ million of deferred revenue and $\$ 1.9$ million of PT goodwill allocable to the MPS business. The Company had acquired the MPS business in connection with the acquisition of PT. The Company incurred $\$ 0.4$ million of transaction costs, which are included as a component of General and
administrative expenses. The results of operations of the MPS business are excluded from the Company's consolidated result for the period subsequent to the MPS Sale Date.

## Acquisition-Related Expenses

Acquisition-related expenses include those expenses related to acquisitions that would otherwise not have been incurred by the Company. These expenses include professional and services fees, such as legal, audit, consulting, paying agent and other fees, and expenses related to cash payments to certain former executives of the acquired businesses under their respective change of control agreements. The amount recorded in the year ended December 31, 2016 relates to professional fees in connection with the acquisition of Taqua. The amount recorded in the year ended December 31, 2015 relates to professional fees in connection with the acquisition of the SDN Business. Of the amount recorded in the year ended December 31, 2014, $\$ 1.3$ million relates to the acquisition of PT, comprised of $\$ 1.0$ million for professional and services fees and $\$ 0.3$ million for change of control agreements, and $\$ 0.3$ million relates to professional fees in connection with acquisition of the SDN Business.

The components of acquisition-related costs incurred in the years ended December 31, 2016, 2015 and 2014 are as follows (in thousands):

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Professional and services fees | \$ | 1,152 | \$ | 131 | \$ | 1,309 |
| Change of control agreements |  | - |  | - |  | 249 |
|  | \$ | 1.152 | S | 131 | \$ | 1.558 |

## (4) EARNINGS (LOSS) PER SHARE

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

The calculations of shares used to compute basic and diluted loss per share are as follows (in thousands)

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| Weighted average shares outstanding-basic | 49,385 | 49,560 | 50,245 |
| Potential dilutive common shares | - | - | - |
| Weighted average shares outstanding-diluted | 49,385 | 49.560 | 50,245 |

Options to purchase the Company's common stock, unvested shares of restricted stock, shares underlying unvested performance-based stock grants sand shares in connection with future purchases under the Company's Amended and Restated 2000 Employee Stock Purchase Plan, as amended (the "ESPP"), aggregating 8.0 million shares for the year ended
December 31, 2016 have not been included in the computation of diluted loss per share because their effect would have been antidilutive. Options to purchase the Company's common stock, unvested shares of restricted stock and unvested performance-
based equity awards for which the performance conditions had been satisfied aggregating 82 million shares for the ear ended based equity awards for which the performance conditions had been satisfied aggregating 8.2 million shares for the year ended December 31, 2015 and 8.0 million shares for the year ended December 31, 2014 have not been included in the computation of diluted loss per share because their effect would have been antidilutive.

## (5) CASH EQUIVALENTS AND INVESTMENTS

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

During the year ended December 31, 2016, the Company sold $\$ 1.1$ million of its available-for-sale securities that were impacted by the Money Market Reform Act, which became effective October 14, 2016 for institutional money markets, to avoid any negative impact on the Company's institutional money market investments. The Company also sold $\$ 3.8$ million of

## SONUS NETWORKS, INC.

Notes to Consolidated Financial Statements (Continued)
its available-for-sale securities during the year ended December 31, 2016. The Company recognized nominal gross gains and losses from the sales of these securities. The Company did not sell any of its available-for-sale securities during the year ended December 31, 2015. During the year ended December 31, 2014, the Company sold $\$ 45.9$ million of its available-for-sal securities and realized gross gains aggregating $\$ 46,000$, which are included as a component of Other income, net, in the Company's consolidated statement of operations for that period. The Company did not realize any gross losses on these sales

Investments with continuous unrealized losses for one year or greater at December 31, 2016 were nominal; however, since the Company does not intend to sell these securities and does not believe it will be required to sell any securities before they recover in value, it does not believe these declines are other-than-temporary.

On a quarterly basis, the Company reviews its investments to determine if there have been any events that could create a credit impairment. Based on its reviews, the Company does not believe that any impairment existed with its current holdings at December 31, 2016.

The amortized cost, gross unrealized gains and losses and fair value of the Company's cash equivalents and investments at December 31, 2016 and 2015 were comprised of the following (in thousands):

|  | December 31, 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortizedcost |  | $\begin{gathered} \hline \begin{array}{c} \text { Unrealized } \\ \text { gains } \end{array} \\ \hline \end{gathered}$ |  | Unrealized losses |  | Fairvalue |  |
| Cash equivalents | \$ | 6,619 | \$ | - | \$ | - | S | 6.619 |
|  |  |  |  |  |  |  |  |  |
| Short-term investments |  |  |  |  |  |  |  |  |
| Municipal obligations | \$ | 3,264 | \$ | - | \$ | (3) | \$ | 3,261 |
| U.S. government agency notes |  | 16,477 |  | 3 |  | (3) |  | 16,477 |
| Corporate debt securities |  | 41,893 |  | 4 |  | (45) |  | 41,852 |
| Certificates of deposit |  | 246 |  | - |  | - |  | 246 |
|  | \$ | 61.880 | \$ | 7 | \$ | (51) | S | 61.836 |
| Investments |  |  |  |  |  |  |  |  |
| U.S. government agency notes | \$ | 19,473 | \$ | 3 | \$ | (39) | \$ | 19,437 |
| Corporate debt securities |  | 10,520 |  | - |  | (44) |  | 10,476 |
| Certificates of deposit |  | 2,458 |  | - |  | - |  | 2,458 |
|  | \$ | 32.451 | \$ | 3 | \$ | (83) | \$ | 32,371 |


|  | December 31, 2015 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Amortized } \\ \text { cost } \end{gathered}$ |  | $\begin{gathered} \hline \begin{array}{c} \text { Unrealized } \\ \text { gains } \end{array} \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { Unrealized } \\ & \text { losses } \end{aligned}$ |  | $\begin{aligned} & \text { Fair } \\ & \text { value } \end{aligned}$ |  |
| Cash equivalents | \$ | 7.122 | \$ | 二 | \$ | - | \$ | 7.122 |
| Short-term investments |  |  |  |  |  |  |  |  |
| Municipal obligations | \$ | 3,910 | \$ | - | \$ | (1) | \$ | 3,909 |
| U.S. government agency notes |  | 3,450 |  | - |  | (2) |  | 3,448 |
| Corporate debt securities |  | 46,736 |  | 2 |  | (56) |  | 46,682 |
| Commercial paper |  | 3,994 |  | - |  | - |  | 3,994 |
| Certificates of deposit |  | 500 |  | - |  | - |  | 500 |
|  | S | 58,590 | s | 2 | \$ | (59) | \$ | 58,533 |
| Investments |  |  |  |  |  |  |  |  |
| Municipal obligations | \$ | 2,165 | \$ | - | \$ | (4) | \$ | 2,161 |
| U.S. government agency notes |  | 1,999 |  | - |  | (13) |  | 1,986 |
| Corporate debt securities |  | 29,541 |  | 2 |  | (85) |  | 29,458 |
|  | \$ | 33,705 | \$ | 2 | \$ | (102) | S | 33.605 |

The Company's available-for-sale debt securities that are classified as Investments in the consolidated balance sheet mature after one year but within two years or less from the balance sheet date.

## Fair Value Hierarchy

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

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

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

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

The following table shows the fair value of the Company's financial assets at December 31, 2016 and 2015. These financial assets are comprised of the Company's available-for-sale debt securities and reported under the captions Cash and cash equivalents, Short-term investments and Investments in the consolidated balance sheets (in thousands):


Short-term investments

| Municipal obligations |
| :--- |
| U.S. government agency note |

Corporate debt securities
Certificates of deposit

Investments
U.S. government agency notes

Corporate debt securities
Certificates of deposit

| \$ | 3,261 | \$ | - | \$ | 3,261 | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16,477 |  | - |  | 16,477 |  | - |
|  | 41,852 |  | - |  | 41,852 |  | - |
|  | 246 |  | - |  | 246 |  | - |
| \$ | 61.836 | \$ | - | \$ | 61.836 | \$ | - |
| \$ | 19,437 | \$ | - | \$ | 19,437 | \$ | - |
|  | 10,476 |  | - |  | 10,476 |  | - |
|  | 2,458 |  | - |  | 2,458 |  | - |
| \$ | 32.371 | \$ | - | \$ | 32.371 | \$ |  |

## SONUS NETWORKS, INC.

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

Accounts receivable, net, consisted of the following (in thousands):

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| Accounts receivable, gross | \$ | 53,872 | \$ | 51,543 |
| Allowance for doubtful accounts |  | (10) |  | (10) |
| Accounts receivable, net | S | 53.862 | \$ | 51.533 |

The activity in the Company's allowance for doubtful accounts was as follows (in thousands):

| Year ended December 31, | Balance at beginning of year |  | Chargesto expense |  | Write-offs |  | Balance atend ofyer year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 | \$ | 10 | \$ | 10 | \$ | (10) | \$ | 10 |
| 2015 | \$ | 58 | \$ | 17 | \$ | (65) | \$ | 10 |
| 2014 | \$ | 157 | \$ | 92 | \$ | (191) | \$ | 58 |

## SONUS NETWORKS, INC.

## (7) INVENTORY

Inventory consisted of the following (in thousands):

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| On-hand final assemblies and finished goods inventories | \$ | 15,346 | \$ | 17,136 |
| Deferred cost of goods sold |  | 4,237 |  | 5,975 |
|  |  | 19,583 |  | 23,111 |
| Less current portion |  | $(18,283)$ |  | $(23,111)$ |
| Noncurrent portion (included in Other assets) | S | 1.300 | \$ |  |

## (8) PROPERTY AND EQUIPMENT

Property and equipment consisted of the following (in thousands):

|  | Useful Life | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2016 |  | 2015 |  |
| Equipment | 3 years | \$ | 63,622 | \$ | 63,667 |
| Software | 2-3 years |  | 19,378 |  | 17,463 |
| Furniture and fixtures | 3-5 years |  | 698 |  | 675 |
| Leasehold improvements | Shorter of the life of the lease or estimated useful life (1-5 years) |  | 11,757 |  | 11,615 |
|  |  |  | 95,455 |  | 93,420 |
| Less accumulated depreciation and amortization |  |  | $(83,714)$ |  | (79,800) |
| Property and equipment, net |  | \$ | 11,741 | \$ | $\underline{13,620}$ |

The Company recorded depreciation and amortization expense related to property and equipment of $\$ 8.0$ million for the year ended December 31, 2016, $\$ 12.0$ million for the year ended December 31, 2015 and $\$ 11.5$ million for the year ended December 31, 2014. During each of the years ended December 31, 2016 and 2015, the Company disposed of certain property and equipment that was fully depreciated at the time of disposal, which resulted in reductions in both Cost and Accumulated depreciation.

Property and equipment under capital leases included in the amounts above were as follows (in thousands):

| December 31, |  |  |  |
| :---: | :---: | :---: | :---: |
| 2016 |  | 2015 |  |
| \$ | 173 | \$ | 137 |
|  | (68) |  | (9) |
|  | 105 |  |  |

The net book values of the Company's property and equipment by geographic area were as follows (in thousands)

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| United States | \$ | 7,939 | \$ | 9,145 |
| Asia/Pacific |  | 2,963 |  | 3,098 |
| Europe |  | 593 |  | 818 |
| Other |  | 246 |  | 559 |
|  | \$ | 11.741 | \$ | 13,620 |

## SONUS NETWORKS, INC.

Notes to Consolidated Financial Statements (Continued)

## (9) INTANGIBLE ASSETS AND GOODWILL

The Company's intangible assets at December 31, 2016 and 2015 consisted of the following (in thousands):

## - 31,2016

Developed technology
Customer relationship
Internal use software

| Weighted average amortization period (years) |  | Cost | Accumulated amortization |  | $\begin{gathered} \text { Net } \\ \text { carrying } \\ \text { value } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6.54 | \$ | 34,980 | \$ | 16,453 | \$ | 18,527 |
| 5.78 |  | 19,540 |  | 7,870 |  | 11,670 |
| 3.00 |  | 730 |  | 730 |  |  |
| 6.23 | \$ | 55.250 | S | 25,053 | S | 30.197 |


| December 31, 2015 | Weighted average amortization period (years) |  | Cost | Accumulated amortization |  | $\begin{gathered} \text { Net } \\ \text { carrying } \\ \text { value } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intellectual property | * | \$ | 1,600 | \$ | - | \$ | 1,600 |
| Developed technology | 6.42 |  | 31,280 |  | 10,415 |  | 20,865 |
| Customer relationships | 5.57 |  | 10,030 |  | 6,408 |  | 3,622 |
| Internal use software | 3.00 |  | 730 |  | 730 |  | - |
|  | 6.19 | \$ | 43.640 | \$ | 17.553 | \$ | 26,087 |

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

Amortization expense for intangible assets for the years ended December 31, 2016, 2015 and 2014 was as follows (in thousands):

Developed technology Customer relationships Internal use software


Estimated future amortization expense for the Company's intangible assets at December 31, 2016 was as follows (in thousands):

Years ending December 31,

| 2017 | 9,13 |
| :---: | :---: |
| 2018 | 6,61 |
| 2019 | 5,60 |
| 2020 | 4,16 |
| 2021 | 2,3 |
| Thereafter | 2,2 |
|  | \$ 30.197 |

Goodwill is recorded when the consideration for an acquisition exceeds the fair value of net tangible and identifiable intangible assets acquired. The changes in the carrying value of the Company's goodwill in the years ended December 31, 2016 and 2015 were as follows (in thousands):

|  | Year ended December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| Balance at January 1 |  |  |  |  |
| Goodwill | \$ | 43,416 | \$ | 42,369 |
| Accumulated impairment losses |  | $(3,106)$ |  | $(3,106)$ |
|  |  | 40,310 |  | 39,263 |
| Acquisition of Taqua |  | 9,083 |  | - |
| Acquisition of SDN Business |  | - |  | 1,047 |
| Balance at December 31 | $\stackrel{\text { s }}{ }$ | 49,393 | \$ | 40,310 |

The components of the Company's goodwill balances at December 31, 2016 and 2015 were as follows:

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 15 |  |
| Goodwill | \$ | 52,499 | \$ | 43,416 |
| Accumulated impairment losses |  | $(3,106)$ |  | $(3,106)$ |

## (10) ACCRUED EXPENSES

Accrued expenses consisted of the following (in thousands):

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| Employee compensation and related costs | \$ | 15,879 | \$ | 22,180 |
| Other |  | 10,007 |  | 9,783 |
|  | \$ | 25,886 | \$ | 31,963 |

## (11) RESTRUCTURING ACCRUALS

The Company has committed to streamlining operations and reducing operating costs by closing and consolidating certain facilities and reducing its worldwide workforce. Accordingly, the Company recorded restructuring expense aggregating $\$ 2.7$ million in the year ended December 31, 2016, $\$ 2.1$ million in the year ended December 31, 2015 and $\$ 5.6$ million in the year ended December 31, 2014

## 2016 Restructuring Initiative

In July 2016, the Company announced a program to further accelerate its investment in new technologies as the communications industry migrates to a cloud-based architecture (the "2016 Restructuring Initiative"). The Company expects to record restructuring expense aggregating between $\$ 3$ million and $\$ 4$ million in connection with this action, resulting in expected annual savings of approximately $\$ 6$ million to $\$ 8$ million. The Company recorded $\$ 1.5$ million of expense in the year ended December 31, 2016 and expects to record the remaining expense by the end of the second quarter of 2017. The Company intends to utilize the majority of the savings to shift headcount toward new strategic initiatives, such as new products and an expanded go-to-market footprint in selected geographies and discrete vertical markets. A summary of the 2016 Restructuring Initiative accrual activity for the year ended December 31, 2016 is as follows:


The Company expects that the amounts accrued under the 2016 Restructuring Initiative will be paid by end of the fourt quarter of 2017

## Taqua Restructuring Initiativ

In connection with the acquisition of Taqua, the Company's management approved a restructuring plan in the third quarter of 2016 to eliminate certain redundant positions within the combined companies. On October 24, 2016, the Audit Committee of the Board of Directors of the Company approved a broader Taqua restructuring plan related to headcount and redundant facilities (both restructuring plans, the "Taqua Restructuring Initiative"). In connection with this initiative, the Company recorded $\$ 1.2$ million in the year ended December 31, 2016. The Company anticipates it will record additional future expense in connection with this initiative for headcount and redundant facilities aggregating approximately $\$ 1$ million. A summary of the Taqua Restructuring Initiative accrual activity for the year ended December 31, 2016 is as follows:

|  | Balance at January 1, 2016 |  | Initiatives charged to expense |  | Adjustments in estimate |  | $\underset{\text { payments }}{\text { Cash }}$ |  | $\begin{gathered} \text { Balance at } \\ \text { December 31, } \\ 2016 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Severance | \$ | - | \$ | 971 | \$ | - | \$ | (587) | \$ | 384 |
| Facilities |  | - |  | 218 |  | - |  | - |  | 218 |
|  | \$ |  | S | 1.189 | \$ |  | S | (587) | \$ | 602 |

The Company expects that the amounts accrued under the Taqua Restructuring Initiative will be paid by the end of the second quarter of 2017.

## 2015 Restructuring Initiative

To better align the Company's cost structure to its then-current revenue expectations, in April 2015, the Company announced a cost reduction review. As part of this review, on April 16, 2015, the Company initiated a restructuring plan to reduce its workforce by approximately 150 positions, or $12.5 \%$ of its worldwide workforce (the "2015 Restructuring Initiative"). In connection with the 2015 Restructuring Initiative, the Company recorded $\$ 3.8$ million of restructuring expense for severance and related costs in the year ended December 31, 2015. The Company recorded $\$ 67,000$ in the year ended December 31, 2016 to adjust the amount expected to ultimately be paid for severance. Summaries of the 2015 Restructuring Initiative accrual for the years ended December 31, 2016 and 2015 are as follows (in thousands):


The Company expects that the remaining amount accrued under the 2015 Restructuring Initiative will be paid by the end of 2017.

## 2012 Restructuring Initiative

In August 2012, the Company announced that it had committed to a restructuring initiative to streamline operations and reduce operating costs by closing and consolidating certain facilities and reducing its worldwide workforce (the "2012 Restructuring Initiative"). The Company regularly reviews its restructuring accruals against expected cash expenditures to determine if adjustments are required. As a result of such reviews, the Company recorded a net credit to restructuring expense

## SONUS NETWORKS, INC.

aggregating $\$ 1.7$ million in the year ended December 31, 2015. This amount is comprised of credits of $\$ 1.4$ million in connection with a settlement with the landlord of the Company's Fremont, California facility to vacate the facility without penalty or future payments, $\$ 0.3$ million in connection with a settlement with the landlord of the Company's Dulles, Virginia facility for an amount that was lower than had previously been accrued and $\$ 0.1$ million in connection with changes in the amounts of severance ultimately paid to certain individuals. These credits were partially offset by $\$ 0.1$ million of incremental expense related to vacating the Company's Rochester, New York facility. As of December 31, 2016, the payments related to the 2012 Restructuring Initiative had been completed. A summary of the 2012 Restructuring Initiative accrual activity for the year ended December 31, 2015 is as follows (in thousands):


## Balance Sheet Classificatio

At December 31, 2016, the long-term portion of accrued restructuring was approximately $\$ 62,000$ and represented future lease payments on restructured facilities. At December 31, 2015, the Company's accrued restructuring was all classified as current

## (12) DEBT

## Credit Agreement

The Company entered into a credit agreement by and among the Company, as Borrower, Bank of America, N.A. ("Bank of America"), as Administrative Agent, Swing Line Lender and L/C Issuer, and the other lenders from time to time party thereto on June 27, 2014, which agreement was amended by a First Amendment to Credit Agreement on June 26, 2015 (the "Cred Agreement"), which agreement was amended by a First Amendment to Credit Agreement on June 26, 2015 (the "First Amendment") and further amended by a Second Amendment to Credit Agreement on June 13, 2016 (the "Second Amendment" and collectively with the Credit Agreement and the First Amendment, the "Amended Credit Agreement"). Certain terms of the Credit Agreens have been annded by the Second Amendment, including, among oher Agio (1) an incrase of the commitments from $\$$ ser any time from $\$ 85$ million to $\$ 50$ million; and (iv) reduction of the
 borm equal to the London Interbank Offered Rate plus $1.5 \%$ per (i)num) for a E ollar R
 Fed by

The obligations of the Company under the Amended Credit Agreement are guaranteed by Sonus International, Inc., Sonus Federal, Inc., Taqua, LLC and Network Equipment Technologies, Inc. ("NET") (collectively with the Company, the "Loan Parties") pursuant to a Master Continuing Guaranty and are secured by the assets of the Loan Parties pursuant to a Security and Pledge Agreement.

The Amended Credit Agreement contains affirmative, negative and financial covenants customary for financings of this type. The negative covenants include limitations on liens, indebtedness, fundamental changes, dispositions, restricted payments, investments, transactions with affiliates, certain restrictive agreements and compliance with sanctions laws and regulations. The total revenues of the Loan Parties cannot be less than an aggregate of $\$ 50$ million as of the last day of the Loan Parties' fiscal quarter, computed on a fiscal quarterly basis. The credit facility will become due on June 30, 2017, subject to acceleration upon certain specified events of default, including, without limitation, payment defaults, defaults in the
performance of affirmative and negative covenants, the inaccuracy of representations or warranties, bankruptcy and insolvencyrelated defaults, defaults relating to judgments, an ERISA Event (as defined in the Credit Agreement), the failure to pay specified indebtedness and a change of control default.

The Company did not have any amounts outstanding under the Amended Credit Agreement at December 31, 2016

## Assumed Debt - NET Acquisition

In December 2007, NET issued $\$ 85.0$ million of 3 3/4\% Convertible Senior Notes due December 15, 2014 (the "2007 Notes") in a private placement, of which $\$ 10.5$ million in principal remained outstanding at the NET Acquisition Date, and under which NET remained obligated after the acquisition. The 2007 Notes bore interest at a rate of $33 / 4 \%$ per annum and matured on December 15, 2014

The $\$ 2.4$ million in aggregate principal underlying the 2007 Notes was paid in full on December 4, 2014 and accordingly, at December 31, 2014, NET's obligations under the 2007 Notes were discharged.

## (13) LONG-TERM LIABILITIES

Long-term liabilities consisted of the following (in thousands)

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| Capital lease obligations | \$ | 124 | \$ | 131 |
| Deferred rent |  | 1,812 |  | 2,606 |
| Restructuring |  | 1,267 |  | 749 |
| Other |  | 790 |  | 844 |
|  |  | 3,993 |  | 4,330 |
| Current portion |  | $(2,360)$ |  | $(1,570)$ |
| Long-term liabilities, net of current portion | \$ | 1.633 | \$ | 2.760 |

## (14) COMMON STOCK REPURCHASES AND UNDERWRITTEN OFFERING

## Stock Buyback Program

On July 29, 2013, the Company announced that its Board of Directors had authorized a stock buyback program to repurchase up to $\$ 100$ million of the Company's common stock from time to time on the open market or in privately negotiated transactions. The timing and amount of any shares repurchased will be determined by the Company's management based on its evaluation of market conditions and other factors. The Company may elect to implement a $10 b 5-1$ repurchase program, which would permit shares to be repurchased when the Company might otherwise be precluded from doing so under insider trading laws. The buyback program does not have a fixed expiration date but may be suspended or discontinued at any time. The buyback program is being funded using the Company's working capital.

During the year ended December 31, 2016, the Company spent $\$ 9.5$ million, including transaction fees, to repurchase and retire 1.3 million shares of its common stock under the buyback program. During the year ended December 31, 2015, the Company spent $\$ 7.9$ million, including transaction fees, to repurchase and retire 0.6 million shares of its common stock under the buyback program.

At December 31, 2016, the Company had $\$ 5.4$ million remaining under the stock buyback program for future repurchases.

## Underwritten Offering

On March 20, 2014, the Company announced the commencement of an underwritten public offering of 7.5 million shares of its common stock on behalf of Galahad Securities Limited and its affiliated entities (collectively, the "Legatum Group"). The underwriter of the offering was granted a 30 -day option to purchase up to 1.125 million additional shares from

## SONUS NETWORKS, INC.

Notes to Consolidated Financial Statements (Continued)
the Legatum Group. The Legatum Group received all the proceeds from the underwritten offering; no shares in the underwritten offering were sold by Sonus or any of its officers or directors. Sonus purchased 4.3 million shares of its common stock from the underwriter for $\$ 17.4410$ per share, the price equal to the price paid by the underwriter to the Legatum Group in the underwritten offering for a total of $\$ 753$ million, including transaction fees of $\$ 03$ million. This repurchase was not completed under the Company's stock buyback program. Sonus funded the share repurchase with cash on hand. The repurchased shares were retired upon completion of the transaction.

## (15) STOCK-BASED COMPENSATION PLANS

## Amended and Restated Stock Incentive Plan

The Company's 2007 Stock Incentive Plan (the "2007 Plan") was approved at, and became effective on the date of, the Company's Annual Meeting of Stockholders on November 12, 2007. The 2007 Plan provides for the award of options to purchase the Company's common stock ("stock options"), stock appreciation rights ("SARs"), restricted stock awards ("RSAs"), restricted stock units ("RSUs"), performance-based stock awards ("PSAs"), PSUs and other stock-based awards to employees, officers, directors (including those directors who are not employees or officers of the Company), consultants and advisors of the Company and its subsidiaries.

At its 2016 Annual Meeting of Stockholders held on June 9, 2016 (the "2016 Annual Meeting"), the Company's stockholders approved (i) changing the name of the 2007 Plan to the Amended and Restated Stock Incentive Plan (the "Stock Plan") and (ii) other amendments to the Stock Plan including, among other things, to:

- Increase the number of shares of the Company's common stock authorized for issuance under the Stock Plan by 800,000 shares;
- Extend the Stock Plan's termination date through June 9, 2026, the tenth anniversary of the 2016 Annual Meeting
- Revise the rate at which RSAs, RSUs, PSAs and PSUs (collectively, "full value awards") are counted against the shares of common stock available for issuance under the Stock Plan from 1.61 shares for every one share subject to such award to 1.50 shares for every one share subject to such award (the "fungible share pool formula"). Shares of common stock subject to full value awards that were granted under any prior ratio that applied at the time such awards were granted will continue to return to the Stock Plan upon forfeiture of such awards at the respective previous ratio of $1.50,1.57$ and 1.61 , as applicable;
- Increase the maximum number of shares of the Company's common stock with respect to which awards may be granted to any participant under the Stock Plan to $1,000,000$ shares per calendar year;
- Increase the maximum number of shares of the Company's common stock with respect to which awards may be granted under the Stock Plan to any director who is not an employee of the Company at the time of grant to 100,000 shares per calendar year; and
- Prohibit stock options and SARs granted under the Stock Plan from (i) providing for the payment or accrual of dividend equivalents or (ii) containing any provision entitling the grantee to the automatic grant of additional stock options or SARs, as applicable, in connection with the exercise of the original stock option or SAR, as applicable

In June 2016, the Compensation Committee of the Company's Board of Directors (the "Compensation Committee") voted to change the standard vesting terms for awards of stock options, RSAs and RSUs granted after June 9, 2016 as follows:

- Stock options will generally vest over a period of three years, with one-third of the stock options vesting on the first anniversary of the grant date and the remaining two-thirds vesting in equal monthly increments thereafter through the third anniversary of the grant date. Stock options had previously generally vested over a period of four years, with one-fourth of the stock options vesting on the first anniversary of the grant date and the remaining three-fourth vesting in equal monthly increments thereafter through the fourth anniversary of the grant date.

RSAs and RSUs (collectively the "restricted stock grants") will generally vest over a period of three years, with one third of the shares underlying the grant vesting on the first anniversary of the grant date and the remaining two-thirds vesting in equal increments semi-annually through the third anniversary of the grant date. Restricted stock grants had previously vested over a period of four years, with one-fourth of the shares underlying the grant vesting on the first anniversary of the grant date and the remaining three-fourths vesting in equal increments semi-annually through the fourth anniversary of the grant date.

The Company neither adjusted nor intends to adjust the vesting schedules of stock options or restricted stock grants awarded prior to June 9,2016 to reflect the new three-year vesting schedules.

At December 31, 2016, there were 1.7 million shares available for future issuance under the Stock Plan. Under the fungible share pool formula, the number of total shares available for future awards under the Stock Plan would be reduced by the fungible share pool multiple of 1.50 . Accordingly, the total number of shares awarded in the future under the Stock Plan could be less than the number of shares currently available for issuance.

## 2008 Stock Incentive Plan

In connection with the acquisition of NET, the Company assumed NET's 2008 Equity Incentive Plan and subsequently renamed it the 2008 Stock Incentive Plan (the " 2008 Plan"). In December 2014 all of the unissued shares under the 2008 Plan were transferred to the 2007 Plan (now the Stock Plan). Any outstanding awards under the 2008 Plan that in the future expire, terminate, are canceled, surrendered or forfeited, or are repurchased by the Company will be returned to the Stock Plan Accordingly, at December 31, 2016, there were no shares available for future issuance under the 2008 Plan.

## 2012 Stock Incentive Plan

In connection with the acquisition of PT, the Company assumed PT's 2012 Amended Performance Technologies, Incorporated Omnibus Incentive Plan, and subsequently renamed it the 2012 Stock Incentive Plan (the " 2012 Plan"). In December 2014 all of the unissued shares under the 2012 Plan were transferred to the 2007 Plan (now the Stock Plan). Any outstanding awards under the 2012 Plan that in the future expire, terminate, are canceled, surrendered or forfeited, or are repurchased by the Company will be returned to the Stock Plan. Accordingly, at December 31, 2016, there were no shares available for future issuance under the 2012 Plan.

## Executive Equity Arrangements

On April 1, 2016, the Company granted an aggregate of 131,250 PSUs with both market and service conditions to six of its executives (the "2016 PSUs"). The terms of the 2016 PSUs are such that up to one-third of the shares subject to the 2016 PSUs will vest, if at all, on each of the first, second and third anniversaries of the date of grant (collectively, the "2016 PSU Vesting Dates") depending on the Company's total shareholder return ("TSR") compared to the TSR of the companies included in the NASDAQ Telecommunications Index for the same fiscal year, measured by the Compensation Committee after each of the 2016, 2017 and 2018 fiscal years, respectively (as used in this paragraph, each, a "Performance Period"). The shares determined to be earned will vest on the anniversary of the grant date following each Performance Period. Shares subject to the 2016 PSUs that fail to be earned will be forfeited. The 2016 PSUs included a market condition that required the use of a Monte Carlo simulation approach to model future stock price movements based upon the risk-free rate of return, the volatility of each entity, and the pair-wise covariance between each entity. These results were then used to calculate the grant date fair values of the 2016 PSUs. Because the 2016 PSUs have market conditions, the Company is required to record expense for the 2016 PSUs through the final 2016 PSU Vesting Date of April 1, 2019, regardless of the number of shares that are ultimately earned.

On March 16, 2015, the Company granted an aggregate of 131,250 PSUs with both market and service conditions to eight of its executives (the "2015 PSUs"). The terms of the 2015 PSUs are such that up to one-third of the shares subject to the 2015 PSUs will vest, if at all, on each of the first, second and third anniversaries of the date of grant (collectively, the "2015 PSU Vesting Dates") depending on the Company's TSR compared to the TSR of the companies included in the NASDAQ Telecommunications Index for the same Performance Period, measured by the Compensation Committee at the end of each of the 2015, 2016 and 2017 fiscal years, respectively (as used in this paragraph, each, a "Performance Period"). The shares determined to be earned will vest on the anniversary of the grant date following each Performance Period. Shares subject to the 2015 PSUs that fail to be earned will be forfeited. The 2015 PSUs included a market condition that required the use of a Monte

Carlo simulation approach to calculate the grant date fair values of the 2015 PSUs. Because the 2015 PSUs have marke conditions, the Company is required to record expense for the 2015 PSUs through the final 2015 PSU Vesting Date of March 16, 2018, regardless of the number of shares that are ultimately earned, if any In February 2016, the Compensation Committee determined that the performance metrics for the 2015 PSUs were not achieved for the 2015 Performance Period. Accordingly, 37,081 shares in the agregate, representing one-third of the 2015 PSUs held by the then-remaining six executives, were forfeited, and are reported as such in the performance-based units table below.

In connection with the Company's annual incentive program, 22 executives of the Company were given the choice to receive all or half of their fiscal year 2015 bonuses (the " 2015 Bonus"), if any were earned, in the form of shares of the Company's common stock (the "2015 Bonus Shares"). Each executive could also elect not to participate in this program and to earn his or her 2015 Bonus, if any, in the form of cash. Under this program, the amount of the 2015 Bonus, if any, for each executive would be determined by the Compensation Committee. The number of shares of the Company's common stock that would be granted to those executives who elected to receive their 2015 Bonus entirely in the form of shares of common stock would be calculated by dividing an amount equal to 1.5 times each executive's 2015 Bonus earned by $\$ 20.55$, the closing pric of the Company's common stock on January 2, 2015. The number of shares of the Company's common stock that would be granted to those executives who elected to receive one-half of their 2015 Bonus in the form of shares of common stock would granted to those executives who elected to receive one-half of their 2015 Bonus in the form of shares of common stock would portion equal to $50 \%$ of their respective 2015 Bonus earned. Under this program, the 2015 Bonus, if any, would be granted portion equal to $50 \%$ of their respective 2015 Bonus earned. Under this program, the 2015 Bonus, if any, would be granted
and/or paid on a date concurrent with the timing of the payout of bonuses under the Company-wide incentive bonus program and would be fully vested on the date of grant. Of the eligible executives, 16 elected to receive their entire 2015 Bonus in shares of common stock, five elected to receive $50 \%$ of their 2015 Bonus in shares of common stock and $50 \%$ in cash, and o elected not to participate and instead to receive his entire 2015 Bonus in cash. The Company determined that the grant date criteria for the 2015 Bonus Shares was met on July 2, 2015, and accordingly, recorded stock-based compensation expense based on the grant date fair value of $\$ 6.79$ per share. Subsequent to that date, in September 2015, the Compensation Committee considered the impact on employee retention and incentive compensation caused by the drop in the price of the Company's common stock since January 2, 2015, and indicated its intent to pay all such executives their 2015 Bonus, if any was earned, in cash. As a result, at September 25, 2015, the Company reclassified the stock-based compensation expense recorded through that date in connection with the 2015 Bonus Shares aggregating $\$ 1.0$ million from Additional paid-in capital to Accrued expenses and recorded incremental bonus expense of $\$ 1.3$ million related to the estimated 2015 Bonus payment. The Company recorded bonus expense in the fourth quarter of 2015 and paid the cash bonuses in March 2016.

In June 2014, the Company modified the outstanding stock options that had been granted to its non-employee member of the Board of Directors (the "Board Members") to extend the exercise period to the lesser of three years from the date that a Board Member stepped down from his or her position on the Board of Directors or the remaining contractual life of the respective stock options. In connection with this modification, the Company recorded $\$ 0.7$ million of incremental stock-based compensation expense in 2014. This expense is included as a component of General and administrative expense in the Company's consolidated statement of operations for the year ended December 31, 2014.

On January 2, 2014, Raymond P. Dolan, the Company's President and Chief Executive Officer, elected to accept shares of restricted stock in lieu of base salary for the period from January 1, 2014 through December 31, 2014. Accordingly, the Company granted Mr. Dolan restricted stock (the "2014 Dolan Salary Shares") on January 2, 2014, with the number granted calculated by dividing an amount equal to 1.5 times Mr. Dolan's base salary for the period from January 1, 2014 through December 31, 2014 by the closing price of the Company's common stock on the date of grant. The 2014 Dolan Salary Shares vested on December 31, 2014. Effective September 16, 2014, Mr. Dolan's annual base salary was increased from $\$ 500,000$ to $\$ 600,000$. For the remainder of 2014 , such increase was prorated and paid in cash and was not subject to any stock-for-cash election. The Company recorded stock-based compensation expense related to the 2014 Dolan Salary Shares ratably from January 1, 2014 to December 31, 2014.

In January 2014, 21 of the Company's executives were given the choice to receive all or half of their fiscal year 2014 bonuses (the "2014 Bonus"), if any were earned, in the form of shares of the Company's common stock (the "2014 Bonus Shares"). Each executive could also elect not to participate in this program and to earn his or her 2014 Bonus in the form of cash. The amount of the 2014 Bonus was determined by the Compensation Committee on February 19, 2015. The number of 2014 Bonus Shares that was granted to those executives who elected to receive their 2014 Bonus entirely in the form of share of common stock was calculated by dividing an amount equal to 1.5 times each executive's 2014 Bonus earned by the closing price of the Company's common stock on January 2, 2014. The number of 2014 Bonus Shares that was granted to those
executives who elected to receive one-half of their 2014 Bonus in the form of shares of common stock was calculated by dividing an amount equal to 1.5 times one-half of each executive's 2014 Bonus earned by the closing price of the Company's common stock on Jnuary 2.2014 with the cash portion equal to $50 \%$ of their respective 2014 Bonus earned. The 2014 B
 obligated to hold such shares for at least one year, until February 20, 2016. Of the eligible executives, 17 elected to receive their entire 2014 Bonus in shares of common stock and 4 elected to receive $50 \%$ of their 2014 Bonus in shares of common stock and $50 \%$ in cash. The Company determined that the grant date criteria for accounting purposes for the 2014 Bonus Shares was met on July 9 , 2014, and accordingly the Company determined that the grant date fair value of the 2014 Bonu Shares was $\$ 19.25$ per are the closing price of the Compan's at date. The Company recorded expense through February 20, 2015, when the shares were issued.

In connection with the October 2016 separation of one executive from the Company and in accordance with his employment agreement with the Company, as amended, the Company accelerated the vesting of certain unvested stock options, RSAs and PSUs. The accelerated RSAs and PSUs are reported as "Vested" in the respective tables below.

In connection with the separation of three executives from the Company during 2015 and in accordance with their respective employment agreements with the Company, the Company accelerated the vesting of certain unvested stock options, RSAs and PSUs

## Stock Options

Options are issued to purchase shares of common stock of the Company at prices that are equal to the fair market value of the shares on the date the option is granted. Options granted under the Stock Plan generally expire ten years from the date of grant. Outstanding options under the 2008 Plan generally expire seven years from the date of grant. Outstanding options under the 2012 Plan generally expire five years from the date of grant. The grant date fair value of options, adjusted for estimated forfeitures, is recognized as expense on a straight-line basis over the requisite service period, which is generally the vesting period. Forfeitures are estimated based on historical experience.

The activity related to the Company's outstanding stock options during the year ended December 31, 2016 was as follows:

|  | Number of Shares | $\begin{gathered} \text { Weighted } \\ \text { Average } \\ \text { Exercise Price } \end{gathered}$ |  | Weighted <br> Average <br> Remaining <br> Contractual <br> Tram <br> (years) | $\begin{gathered} \text { Aggregate } \\ \text { Intrinsic } \\ \text { Value } \\ \text { (in thousands) } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Outstanding at January 1, 2016 | 6,352,208 | \$ | 15.99 |  |  |  |
| Granted | 172,450 | \$ | 8.31 |  |  |  |
| Exercised | $(23,070)$ | \$ | 6.63 |  |  |  |
| Forfeited | $(202,233)$ | \$ | 14.32 |  |  |  |
| Expired | $(689,249)$ | \$ | 16.99 |  |  |  |
| Outstanding at December 31, 2016 | 5,610,106 | \$ | 15.73 | 5.32 | \$ | 109 |
| Vested or expected to vest at December 31, 2016 | 5,541,766 | \$ | 15.75 | 5.29 | \$ | 108 |
| Exercisable at December 31, 2016 | 4,754,860 | \$ | 15.81 | 4.91 | \$ | 105 |

The grant date fair values of options to purchase common stock granted in the years ended December 31, 2016, 2015 and 2014 were estimated using the Black-Scholes valuation model with the following assumptions:

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| Risk-free interest rate | 1.00\% - 1.61\% | 1.46\%-1.75\% | 1.53\%-2.70\% |
| Expected dividends | - | - | - |
| Weighted average volatility | 54.8\% | 54.3\% | 60.8\% |
| Expected life (years) | 5.0-10.0 | 5.0-6.0 | 4.5-6.0 |

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The risk-free interest rate used is the average U.S. Treasury Constant Maturities Rate for the expected life of the award. The expected dividend yield of zero is based on the fact that the Company has never paid dividends and has no present intention to pay cash dividends. The expected life for stock options is based on a combination of the Company's historica option patterns and expectations of future employee actions.

The weighted average grant-date fair values of options granted during the year were $\$ 4.39$ for the year ended December 31, 2016, $\$ 7.30$ for the year ended December 31, 2015 and $\$ 8.32$ for the year ended December 31, 2014.

The total intrinsic values of options exercised during the year were $\$ 42,000$ for the year ended December 31, 2016, $\$ 0.9$ million for the year ended December 31, 2015 and $\$ 5.1$ million for the year ended December 31, 2014

The Company received cash from option exercises of $\$ 153,000$ in the year ended December 31, 2016, $\$ 1.8$ million in the year ended December 31, 2015 and $\$ 10.1$ million in the year ended December 31, 2014

## Restricted Stock Grants - Restricted Stock Awards and Restricted Stock Units

The Company's outstanding restricted stock grants consist of both RSAs and RSUs. Holders of unvested RSAs have voting rights and rights to receive dividends, if declared; however, these rights are forfeited if the underlying unvested RSA shares are forfeited. Holders of unvested RSUs do not have such voting and dividend rights. The grant date fair value of restricted stock grants, adjusted for estimated forfeitures, is recognized as expense on a straight-line basis over the requisite service period. The fair value of restricted stock grants is determined based on the market value of the Company's shares on the date of grant.

The activity related to the Company's RSAs for the year ended December 31, 2016 was as follows

|  | Shares | $\begin{gathered} \text { Weighted } \\ \text { Average } \\ \text { Grant Date } \\ \text { Fair Value } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: |
| Unvested balance at January 1, 2016 | 1,512,783 | \$ | 13.48 |
| Granted | 1,666,682 | \$ | 7.70 |
| Vested | $(757,580)$ | \$ | 12.65 |
| Forfeited | $(391,857)$ | \$ | 10.09 |
| Unvested balance at December 31, 2016 | 2,030,028 | \$ | 9.69 |

The activity related to the Company's RSUs for the year ended December 31, 2016 was as follows.

|  | Shares | Weighted Average Fair Value <br> 16.05 |  |
| :---: | :---: | :---: | :---: |
| Unvested balance at January 1, 2016 | 95,361 | \$ | 16.05 |
| Granted | 53,400 | \$ | 7.58 |
| Vested | $(35,193)$ | \$ | 16.05 |
| Forfeited | $(3,349)$ | \$ | 16.05 |
| Unvested balance at December 31, 2016 | $\underline{110.219}$ | \$ | 11.95 |

The total fair value of restricted stock grant shares vested was $\$ 10.1$ million in the year ended December 31, 2016, $\$ 8.5$ million in the year ended December 31, 2015 and $\$ 6.7$ million in the year ended December 31, 2014

## Performance-Based Stock Grants - Performance-Based Stock Units

In 2016, the Company's outstanding performance-based stock grants consisted of PSUs. Holders of unvested PSUs do not have voting and dividend rights. The Company recognizes the grant date fair value of PSUs on a graded attribution basis through the vest date of the respective awards so long as it remains probable that the related service conditions will be satisfied.

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The activity related to the Company's PSUs for the year ended December 31, 2016 was as follows:

|  | Shares | Weighted <br> Average Grant Date <br> Fair Value |  |
| :---: | :---: | :---: | :---: |
| Unvested balance at January 1, 2016 | 111,250 | \$ | 14.68 |
| Granted | 131,250 | \$ | 10.24 |
| Vested | $(18,438)$ | \$ | 12.34 |
| Forfeited | $(76,977)$ | \$ | 12.57 |
| Unvested balance at December 31,2016 | 147,085 | \$ | 12.11 |

The total fair value of performance-based stock grant shares vested was $\$ 0.2$ million in the year ended December 31 2016, $\$ 0.6$ million in the year ended December 31, 2015 and $\$ 1.7$ million in the year ended December 31, 2014

## ESPP

The ESPP is designed to provide eligible employees of the Company and its participating subsidiaries an opportunity to purchase common stock of the Company through accumulated payroll deductions.

The ESPP provides for six-month consecutive offering periods, with the purchase price of the stock equal to $85 \%$ of the lesser of the market price on the first or last day of the offering period. The maximum number of shares of common stock an employee may purchase during each offering period is 500 , subject to certain adjustments pursuant to the ESPP

At December 31, 2016, 5.0 million shares, the maximum number of shares that may be issued under the ESPP, were authorized, and 1.7 million shares were available under the ESPP for future issuance.

## Stock-Based Compensation

The consolidated statements of operations included stock-based compensation for the years ended December 31, 2016, 2015 and 2014 as follows (in thousands):

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Product cost of revenue | \$ | 359 | \$ | 317 | \$ | 337 |
| Service cost of revenue |  | 1,314 |  | 1,524 |  | 1,449 |
| Research and development |  | 5,014 |  | 5,439 |  | 5,759 |
| Sales and marketing |  | 6,209 |  | 5,423 |  | 5,437 |
| General and administrative |  | 6,872 |  | 8,996 |  | 10,932 |
|  | \$ | 19,768 | \$ | 21.699 | S | 23.914 |

There was no income tax benefit for employee stock-based compensation expense for the years ended December 31, 2016, 2015 and 2014 due to the valuation allowance recorded

At December 31, 2016, there was $\$ 20.9$ million, net of expected forfeitures, of unrecognized stock-based compensation expense related to unvested stock options, RSAs, RSUs and PSUs. This expense is expected to be recognized over a weighte average period of approximately two years.

## Common Stock Reserved

Common stock reserved for future issuance at December 31, 2016 consists of the following:

```
Stock
ESPP ESPP
```

The Company's policy is to issue authorized but unissued shares upon the exercise of stock options, grant restricted common stock awards and units and performance-based stock awards and units, and authorize the purchase of shares of the Company's common stock under the ESPP.

## (16) EMPLOYEE DEFINED CONTRIBUTION PLAN

The Company offers a $401(\mathrm{k})$ savings plan to eligible employees. In the years ended December 31, 2015 and 2014, the Company did not provide a matching contribution for deferral contributions made by employees. However, in June 2016, at the recommendation of the Compensation Committee, the Company's Board of Directors elected to reinstate a discretionary limited $401(\mathrm{k})$ match program of up to $\$ 2,000$ per year ( $\$ 1,000$ per each half-year) per eligible employee, contingent upon the Company's achievement of certain financial metric targets set by the Compensation Committee. The matching contribution became effective July 1, 2016. The Company recorded $\$ 0.6$ million of expense related to its employee defined contribution plan in the year ended December 31, 2016. The Company did not ecord ense relad it mploye defined contributio 31,2015 or 2014

## (17) INCOME TAXES

The components of loss from continuing operations before income taxes consisted of the following (in thousands)

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Income (loss) before income taxes: |  |  |  |  |  |  |
| United States | \$ | $(11,973)$ | , | $(29,595)$ | \$ | $(16,582)$ |
| Foreign |  | 557 |  | (293) |  | 1,941 |
|  | \$ | (11.416) | \$ | (29.888) |  | (14.641) |

The provision (benefit) for income taxes from continuing operations consisted of the following (in thousands):

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Provision (benefit) for income taxes: |  |  |  |  |  |  |
| Current: |  |  |  |  |  |  |
| Federal | \$ | 12 | \$ | 60 | \$ | 23 |
| State |  | 24 |  | 150 |  | 150 |
| Foreign |  | 1,378 |  | 982 |  | 926 |
| Total current |  | 1,414 |  | 1,192 |  | 1,099 |
| Deferred: |  |  |  |  |  |  |
| Federal |  | (301) |  | $(7,069)$ |  | $(3,885)$ |
| State |  | $(1,007)$ |  | 4,962 |  | $(1,656)$ |
| Foreign |  | 338 |  | 155 |  | 414 |
| Change in valuation allowance |  | 2,072 |  | 2,767 |  | 6,242 |
| Total deferred |  | 1,102 |  | 815 |  | 1,115 |
| Total | \$ | 2.516 | \$ | 2.007 | \$ | 2.214 |

SONUS NETWORKS, INC.

A reconciliation of the Company's effective tax rate for continuing operations to the statutory federal rate is as follows:

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| U.S. statutory income tax rate | (35.0)\% | (35.0)\% | (35.0)\% |
| State income taxes, net of federal benefit | - | - | (4.9) |
| Foreign income taxes | 7.9 | 3.6 | 5.1 |
| Settlement of foreign tax audit | 5.2 | - | - |
| Foreign deemed dividends | 5.0 | 1.7 | 11.5 |
| Stock-based compensation | 38.9 | 14.4 | 12.0 |
| Tax credits | (11.6) | (3.3) | (14.6) |
| Valuation allowance | 1.9 | 24.3 | 29.8 |
| Goodwill amortization | 6.7 | 2.2 | 4.8 |
| Meals and entertainment | 1.4 | 0.8 | 2.5 |
| Tax gain on sale of acquired assets | - | - | 4.2 |
| Other, net | 1.6 | (2.0) | (0.3) |
| Effective income tax rate | 22.0 \% | 6.7 \% | 15.1 \% |

The following is a summary of the significant components of deferred income tax assets and liabilities (in thousands):

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  |
| Assets: |  |  |  |  |
| Net operating loss carryforwards | \$ | 77,425 | \$ | 76,970 |
| Research and development tax credits |  | 24,440 |  | 22,412 |
| Other tax credits |  | 230 |  | 230 |
| Intangible assets |  | 9,270 |  | 7,128 |
| Deferred revenue |  | 3,176 |  | 3,936 |
| Accrued expenses |  | 6,699 |  | 8,706 |
| Inventory |  | 5,010 |  | 6,103 |
| Stock-based compensation |  | 14,295 |  | 13,594 |
| Other temporary differences |  | 2,892 |  | 2,623 |
|  |  | 143,437 |  | 141,702 |
| Valuation allowance |  | $(141,895)$ |  | $(139,823)$ |
| Total deferred tax assets |  | 1,542 |  | 1,879 |
| Liabilities: |  |  |  |  |
| Purchased intangible assets |  | $(3,047)$ |  | $(2,282)$ |
| Total deferred tax liabilities |  | $(3,047)$ |  | $(2,282)$ |
| Total net deferred tax assets | S | (1,505) | \$ | (403) |
|  |  |  |  |  |
| Reported as: |  |  |  |  |
| Deferred income taxes - noncurrent assets | S | 1,542 | \$ | 1,879 |
| Deferred income taxes - noncurrent liabilities |  | $(3,047)$ |  | $(2,282)$ |
|  | \$ | (1.505) | \$ | (403) |

At December 31, 2016, the Company had cumulative NOLs of $\$ 226.5$ million for federal income tax purposes and $\$ 111.2$ million for state income tax purposes. The federal NOL carryforwards expire at various dates from 2020 through 2034. The state NOL carryforwards expire at various dates from 2017 through 2036. Of the federal NOL, $\$ 150.8$ million is attributable to stock option deductions. The Company's federal NOL carryforwards for tax return purposes are $\$ 22.7$ million greater than 1 deductions in excess of bor concial repation costs) not recognized for financial stax benefts (stock-based benefit of thi benefit of this loss would be recognized for financial statement purposes in the period in which the tax benefit reduces incom taxes payable, which will not be recognized until the Company recognizes a reduction in taxes payable from all other NOL caryorwars. compensation expenses recognized financial reporting purposes that are not ded or tax purposes until options are exercised or shares vest. The ultimate realization of the benefit related to stock options is directly associated with the price of

## SONUS NETWORKS, INC.

the Company's common stock. Employees will not exercise the underlying options unless the current market price exceeds the option exercise price.

The Company also has available federal and state research and development credit carryforwards of approximately $\$ 25$ million that expire at various dates from 2017 through 2036

In November 2015, the FASB issued ASU 2015-17, which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent in the consolidated balance sheet. The Company elected to early-adopt ASU 2015-17 and accordingly, reclassified its net current deferred tax asset totaling $\$ 1.0$ million to its noncurrent net deferred tax asset as of December 31 2015. No prior periods were retrospectively adjusted

During 2016 and 2015, the Company performed an analysis to determine if, based on all available evidence, it considered it more likely than not that some portion or all of the recorded deferred tax assets will not be realized in a future period. As a result of the Company's evaluation, the Company concluded that there was insufficient positive evidence to overcome the more objective negative evidence related to its cumulative losses and other factors. Accordingly, the Company has maintained valuation allowance against its domestic deferred tax asset amounting to $\$ 141.9$ million at December 31, 2016 and $\$ 139.8$ million at December 31, 2015

A reconciliation of the Company's unrecognized tax benefits is as follows (in thousands):

|  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unrecognized tax benefits at January 1 | \$ | 8,888 | \$ | 8,875 | \$ | 8,861 |
| Increases related to current year tax positions |  | 36 |  | 13 |  | 14 |
| Increases related to prior period tax positions |  | 723 |  | - |  | - |
| Decreases related to prior period tax positions |  | (81) |  | - |  | - |
| Settlements |  | (597) |  | - |  | - |
| Unrecognized tax benefits at December 31 | \$ | 8.969 | \$ | 8,888 | \$ | 8.875 |

The Company recorded liabilities for potential penalties and interest of $\$ 80,721$ for the year ended December 31, 2016, $\$ 13,000$ for the year ended December 31, 2015 and $\$ 14,000$ for the year ended December 31, 2014. The Company does not expect its unrecognized tax benefits to change materially over the next 12 months. Due to the Company's valuation allowance at December 31, 2016, none of the Company's unrecognized tax benefits, if recognized, would affect the effective tax rate.

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction, as well as various state and foreign jurisdictions. Generally, the tax years 2013 through 2015 remain open to examination by the major taxing jurisdictions to which the Company is subject. The Company's federal NOLs generated prior to 2013 could be adjusted on examination even though the year in which the loss was generated is otherwise closed by the statute of limitations. The Company's primary state jurisdiction, Massachusetts, has open periods from 2011 through 2013.

The acquisition of PT was accounted for as a taxable business combination and the Company carried over the existing tax basis of the acquired assets and liabilities as the Company did not make the election under Section $338(\mathrm{~g})$ of the Internal Revenue Code to have the transaction treated as an asset acquisition election to step up the basis in the acquired assets and liabilities to fair market value for tax purposes. Deferred taxes were recorded as part of the business combination based on the differences between the tax basis of the acquired assets or liabilities and their reported amounts for financial reporting purposes. The Company concluded that there was insufficient positive evidence to overcome the more objective negative evidence related to cumulative losses and other factors. Accordingly, the Company recorded a valuation allowance against the acquired deferred tax assets. As a result of the change in control of PT, the NOL and credit carryforwards are limited under Internal Revenue Code Section 382.

The Company acquired approximately $\$ 26$ million of federal and state NOL carryforwards and federal and state research and development credit carryforwards as a result of the PT acquisition. Under the provisions of the Internal Revenue Code, the NOL and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities. NOL and tax credit carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership of significant shareholders over a three-year period in excess of $50 \%$, as defined under Sections 382 and 383 of the Internal Revenue Code, as well as similar state provisions. This could limit the amount of tax attributes that can
be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. The Company has not performed a comprehensive Section 382 study to determine any potential loss limitation with regard to NOL carryforwards and tax credits acquired as a result of the PT acquisition.

The acquisition of the SDN Business was a taxable purchase of a business under Section 197 of the Internal Revenue Code. The tax amortization related to the SDN Business goodwill created a deferred tax liability.

The acquisition of Taqua was a taxable purchase of a business under Section 197 of the Internal Revenue Code. The tax amortization related to Taqua goodwill created a deferred tax liability.

## (18) MAJOR CUSTOMERS

The following customer contributed $10 \%$ or more of the Company's revenue in each of the years ended December 31, 2016, 2015 and 2014:

## AT\&T

| Year ended December 31, |
| :---: |
| $\frac{2016}{12 \%}-\frac{2015}{13 \%}-\frac{2014}{19 \%}$ |

At December 31, 2016, no customer accounted for $10 \%$ or more of the Company's accounts receivable balance. At December 31, 2015, one customer accounted for $10 \%$ or more of the Company's accounts receivable balance, representing approximately $11 \%$ of total accounts receivable. The Company performs ongoing credit evaluations of its customers and generally does not require collateral on accounts receivable. The Company maintains an allowance for doubtful accounts and such losses have been within management's expectations

## (19) GEOGRAPHIC AND SEGMENT INFORMATION

The Company's classification of revenue by geographic area is determined by the location of the Company's customers. The following table summarizes revenue by geographic area as a percentage of total revenue:

|  | Year ended December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2015 | 2014 |
| United States | 69\% | 71\% | 71\% |
| Europe, Middle East and Africa | 13 | 13 | 13 |
| Japan | 10 | 10 | 9 |
| Other Asia Pacific | 5 | 4 | 5 |
| Other | 3 | 2 | 2 |
|  | 100\% | 100\% | 100\% |

The Company's service revenue is comprised of the following (in thousands):

|  | Year ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  |
| Maintenance | \$ | 86,995 | \$ | 89,280 | \$ | 90,003 |
| Professional services |  | 19,215 |  | 17,841 |  | 23,868 |
|  | \$ | 106,210 | \$ | 107.121 | \$ | $\underline{113.871}$ |

## (20) RELATED PARTIES

H. Brian Thompson, who was an independent member of the Company's Board of Directors until the Company's 2016 Annual Meeting on June 9, 2016, is the Executive Chairman of GTT Communications, Inc., a leading global cloud networking provider to multinational clients ("GTT"). Howard Janzen is an independent member of the Company's Board of Directors and also serves as an independent director of GTT. In October 2015, GTT completed the acquisition of One Source Networks Inc.,
a provider of global data, Internet, SIP trunking and managed services ("One Source"). One Source is a customer of the Company. The Company had a well-established and ongoing business relationship with One Source prior to its acquisition by GTT. The Company recognized revenue aggregating approximately $\$ 23,000$ from One Source in the period from January 1 2016 through June 9,2016 , and approximately $\$ 150,000$ in the year ended December 31, 2015, pursuant to the terms of a contract between the parties, effective June 28, 2010. The Company believes the terms of this contract are consistent with third-party arrangements that provide similar services.

Since Mr. Thompson is no longer a member of the Company's Board of Directors, the Company's relationship with GTT no longer triggers a related party transaction unless and until any of the Company's directors, executive officers or holders of $5 \%$ or more of any class of its capital stock or any member of their immediate family has a direct or indirect material interest in a transaction between the Company and GTT in which the amount involved exceeds or will exceed $\$ 120,000$.

As a matter of corporate governance policy and practice, related party transactions are presented and considered by the Audit Committee of the Company's Board of Directors in accordance with the Company's Related Person Transaction Policy

## (21) COMMITMENTS AND CONTINGENCIES

## Leases

The Company leases its facilities under operating leases, which expire at various times through 2024. The Company is responsible for certain real estate taxes, utilities and maintenance costs under these leases. The Company's corporate headquarters is located in a leased facility in Westford, Massachusetts, consisting of 97,500 square feet under a lease that expires in August 2018

Escalation clauses, free rent and other lease concessions are recognized on a straight-line basis over the minimum lease term. Rent expense was $\$ 4.5$ million for the year ended December 31, 2016, $\$ 5.2$ million for the year ended December 31, 2015 and $\$ 6.1$ million for the year ended December 31, 2014.

Future minimum payments under operating lease arrangements as of December 31, 2016 were as follows (in thousands)
Years ending December 31,

| Years ending December 31, | $\$ 4,600$ |  |
| :--- | ---: | ---: |
| 2017 | 3,593 |  |
| 2018 | 2,094 |  |
| 2019 | 640 |  |
| 2020 | 266 |  |
| 2021 | - |  |
| Thereafter |  |  |

Thereafter

## Litigation and Contingencies

On April 6, 2015, Ming Huang, a purported shareholder of the Company, filed a Class Action Complaint (Civil Action No. 3:15-02407), alleging violations of the federal securities laws (the "Complaint") in the United States District Court for the District of New Jersey (the "District of New Jersey"), against the Company and two of its officers, Raymond P. Dolan, the Company's President and Chief Executive Officer, and Mark T. Greenquist, the Company's former Chief Financial Officer (collectively, the "Defendants"). On September 21, 2015, in response to motions subsequently filed with the District of New Jersey by four other purported shareholders of the Company seeking status as lead plaintiff, the District of New Jersey
appointed Richard Sousa as lead plaintiff (the "Plaintiff"). The Plaintiff claims to represent purchasers of the Company' appointed Richard Sousa as lead plaintiff (the "Plaintiff"). The Plaintiff claims to represent purchasers of the Company's common stock during the period from October 23, 2014 to March 24, 2015, and seeks unspecified damages. The principal allegation contained in the Complaint is that the Defendants made misleading forward-looking statements concerning the Company's fiscal first quarter of 2015 financial performance. On September 22, 2015, the Company filed a Motion to Transfer (the "Motion to Transfer") this case to the United States District Court for the District of Massachusetts. The Plaintiff filed his opposition to the Motion to Transfer on October 5, 2015, and the Company filed a reply to the Motion to Transfer on October 13, Litiged in be litigated in the United States District Court for he District of Massachusets (Clvi) Action No. 1.16-cv-10657-GAO). O. May 4, 2016, the Plaintiff filed an amended complaint (the Amended Complaint), which is now he operative complain. "M. © (the "Mo its reply to the Plaintiff's opposition to the Motion to Dismiss on August 15, 2016. A hearing on the Motion to Dismiss is

## SONUS NETWORKS, INC.

scheduled for February 28, 2017. The Company believes that the Defendants have meritorious defenses to the allegations made in the Amended Complaint and does not expect the results of this suit to have a material effect on its business or consolidated financial statements. The Company is also fully cooperating with an SEC inquiry regarding the development and issuance of the Company's first quarter 2015 revenue and earnings guidance. At this time, it is not possible to predict the outcome of the SEC's inquiry, including whether or not any proceedings will be initiated or, if so, when or how the matter will be resolved and therefore an estimate of the possible range of loss, if any, cannot be made.

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

## (22) QUARTERLY RESULTS (UNAUDITED)

The Company's fiscal year ends on December 31. For fiscal year 2015, the Company reported its first, second and thir quarters on a 4-4-5 basis, with the quarter ending on the Friday closest to the last day of each third month. In 2015, the Company's first quarter ended on March 27, 2015, the second quarter ended on June 26, 2015 and the third quarter ended on September 25, 2015.

The following tables present the Company's quarterly operating results for the years ended December 31, 2016 and 2015. The information for each of these quarters is unaudited and has been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, all necessary adjustments, consisting only of normal recurring adjustments, have been included to present fairly the unaudited consolidated quarterly results when read in conjunction with the Company's audited consolidated financial statements and related notes.


Fiscal 2016
Revenue

| Cost of revenue |
| :--- |
| Gross profit |
| Loss from operation |
| Net loss |


| Loss from operation |
| :--- |
| Net loss |
| Loss per share (3): |


|  | $\$$ | $(4,654)$ | $\$$ | $(2,916)$ | $\$$ | $(3,731)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |$\$(2,631)$

Shares used in computing loss per share:

| Basic | 49,484 | 49,423 | 49,402 | 49,232 |
| :--- | :--- | :--- | :--- | :--- |

Diluted

|  | 49,423 | 49,402 | 49,232 |
| :--- | :--- | :--- | :--- |
| , 484 | 49,423 | 49,402 | 49,232 |

## SONUS NETWORKS, INC.

Notes to Consolidated Financial Statements (Continued)

|  | $\begin{gathered} \text { First } \\ \text { Quarter (2) } \end{gathered}$ |  | SecondQuarter |  | $\begin{gathered} \text { Third } \\ \text { Quarter } \end{gathered}$ |  | Fourth Quarter |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (In thousands, except per share data) |  |  |  |  |  |  |  |
| Fiscal 2015 |  |  |  |  |  |  |  |  |
| Revenue | \$ | 50,145 | \$ | 54,701 | \$ | 67,862 | \$ | 76,326 |
| Cost of revenue |  | 20,915 |  | 20,287 |  | 22,150 |  | 24,025 |
| Gross profit | \$ | 29,230 | \$ | 34,414 | \$ | 45,712 | \$ | 52,301 |
| Income (loss) from operations | \$ | $(18,866)$ | \$ | $(15,049)$ | \$ | $(1,362)$ | \$ | 4,060 |
| Net income (loss) | \$ | $(19,359)$ | \$ | $(15,343)$ | \$ | $(1,896)$ | \$ | 4,703 |
| Income (loss) per share (3): |  |  |  |  |  |  |  |  |
| Basic | \$ | (0.39) | \$ | (0.31) | \$ | (0.04) | \$ | 0.09 |
| Diluted | \$ | (0.39) | \$ | (0.31) | \$ | (0.04) | \$ | 0.09 |
| Shares used in computing income (loss) per share: |  |  |  |  |  |  |  |  |
| Basic |  | 49,423 |  | 49,484 |  | 49,625 |  | 49,685 |
| Diluted |  | 49,423 |  | 49,484 |  | 49,625 |  | 49,906 |

(1) Includes the results of Taqua for the period subsequent to September 26, 2016.
(2) Includes the results of the SDN Business for the period subsequent to January 2, 2015.
(3) Income (loss) per share is calculated independently for each of the quarters presented; accordingly, the sum of the quarterly earnings (loss) per share amounts may not equal the total calculated for the year.

## Item 9A. Controls and Procedures

## Disclosure Controls and Procedure

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2016

## Management's Annual Report on Internal Control over Financial Reporting

Our management, with the participation of our principal executive officer and principal financial officer, is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance to our management and Board of Directors regarding the preparation and fair presentation of published financial statements.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2016. In making its assessment of internal control over financial reporting, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013). Based on this assessment, management concluded that, as of December 31, 2016, our internal control over financial reporting is effective.

Deloitte \& Touche LLP, an independent registered public accounting firm that audited our financial statements included in this Annual Report on Form 10-K, has issued an attestation report on management's internal control over financial reporting, which is included in this Item 9A under the caption "Report of Independent Registered Public Accounting Firm."

## Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

To the Board of Directors and Stockholders of
Sonus Networks, Inc.
Westford, Massachusetts
We have audited the internal control over financial reporting of Sonus Networks, Inc. and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.
We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States) Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in citions, or that the degree of compliance with the policies or procedures may deteriorate

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control - Integrated Framework (2013) issued by the December 31, 2016, based on the criteria established in Internal Contro
Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 27,2017 expressed an unqualified opinion on those financial statements.
/s/ Deloitte \& Touche LLP
Boston, Massachusetts
February 27, 2017

## PART III

## Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item 10 is included in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC not later than 120 days after the end of the fiscal year ended December 31, 2016 and is incorporated herein by reference.

## Item 11. Executive Compensation

The information required by this Item 11 is included in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC not later than 120 days after the end of the fiscal year ended December 31, 2016 and is incorporated herein by reference.

## Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item 12 is included in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC not later than 120 days after the end of the fiscal year ended December 31, 2016 and is incorporated herein by reference.

## Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item 13 is included in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC not later than 120 days after the end of the fiscal year ended December 31, 2016 and is incorporated herein by reference.

## Item 14. Principal Accounting Fees and Services

The information required by this Item 14 is included in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC not later than 120 days after the end of the fiscal year ended December 31, 2016 and is incorporated herein by reference.

## Item 15. Exhibits, Financial Statement Schedule

## 1) Financial Statement

The consolidated financial statements of the Company are listed in the index under Part II, Item 8, of this Annual Repor on Form 10-K

## 2) Financial Statement Schedules

None. All schedules are omitted because they are not applicable, not required under the instructions or the information is contained in the consolidated financial statements, or notes thereto, included herein

## 3) List of Exhibits

The Exhibits filed as part of this Annual Report on Form 10-K are listed in the Exhibit Index immediately preceding such Exhibits, which Exhibit Index is incorporated herein by reference

## Item 16. Form 10-K Summar

Not applicable.

# SIGNATURES 

## EXHIBIT INDEX

# Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused 

 this report to be signed on its behalf by the undersigned, thereunto duly authorized.SONUS NETWORKS, INC.
February 27, 2017
By: $\quad / \mathrm{s} /$ Raymond P. Dolan

| /s/ Raymond P. Dolan |
| :--- |
| Raymond P. Dolan <br> President, Chief Executive Officer and Director |

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

| Signature | Title | Date |
| :---: | :---: | :---: |
| /s/ Raymond P. Dolan | President, Chief Executive Officer and Director (Principal Executive Officer) | February 27, 2017 |
| Raymond P. Dolan |  |  |
| /s/ Susan M. Villare | Chief Financial Officer (Interim) (Principal Financial Officer and Principal Accounting Officer) | February 27, 2017 |
| Susan M. Villare |  |  |
| /s/ Richard J. Lynch | Chairman | February 27, 2017 |
| Richard J. Lynch |  |  |
| /s/ Matthew W. Bross | Director | February 27, 2017 |
| Matthew W. Bross |  |  |
| /s/ Beatriz V. Infante | Director | February 27, 2017 |
| Beatriz V. Infante |  |  |
| /s/ Howard E. Janzen | Director | February 27, 2017 |
| Howard E. Janzen |  |  |
| /s/ Pamela D.A. Reeve | Director | February 27, 2017 |
| Pamela D. A. Reeve |  |  |
| /s/ John A. Schofield | Director | February 27, 2017 |
| John A. Schofield |  |  |
| /s/ Scott E. Schubert | rector | bruary 27,2017 |

[^4]2.2 ** Agreement and Plan of Merger, dated as of December 12, 2013, by and among Sonus Networks, Inc., Emhance Tech the registrant's Current Rert $n$ Form 8-K, filed Decenber 13,2013 with the SEC) Fourth Am ded (incorporated by reference to Exhibit 33 to the registrant's Current Report on Form 8-K, filed June 22, 2009 with the SEC).

Form of Notice of Grant of Stock Options and Stock Option Agreement under the 1997 Stock Incentive Plan-Additional Terms and Conditions (incorporated by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q, filed August 20, 2004 with the SEC). registrant's Quarterly Report on Form 10-Q, filed August 20, 2004 with the SEC).
of Resale Restriction Agreement (incorporated by reference to Exhibit 10.1 to the registrant's Curren

Exhibit 10.7 to the registrant's Annual Report on Form 10-K, filed February 25, 2015 with the SEC).
$10.8+\quad$ Senior Management Cash Incentive Plan, as amended on March 28, 2013 (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K, filed April 1, 2013 with the SEC).
$10.9+\quad$ Amended and Restated Employment Agreement between Sonus Networks, Inc. and Raymond P. Dolan Repted Report on Form 10-K, filed February 25, 2015 with the SEC). Lease, dated August 11, 2010, between Michelson Farm-Westford Technology Park IV Limited Partnership
and Sonus Networks, Inc. with respect to the property located at 4 Technology Park Drive, Westford, Massachusetts (incorporated by reference to Exhibit 10.2 to the registrant's Quarterly Report on Form 10 November 2, 2010 with the SEC).
First Amendment to Lease, dated October 27, 2010, between Michelson Farm-Westford Technology Park IV Limited Partnership and Sonus Networks, Inc. with respect to the property located at 4 Technology Park Report on Form 10-Q, filed November 2, 2010 with the SEC). Statement on Form S-8, filed August 27, 2012 with the SEC).
$10.13+$ Form of Nonstatutory Stock Option Award Agreement Granted under the 2008 Stock Incentive Plan incorporated by reference to Exhibit 10.29 to the registrant's Annual Report on Form 10-K, filed March 6 2013 with the SEC).
$10.14+$ Form of Restricted Stock Award Agreement Granted under the 2008 Stock Incentive Plan (incorporated by reference to Exhibit 10.30 to the registrant's Annual Report on Form 10-K, filed March 6, 2013 with the $\stackrel{\text { referen }}{ }$
$10.15+\quad$ Form of Letter Agreement between Sonus Networks, Inc. and each of Raymond P. Dolan, Mark Greenquist and Anthony Scarfo (incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8 -K, filed January 6,2014 with the SEC).
$10.16+$ Employment Agreement between Sonus Networks, Inc. and Mark T. Greenquist, accepted on October 24, 2013 (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K, filed
October 29, 2013 with the SEC). October 29, 2013 with the SEC).
$10.17+\quad$ Assumed Performance Technologies, Incorporated 2001 Stock Option Plan (incorporated by reference to Exhibit 99.1 to the registrant's Registration Statement on Form S-8, filed with the SEC effective February 28, 2014).
$10.18+\quad \begin{aligned} & \text { Assumed Performance Technologies, Incorporated } 2003 \text { Omnibus Incentive Plan (incorporated by } \\ & \text { reference to Exhibit } 99.2 \text { to the registrant's Registration Statement on Form S-8, filed with the SEC }\end{aligned}$ reference to Exhibit 99.2 to the registrant's Registration Statement on Form S-8, filed with the SEC effective February 28, 2014).
$10.19+\quad 2012$ Amended Performance Technologies Incorporated Omnibus Incentive Plan (incorporated by reference to Exhibit 99.3 to the
effective February 28,2014 ).
$10.20+$ Form of Non-Qualified Stock Option Award Agreement Granted under the 2012 Amended Performance Technologies, Incorporated Omnibus Incentive Plan (incorporated by reference to Exhibit 10.7 to the registrant's Quarterly Report on Form 10-Q, filed
$10.21+\quad$ Form of Restricted Stock Agreement Granted under the 2012 Amended Performance Technologies, Quarterly Report on Form 10-Q, filed April 29,2014 with the SEC).
$10.22+$ Employment Agreement by and between Sonus Networks, Inc. and Jeffrey M. Snider, accepted June 1, Exhibit 10.2 to the registrant's Quarterly Report on Form 10-Q, file
$10.23+$ Amendment to Employment Agreement by and between Sonus Networks, Inc. and Jeffrey M. Snider, Amendment to Employment Agreement by and between Sonus Networks, Inc. and Jeffrey M. Snider,
accepted February 15, 2014 (incorporated by reference to Exhibit 10.9 to the registrant's Quarterly Report on Form 10-Q, filed April 29, 2014 with the SEC).
Amendment to Employment Agreement by and between Sonus Networks, Inc. and Jeffrey M. Snider, accepted March 28, 2013 (incorporated by reference to Exhibit 10.10 to the registrant's Quarterly Report on Form 10-Q, filed April 29, 2014 with the SEC). Credit Agreement, dated as of June 27, 2014 by and among Sonus Networks, Inc. as Borrower, Bank of
America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, and the other lenders from
time to time party thereto (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on time to time party thereto (incorporated by ref
Form 8 -K, filed June 30,2014 with the SEC).
10.26 First Amendment to Credit Agreement, dated as of June 26, 2015 by and between Sonus Networks, Inc., as Borrower, Bank of America, N.A., as Administrative Agent, Swing Line Lender, L/C sssuer and Lender (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K, filed June 30 2015 with the SEC).
Second Amendment to Credit Agreement, dated as of June 13, 2016 by and between Sonus Networks, Inc., as Borrower, Bank of America, N.A., as Administrative Agent, Swing Line Lender, L/C Issuer and Lender
(incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K, filed June 15 , 2016 with the SEC). Security and Pledge Agreement, dated as of June 27, 2014 by and among Sonus Networks, Inc., Sonus International, Inc., Sonus Federal, Inc., Network Equipment Technologies, fic., Performance Technologies, 10.2 to the registrant's Current Report on Form 8-K, filed June 30, 2014 with the SEC).
$10.29 \quad$ Master Continuing Guaranty, dated as of June 27, 2014 by and among Sonus Federal, Inc., Network Equipment Technologies, Inc. Performance Technologies, Incorporated and Sonus International, Inc.
(incorporated by reference to Exhibit 10.3 to the registrant's Current Report on Form 8-K, filed June 30 , (incorporated by refe
2014 with the SEC).
$10.30+\quad$ Form of Letter Agreement between Sonus Networks, Inc. and each of Raymond P. Dolan, Mark Greenquist, Anthony Scarfo and Jeffrey Snider (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K, filed December 29, 2014 with the SEC).

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\begin{aligned}
& \text { accepted February 15, } 2013 \text { (incorporated by refe } \\
& \text { on Form 10-Q, filed May 2, } 2013 \text { with the SEC). }
\end{aligned}
$$

$10.34+$ Amendment to Employment Agreement by and between Sonus Networks, Inc. and Anthony Scarfo, accepted March 28, 2013 (incorporated by reference to Exhibit 10.12 to the registrant's Quarterly Report on ith the SEC).

Employment Agreement between Sonus Networks, Inc. and Kevin Riley, dated July 30, 2014 (incorporated by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q, filed April 29, 2016 with
the SEC). the SEC).
$10.36+\underset{\substack{\text { Employment Agreement between Sonus Networks, Inc. and Michael Swade, accepted September 29, } 2014 \\ \text { (incorporated by reference to Exhibit } 10.2 \text { to the registrant's Quarterly Report on Form 10-Q, filed April } 29,}}{\text { R }}$ (incorporated by refer
$10.37+\quad$ Employment Agreement between Sonus Networks, Inc. and Susan Villare, accepted on February 3, 2012 (incorporated by reference to Exhibit 10.1 to the registrant's Amendment No. 1 to Current Report on Form
8 -K/A, filed July 8,2016 with the SEC).
$10.38+\quad \begin{aligned} & \text { Letter Agreement between Sonus Networks, Inc. and Susan Villare, accepted on July 7, } 2016 \text { (incorporated } \\ & \text { by reference to Exhibit } 10.2 \text { to the registrant's Amendment No. } 1 \text { to Current Report on Form 8-K/A, filed }\end{aligned}$ July 8, 2016 with the SEC).
$10.39+\quad \begin{aligned} & \text { Amended and Restated Stock Incentive Plan (incorporated by reference to Exhibit } 10.1 \text { to the registrant's } \\ & \text { Quarterly Report on Form 10-Q, filed July } 29,2016 \text { with the SEC). }\end{aligned}$ Amended and Restated Stock Incentive Plan (incorporated by refere
Quarterly Report on Form 10-Q, filed July 29,2016 with the SEC).

Form of Nonstatutory Stock Option Award Agreement Granted under the Amended and Restated Stock
Incentive Plan (incorporated by reference to Exhibit 10.2 to the registrant's Quarterly Report on Form $10-0$ Q filed July 29, 2016 with the SEC).
$10.41+$ Form of Restricted Stock Award Agreement Granted under the Amended and Restated Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to the registrant's Quarterly Report on Form 10-Q, filed July 29, 2016 with the SEC).
Form of Restricted Stock Unit Award Agreement (Performance-Based Vesting) for Awards Granted on
March 16,2015 under the 2007 Stock Incentive Plan as amended (incorporated by reference to Exhibit 10.4 to the registrant's Quarterly Report on Form 10-Q, filed April 27, 2015 with the SEC).

Form of Restricted Stock Unit Award Agreement (Performance-Based Vesting) for Awards Granted under the Amended and Restated Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to the registrant's Quarterly Report on Form 10-Q, filed July 29, 2016 with the SEC).
Code of Conduct (incorporated by reference to Exhibit 14.1 to the registrant's Current Report on Form 8-K, filed June 7, 2011 with the SEC)
21.1 * Subsidiaries of the Registrant.
23.1 * Consent of Independent Registered Public Accounting Firm, Deloitte \& Touche LLP
31.1 * Certificate of Sonus Networks, Inc. Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
Certificate of Sonus Networks, Inc. Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley
Act of 2002 . Act of 2002.

Earn-Out Agreement, dated as of January 2, 2015, by and among Sonus Networks, Inc., Treq Labs, Inc. and
Karl F. May as the Seller Representative (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K, filed January 8, 2015 with the SEC). Employment Agreement by and between Sonus Networks, Inc. and Anthony Scarfo, accepted August 25,
2011 (incorporated by reference to Exhibit 10.10 to the registrant's Quarterly Report on Form 10-Q, filed May 2, 2013 with the SEC).

Certificate of Sonus Networks, Inc. Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
Certificate of Sonus Networks, Inc. Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley
Act of 2002 . Act of 2002.
XBRL Instance Document
XBRL Taxonomy Extension Schema
XBRL Taxonomy Extension Calculation Linkbase
XBRL Taxonomy Extension Definition Linkbase
XBRL Taxonomy Extension Label Linkbase

* Filed herewith.
\# Furnished herewith.
$+\quad$ Management contract or compensatory plan or arrangement filed in response to Item 15(a)(3) of the Instructions to the Annual Report on Form 10-K.
** Schedules and exhibits have been omitted pursuant to Item $601(\mathrm{~b})(2)$ of Regulation S-K. The Registrant hereby undertakes to furnish copies of any of the omitted schedules and exhibits upon request by the U.S. Securities and Exchange Commission


## Important Information Regarding Forward-Looking Statements

This Annual Report and Proxy Statement contain forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical fact contained in this Annual Report and Proxy Statement are forward-looking statements. Without limiting the foregoing, the words "anticipates", "believes", "could", "estimates", "expects", "intends", "may", "plans", "seeks", "projects", "will" and other similar language, whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this Annual Report and Proxy Statement are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Although we believe that our current expectations and assumptions are reasonable, readers are cautioned that these forward-looking statements are only predictions and are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict, and our actual results may differ materially from those contemplated by the forward-looking statements as a result of various factors, including those discussed in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" sections of the copy of our Form 10-K included as part of this Annual Report. Any forward-looking statement represents our views only as of the date such statement was made and should not be relied upon as representing our views as of any subsequent date. While we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so

## Sonus

4 Technology Park Drive
Westford, MA 01886 USA


[^0]:    Please refer to the inside back cover for Important Information Regarding Forward-Looking Statements.

[^1]:    ${ }^{1}$ Please see the "Compensation Discussion and Analysis" section of this Proxy Statement for information related to awards made under the Amended Plan since December 31, 2016 to our named executive officers.

[^2]:    (1) Assumes employment termination without a change in control. "Change in Control" or

[^3]:    See notes to the consolidated financial statements.

[^4]:    Exhibit No.
    Description
    $2.1^{* *}$ Agreement and Plan of Merger, dated as of June 18, 2012, by and among Sonus Networks, Inc., Navy Acquisition Subsidiary, Inc. and Network Equipment Technologies, Inc. (incorporated by refe,

