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

FORM 10-K

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

For the fiscal year ended December 31, 2017

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

Commission File Number 001-38267

RIBBON COMMUNICATIONS INC.
(Exact name of Registrant as specified in its charter)

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

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

(978) 614-8100
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, par value $0.0001	The Nasdaq Global Select Market

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 o No x

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 o No x

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 x No o

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 x No o

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. x

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

Large accelerated filer o	Accelerated filer x	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o	Emerging growth company o

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

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

As of June 30, 2017, the last business day of the Registrant's most recently completed second fiscal quarter, the Registrant's common stock was not publicly traded. Therefore, the Registrant cannot calculate the aggregate market value of its voting and non-voting common equity held by non-affiliates as of such date.

The aggregate market value of the common stock held by non-affiliates of Sonus Networks, Inc., the Registrant's predecessor, was approximately $357,710,000 based on the closing price for its common stock on The Nasdaq Global Select Market on June 30, 2017. As of February 27, 2018, the Registrant had 101,928,560 shares of common stock, $0.0001 par value, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement to be delivered to stockholders in connection with the Registrant's 2018 Annual Meeting of Stockholders are incorporated by reference into Part III of this report.

RIBBON COMMUNICATIONS INC.
FORM 10-K
YEAR ENDED DECEMBER 31, 2017
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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-K, including statements regarding our future results of operations and financial position, anticipated restructuring and integration-related expenses, business strategy, plans and objectives of management for future operations and plans for future product development and manufacturing are forward-looking statements. Without limiting the foregoing, the words "anticipates", "believes", "could", "estimates", "expects", "intends", "may", "plans", "seeks" and other similar language, whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward looking statements contain these identifying words. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. These statements involve known and unknown risks, uncertainties and other important 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.

Presentation of Information

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

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

GLOSSARY OF CERTAIN INDUSTRY TERMS

The industry terms defined below are used throughout this Annual Report on Form 10-K (this “10-K”).

API (*application programming interface*): A set of subroutine definitions, protocols, and tools for building application software. In general terms, it is a set of clearly defined methods of communication between various software components.

CPaaS (*Communications Platform as a Service*): A cloud-based delivery model that allows organizations to add real-time communication capabilities such as voice, video and messaging to business applications by deploying application program interfaces.

CPU (*central processing unit*): The electronic circuitry within a computer that carries out the instructions of a computer program by performing the basic arithmetic, logical, control and input/output operations specified by the instructions.

DSC (*diameter signaling controller*): A device that helps communications service providers overcome Diameter signaling performance, scalability and interoperability challenges in LTE and IMS networks. Diameter is a next-generation industry-standard protocol used to exchange authentication, authorization and accounting information in LTE and IMS networks.

DSP (*digital signal processing*): The use of digital processing, such as by computers or more specialized digital signal processors, to perform a wide variety of signal processing operations. The signals processed in this manner are a sequence of numbers that represent samples of a continuous variable in a domain such as time, space, or frequency.

ESP: Estimated selling price.

GPU (*graphical processing unit*): A specialized electronic circuit designed to rapidly manipulate and alter memory to accelerate the creation of images in a frame buffer intended for output to a display device.

HUC (*hosted unified communications*): A user-centric UC that supports traditional SIP-based endpoints as well as collaboration and video UC from PCs, Macs, and mobile devices.

IMS (*IP multimedia [sub]system*): An architectural framework for delivering IP multimedia services.

IP (*Internet Protocol*): A set of rules governing the format of data sent over the Internet or other network.

IP-PBX: SIP-based PBX.

ISP: Internet service provider.

LTE (*long term evolution*): A standard for high-speed wireless communication for mobile devices and data terminals for smooth and efficient transition toward more advanced leading-edge technologies to increase the capacity and speed of wireless data networks. Often used to refer to wireless broadband or mobile network technologies.

MSO (*multi-system operator*): An operator of multiple cable or direct-broadcast satellite television systems.

NFV (*network function virtualization*): A network architecture concept that uses the technologies of IT virtualization to virtualize entire classes of network node functions into building blocks that may connect, or chain together, to create communication services.

OTT (*Over-the-Top*): A media distribution practice that allows a streaming content provider to sell audio, video, and other media services directly to the consumer over the internet via streaming media as a standalone product, bypassing telecommunications, cable or broadcast television service providers that traditionally act as a controller or distributor of such content.

PBX (*private branch exchange*): A telephone system within an enterprise that switches calls between enterprise users on local lines while allowing all users to share a certain number of external phone lines.

PLMN (*public land mobile network*): A network that is established and operated by an administration or by a recognized operating agency for the specific purpose of providing land mobile telecommunications services to the public.

PSTN (*public switched telephone network*): The aggregate of the world's circuit-switched telephone networks that are operated by national, regional, or local telephony operators, providing infrastructure and services for public telecommunication.

RTC (*real-time communications*): A term used to refer to live telecommunications that occur without transmission delays. RTC is nearly instant with minimal latency. RTC data and messages are not stored between transmission and reception. RTC is generally a peer-to-peer, rather than broadcasting or multicasting, transmission.

SBC (*session border controller*): A device regularly deployed in VoIP networks to exert control over the signaling and the media streams involved in setting up, conducting, and tearing down telephone calls or other interactive media communications.

SDK: Software development kit.

SDN (*software-defined networking*): An umbrella term encompassing several kinds of network technology aimed at making the network as agile and flexible as the virtualized server and storage infrastructure of the modern data center.

SIP (*session initiation protocol*): A communications protocol for signaling and controlling multimedia communication sessions in applications of Internet telephony for voice and video calls, in private IP telephone systems, as well as in instant messaging over IP networks.

SMB: Small-medium business.

SMS (*short message service*): A text messaging service component of most telephone, World Wide Web, and mobile device systems, using standardized communication protocols to enable mobile devices to exchange short text messages.

SOHO: Small office and home office.

STaaS (*SIP Trunking as a Service*): A VoIP technology and streaming media service based on SIP by which Internet telephony service providers deliver telephone services and UC to customers equipped with IP-PBX and UC facilities.

TDM (*time-division multiplexing*): A method of putting multiple data streams in a single signal by separating the signal into many segments, each having a very short duration. Each individual data stream is reassembled at the receiving end based on the timing.

TPE: Third-party evidence of selling price.

UC (*unified communications*): A business term describing the integration of enterprise communication services such as instant messaging (chat), presence information, voice (including IP telephony), mobility features (including extension mobility and single number reach), audio, web & video conferencing, fixed-mobile convergence, desktop sharing, data sharing (including web connected electronic interactive whiteboards), call control and speech recognition with non-real-time communication services such as unified messaging (integrated voicemail, e-mail, SMS and fax).

VAR (*value added reseller*): A company that adds features or services to an existing product, then resells it (usually to end-users) as an integrated product or complete turn-key solution.

VMC (*virtualized mobile core*): A software platform enabling standard-based Wi-Fi Calling, LTE calling and VoLTE services for mobile network operators and mobile virtual network operators.

VNF (*virtual network function*): Responsible for handling specific network functions that run in one or more virtual machines on top of the hardware networking infrastructure, which can include routers, switches, servers, cloud computing systems and more.

VoIP (*Voice over Internet Protocol*): A methodology and group of technologies for the delivery of voice communications and multimedia sessions over IP networks, such as the Internet.

VoLTE (*Voice over LTE*): A standard for high-speed wireless communication for mobile phones and data terminals over a 4G LTE access network, rather than 2G or 3G connections.

VoWifi (*Voice over Wifi*): A complementary technology to VoLTE that utilizes IMS technology to provide the routing telephone calls and faxes over an existing data network rather than over the traditional PSTN.

VSOE (*vendor-specific objective evidence of selling price*): A method of revenue recognition allowed by U.S. GAAP that enables companies to recognize revenue on specific items on a multi-item sale based on evidence specific to a company that the product has been delivered.

PART I

Item 1. Business

Overview

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

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

Industry Background

Traditional TDM-based voice and data solutions are being supplanted by alternative IP-based networks. Given this shift, today’s telecommunications service providers and enterprises are faced with two separate but related challenges: how to upgrade their aging and costly communications infrastructure, and how to implement new and innovative software, IP and cloud-based communications capabilities. Service providers in particular must address these challenges while at the same time responding to competition in the form of new web-scale communication providers such as Microsoft, Google and Amazon.

To address these challenges, service providers and enterprises are modernizing their communications networks, network functions and communications applications from legacy environments to new environments using IP, NFV and the cloud to take advantage of the many benefits that these technologies offer with an end goal of providing better and more productive communications experiences to their customers and employees.

Telecommunications Service Providers: Network Modernization

One of the most significant capital costs for telecommunications service providers has been and continues to be their infrastructure. In order to leverage past capital investments and deliver existing and new services, service providers must consolidate their infrastructure from the costly, legacy infrastructures such as the PSTN and the PLMN into the more efficient and flexible IP- and software-based network models, which are capable of driving revenue growth. Migrating from the PSTN to IP reduces real estate, power and operating costs. IP networks allow the consolidation of voice, video and data within a single IP-based networking infrastructure over broadband and wireless access and enables new communications services, such as SIP Trunking and HUCs. Similarly, modernizing mobile networks to the IMS-based 4G LTE and VoLTE networks enables mobile service providers to offer better and more efficient mobile communications experiences to end users. As consumers and businesses continue to demand more engaging and productive communications experiences, we believe network modernization is and will continue to be essential to service providers’ ability to compete effectively in the market for telecommunications services.

Modernization of Networks to IP

Communication trends have been shifting for the past several years. What was once an industry built on voice communications from central office switches and PBXs on the enterprise premise is now being replaced by the use of social networks, OTT service providers, mobile applications, and hosted service providers. Consumers are increasingly turning to OTT applications

(like WhatsApp, Apple's Facetime, Messaging or Amazon's Alexa). This shift has created an enhanced experience for consumers and has heightened expectations for future products and services.

Businesses, large and small, are re-architecting business processes and undergoing a digital transformation, building their own virtualized solutions in the cloud or moving their IT applications entirely to public cloud applications, and adding RTC and collaboration to their customer service solutions. These new solutions improve customer service and create an e-commerce experience that blends online applications with the in-store environment, creating a seamless experience for customers. Network modernization to IP-based systems enables service providers to add modern communications service offers that blend traditional voice messaging capabilities with contemporary features such as video messaging, visual voicemail, mobile messaging and email integration, and an accelerated time-to-market for differentiated messaging services.

Secure Real-time Communications

For most telecommunications service providers, the move to IP-based RTC presumes a strategic, phased migration. This evolution exposes service providers to new security threats, as the "walled" protection offered by their voice network infrastructures no longer exists with SIP and data-based networks. With SIP-based systems, RTC applications such as voice, video and messaging become data applications, and without appropriate security measures in place, these networks are left open to security breaches and hacks. Additionally, the move to SIP has seen an increase in fraud in service provider networks in the form of robo-dialing and toll fraud schemes.

Given these threats, there is a need for sophisticated security solutions to protect networks during the network transformation process. Service providers have relied on SBCs, which are deployed within networks that are designed to provide robust security, as well as simplify interoperability, routing and other functions as a protection measure. By their nature, SBCs are application-aware and therefore can use data and sophisticated analytics to detect and thwart security breaches. We believe securing networks against threats is most effective when secure software solutions are deployed within networks and integrated into existing RTC investments.

Network Function Virtualization

In addition to shifting from legacy to secure IP networks, service providers are increasingly moving toward NFV in order to be able to offer new services quickly to their customers, reduce costs and compete with Web-Scale companies. NFV offers a new way to design, deploy and manage networking services by decoupling network functions from proprietary hardware appliances so they can run in software. This transformation enables better use of network infrastructure, creates agility, delivers rapid and elastic scaling, and enables faster time to market. VNFs can be deployed on generic computing platforms, hosted in private and public clouds, located in data centers, or within other network elements, and on end user premises.

Cloud and "as a Service" Models

As communications applications are deployed in the cloud, service providers gain the ability to offer a new class of business models commonly referred to "as a Service" solutions. These solutions include:

CPaaS: CPaaS is a cloud-based platform that enables developers to add RTC features such as voice, data, video, and messaging in their own applications without needing to build backend infrastructure and interfaces. CPaaS provides software developers the flexibility to "drag and drop" these features into their native applications or within web sites, through simple APIs and SDKs. With CPaaS, enterprises can quickly build applications that tie RTC and their social channels to their business workflows. This technology has not only moved real time communications off carrier networks, but also has greatly simplified the development and deployment of RTC capabilities.

UCaaS: Deploying UC within the "cloud" helps businesses provide flexibility and scalability for core business tasks. UCaaS features include enterprise messaging, presence technology, online meetings, team collaboration, telephony and video conferencing in lieu of traditional voice solutions, such as PBXs or carrier based Centrex. With CPaaS, enterprises can quickly build applications that tie RTC and their social channels to their business workflows.

STaaS: SIP trunking enables service providers to bundle voice and data over a single converged IP pipe and brings connectivity to the enterprise, creating a more economical offering than can be achieved with separate voice and data connections. STaaS delivers IP telephone to customers equipped with IP-PBX and UC facilities. With STaaS, customers have the flexibility to turn up or down and manage their own SIP trunks without the need for additional hardware on-premises or in the network.

Enterprises: Network Modernization and Digital Transformation

Today's businesses, both enterprises and SMBs, are undergoing not only a network modernization but also a digital business transformation. The focus is shifting from person-to-person communications to contextual collaboration and omni-channel customer experiences. Within this context, businesses need a secure, scalable and innovative alternative to proprietary PBX and UC products. As part of their digital transformation, businesses have adopted the cloud, open interfaces, mobile, Big Data, and analytics. Seeing the advantages and cost savings from the cloud, businesses are migrating their communications solutions to this same environment, thereby enabling connections between business processes, communications, and collaboration.

Network Modernization

Enterprises undergoing network modernization are focused on moving from TDM-based PBXs to SIP trunking and new UC and collaboration systems while ensuring interoperability during the transformation process. In addition, enterprises in certain industries will often be subject to specific requirements or standards before a network transformation is completed. For example, governments may require JITC certification for secure deployments, and healthcare providers may need to achieve HIPAA certification.

When modernizing a network, the ability to interwork modern applications such as Microsoft's Skype for Business, with legacy analog endpoints on premises, becomes essential. SBCs play an integral role in providing interworking and survivability options. As discussed above, SBCs play a crucial role in securing the network modernization process, which is a top priority for any business.

Digital Transformation

Successful enterprises today are focused on innovating their core product offerings and building a strategic advantage to reach and empower their customers. As technologies evolve and new mobile applications and connected devices proliferate, enterprises must adapt and innovate their communications solutions to create a "connected" experience anywhere, anytime, on any device. As part of this process, businesses are increasingly deploying "as a Service" offerings from the cloud (from either a service provider or a web-scale provider). UCaaS and CPaaS create a single communications platform that changes the way enterprises interact with customers and meet their expectations. CPaaS enables enterprises to quickly build applications that tie real time communications and their social channels to their business processes while UCaaS delivers the underlying UC infrastructure to ensure end users have the features and functionality required to enable reliable and scalable end-to-end communications.

Our Solutions, Products and Services

Ribbon Solutions

Ribbon provides secure RTC software, hardware and cloud-native solutions for service providers and enterprises. Ribbon's communications solutions are widely deployed at over 1,000 customers globally, provide high scale, reliability and performance, and are deployable from the public, private and hybrid cloud, in-network or on the enterprise premise. As of December 31, 2017, our solutions for service providers and enterprises included the following:

Ribbon service provider solutions help fixed and mobile operators, cable providers or MSOs, ISPs and interconnect service providers modernize their networks, quickly capitalize on growing market segments and introduce differentiating products, applications and services for their business and consumer customers. Ribbon's service provider network modernization solutions include fixed network transformation, mobile network evolution (mobility), secure network interconnects, network functions virtualization, cloud communications as a Service and communications security solutions, enabling secure and innovative business and consumer communications services offerings. Ribbon solutions help service providers connect people to each other wherever they happen to be, addressing the growing demands of today’s consumers and businesses for secure RTC.

Ribbon's enterprise solutions allow enterprises to securely connect to SIP trunks and modernize their communications networks. Modernization solutions range from legacy Nortel PBX evolution, securing UC and contact centers, migrating to Microsoft Skype for Business and Teams, providing session management, security and cloud communications solutions to enable highly productive communications experiences for employees and customers using the web, mobile and fixed endpoints. Ribbon provides communications solutions for the federal government vertical and has Joint Interoperability Test Command (JTIC) certified solutions. Ribbon also provides RTC solutions to other industry verticals, including higher education, finance and healthcare. Ribbon has significant experience and expertise in securing SIP communications with a portfolio of SBCs, and has deployed thousands of SBCs across different industry verticals. Our Microsoft Skype for Business and Teams solutions secure those communications environments and assist in the migration of enterprise customers to those environments.

Ribbon Products

Ribbon products enable service providers to take new services to market quickly and with scale and carrier class reliability, allowing them to compete effectively in the marketplace, and enable enterprises to make their employee and customer engagement experiences richer and more productive.

Ribbon’s product lines enabling network transformation, mobile network evolution and interconnect solutions include Ribbon's call session controllers, media gateways, signaling products, policy and routing products and a market leading portfolio of SBCs, all of which are mechanisms through which operators and enterprises deploy our secure RTC solutions. Ribbon’s UC solutions are enabled by the Ribbon Application Server, Client and Intelligent Messaging products, and are a platform for business and residential multimedia communications across fixed, mobile, cable, and enterprise markets. Our product portfolio enables the securing of SIP-based UC sessions in the enterprise and the migration of legacy PBX-based enterprise communications networks (such as the Nortel PBX installed base) across different market verticals. Our product portfolio includes element management and network management products to enable customers to configure, monitor and manage the products they purchase from us.

The product portfolio also includes native mobile client products that allow service providers to enable Wi-Fi and LTE Calling services for their subscribers, without the considerable cost of investing in, implementing and maintaining, a full VoLTE IMS network.

The Company's Cloud Communications “as a Service” portfolio, which includes CPaaS, UCaaS and STaaS offers, is based on Kandy, which is a cloud-based RTC platform that enables service providers, independent software vendors, systems integrators and enterprises to rapidly create and deploy high value embedded communications services for their customers. Utilizing Ribbon's communications technology and offered as a part of a white-label solution, providers connect their networks to Kandy CPaaS via SIP Trunks and APIs. The Kandy Platform provides APIs and SDKs for developers to build embedded communications applications. Kandy helps service providers grow revenues with quick to deploy, pre-packaged applications called Kandy Wrappers. Kandy Wrappers are fully functional software applications that can be delivered standalone or inserted into a business website or into a business application to endow it with embedded RTC capabilities. Kandy also delivers a suite of UCaaS solutions such as Cloud PBX, Cloud Contact Center and Cloud Collaboration.

Ribbon Services

Our global services organization is responsible for all aspects of implementation and support of our solutions and products. Key portfolio components include solution and business consulting, system integration, deployment, and managed care services. Our technical support group provides constant support to keep customers' networks operating at peak performance. Support services include managing software updates, hardware maintenance, hardware spare services and managed spares programs, and emergency assistance during disaster recovery.

With a local presence in over twenty countries on five continents, Ribbon Global Services provides both a local presence and global scale with complete coverage to help drive our customers' success.

The Ribbon Global Services team provides our customers with:

A full-service portfolio including deployment and integration, testing and verification, migration, operational support, monitoring and managed services;

End to end project management and accountability via highly experienced Program Managers and following a consistent, disciplined methodology;

Knowledgeable and experienced technical resources with scarce skills and expertise on IP Communications Solutions and Network Modernization;

Consistent execution in the design, deployment and support of the world's largest and most advanced networks; and

Award winning, around-the-clock technical support services with dedicated technical support centers around the globe, including the United States, Mexico, United Kingdom, Spain, Germany, Australia, Japan, Malaysia, Taiwan, China (Hong Kong) and India.

Our Strategy

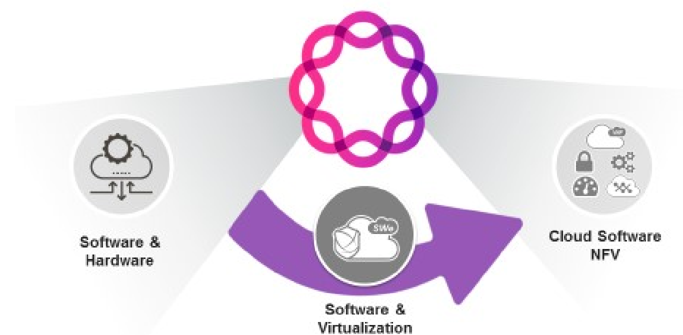
Ribbon is a leader in enabling network modernization and we plan to continue to invest in our platform approach to increase our global reach and scale. Ribbon is intently focused on realizing the cost synergies and product rationalizations that it aimed to achieve through the Merger. Key elements of Ribbon's strategy include:

Continue to Enable our Service Provider and Enterprise Customers to Transform their Networks and Business Models. Changing consumption patterns of end customers and consumers of secure real-time communications, combined with competitive pressures, are forcing service providers and enterprises to significantly expand their RTC environments to provide better, more agile end customer experiences containing operational and capital expenditure costs. This in turn is requiring them to transform their networks and business models for secure RTC. The Ribbon portfolio enables this transformation.

Focus on our Customer Needs. Our customers are key to the success of our business and our business model is focused on aligning with our customers through direct engagement, service and support as well as through our channel partners. This model allows us to target our sales and research and development efforts based on the needs of our customers and we believe it is critical to our success.

Build on Growing our Customer Footprint and Global Reach. Ribbon has over 1,000 customers globally, in all of the major regions of the world, including some of the largest telecommunications service providers and enterprises in the world. This footprint allows us to sell additional products and services from the Ribbon portfolio to that deployed base of existing customers and provides us the ability to sell new products and services to that customer base. We also continue to look for opportunities to expand our portfolio footprint and global reach to further diversify our customer base.

Selectively Invest in our Core Products and Solutions. In order to service our customers that have deployed our products and solutions and support their key priorities and growth, we must strategically invest in research and development. We are committed to balancing our research and development investments between existing products and solutions and new growth-oriented product initiatives. In addition, we are focused on investing in products and solutions that we will be profitable for our Company. We intend to sunset certain less significant product offerings that are not aligned with our strategic direction and are not meaningful contributors to profitability. We believe this will allow us to more effectively and efficiently deploy capital to growth areas. Through targeted research and development investments in core products and solutions that will align with our strategy for growth, we are committed to helping our customers migrate their networks to software, and virtualized and cloud environments.



Disciplined Expansion into New Markets and Applications for Growth. We believe that a disciplined approach to targeting new markets and applications is critical to growing our business. As such, we have taken actions to expand our portfolio and offers to our customers. Two key growth initiatives include a focus on cloud communications and RTC security. We have also begun to work with our customers on the deployment of our Kandy platform to offer new and innovative RTC services. Similarly, given our significant experience with securing IP network borders with our SBC portfolio, and the increasing importance of security in today's networks and communications, we are working on expanding our role in securing RTC with new portfolio offerings.

Selectively Pursue Strategic Relationships, Alliances and Acquisitions. Ribbon continues to pursue strategic relationships, alliances and acquisitions that align our business with our customers' strategic goals and objectives as well as our own strategic goals for further extending our footprint, reach, scale and growth in the business.

Competitive Differentiation

In addition to our scale and global presence, there are several factors that set us apart and allow us to compete effectively with comparable peers in terms of scope, size and scale.

Installed Base. Ribbon has a large deployed based of Nortel softswitches and media gateways in global service provider and enterprise networks supporting over 30 million legacy switched access lines. These softswitches are highly integrated into our customer's back office environments and require specialized tools and intellectual property from Ribbon to consolidate and migrate those environments to newer IP based services with optimal capital expenditure investments. Similarly, our large deployed based of SBCs at service providers and enterprises offers Ribbon a unique platform for upgrading and cross-selling products into that installed base.

Strong Technology in Virtualization. Ribbon has extensive network virtualization software products and technology as part of our overall portfolio and have begun deploying these products to help our customers in the modernization of their networks to software-based virtualization and the cloud. A significant portion of our overall portfolio has software and virtualized offerings that can co-exist with our hardware appliance based options.

Security Experience and Technology. Our SBC technology, deployments and expertise are market leading. Ribbon has been securing service provider and enterprise networks and RTC sessions for over nine years, giving us a strong platform from which to launch additional security offers into the market. We believe our SBC products are unmatched in the market on reliability, performance and functionality at scale.

Media Processing, Transcoding and Signaling Technology Expertise. We have extensive experience in deploying mobile VoLTE and VoWifi solutions. Our voice media transcoding technology that is supported by CPU, GPU or DSP options is industry leading. Our mobile network evolution solutions are deployed in large-scale 4G VoLTE networks supporting over 200 million subscribers in total.

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 valuable otherwise. We have a program to file applications for and obtain patents, copyrights and trademarks in the United States and in specific foreign countries where we believe filing for such protection is appropriate.

As of December 31, 2017, we held patents and had pending patent applications both in the United States and abroad as follows: in the name of Sonus Networks, Inc., 234 United States patents with expiration dates ranging from July 2018 through January 2036, 35 patent applications pending in the Unites States, 47 foreign patents with expiration dates ranging from May 2020 through October 2027, and four patent applications pending abroad; and in the name of GENBAND US LLC, 129 United States patents with expiration dates ranging from February 2017 through March 2025, 70 patent applications pending in the Unites States, 122 foreign patents with expiration dates ranging from June 2019 through October 2027, and 56 patent applications pending abroad.

Furthermore, as of December 31, 2017, we had 48 registered trademarks in the United States, as follows: 25 in the name of GENBAND US LLC, including GENBAND, GENBAND with design, G9, G9 with design, KANDY and BUSINESSCALL; 16 in the name of Sonus Networks, Inc., including SONUS, the SONUS logo, NETASSURE and NETSCORE; three in the name of Network Equipment Technologies, Inc., including PROMINA; and four in the name of Quintum Technologies, LLC, including TENOR. We also had 34 pending trademark applications in the United States as of December 31, 2017, as follows: 33 in the name of Sonus Networks, Inc., including Ribbon and the Ribbon Logo; and one in the name of GENBAND US LLC.

In addition to the protections described above, we seek to safeguard our intellectual property by:

Employing measures to safeguard against the unauthorized use or disclosure of the source and object code for our software, documentation and other written materials, and seeking protection of such materials under copyright and trade secret laws;

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.

Our Customers

We have over 1,000 customers globally. Our customers are located around the world in over 50 countries and include many of the leading global telecommunications service providers and enterprises. Service providers use our products to provide secure RTC for the service providers (in the case of interconnects), enterprises and consumers they serve. Enterprises use our products to provide RTC for their employees (including remote workers) as well as provide secure communications networks for their customer-facing components, such as contact centers.

Our global service provider customers include fixed-line, mobile, cable, internet and interconnect service providers. Our Enterprise customers include businesses of all sizes, ranging from SOHO, SMB and large enterprises across various industry verticals with a concentration in the federal government, healthcare and education sectors. We sell to customers via a direct sales team as well as through indirect channels that include VARs, system integrators and service providers. Independent software vendors also partner with Ribbon to source our communications solutions and market them through their sales channels.

In the year ended December 31, 2017, 17% of our revenues were derived from sales to one customer, Verizon Networks, a service provider that provides interconnect, fixed line and mobile communications services. Verizon is transforming its TDM network from a hardware centric network to a SIP and NFV based network, and Ribbon is playing a key role in this transformation. Our top five customers represented approximately 41% of our revenue in the year ended December 31, 2017.

Competitive Conditions

Competition in the telecommunications market is intense. The market is shifting from a market dominated by a few large incumbent telecommunications equipment companies, such as Ericsson LM Telephone Company, Huawei Technologies Co. Ltd., and Nokia Corporation (which recently merged with Alcatel-Lucent S.A.), to a market that is characterized by network virtualization, migration to the cloud, and open interfaces. We believe this shift creates opportunities for us, as well as our direct competitors in telecommunications and networking, which include:

Within the network transformation space: mid-size vendors of networking and telecommunications equipment and specialty vendors, including AudioCodes Ltd., Dialogic Inc., Mavenir Systems, Inc., Metaswitch Networks Corporation, Oracle Communications and ADTRAN, Inc.; and

Within the enterprise and cloud solutions space: Microsoft, 8x8, Inc., Avaya Inc., Bandwidth Inc., Cisco Inc., (with Tropo Inc./Broadsoft, Inc.), F5 Networks, Inc., Mitel Networks Corporation (with ShoreTel, Inc.), Plivo Inc., RingCentral, Inc., Tokbox Inc., Twilio Inc. and Vonage Holdings Corp. (with Nexmo, Inc.).

Other smaller private and public companies are also focusing on similar market opportunities. Mergers among any of the above companies or other competitors, as well as additional competitors with significant financial resources entering our markets, could further intensify competition. Mergers between service providers may also increase competition, as these reduce the number of customers and channels for products and solutions.

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.

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.

Sales and Marketing

We sell our products, solutions and services to our customers with a direct internal sales force and also indirectly via channels and partnerships globally, leveraging the assistance of VARs such as Verizon Communications Inc. and distributors such as Westcon Group Inc, BlackBox and Arrow S3. Our channel partner programs are designed to serve particular markets and provide our customers with opportunities to purchase our products in combination with related services and products. For example, Ribbon is a Microsoft Gold Communications Partner and helps enterprises optimize Skype for Business (and Teams) deployments by securing those communications.

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 also have a dedicated direct sales team focused on the Federal Government sector in the United States.

Our marketing team is focused on promoting company brand awareness, increasing our solutions, product, technology and services differentiation and awareness via webinars, company web sites, advertising and digital outreach, as well as generating qualified sales leads. We promote thought leadership on technology and our solutions within the industry by participating in and speaking at industry events and conferences and via social network campaigns and blogs. Our marketing team also provides briefings to industry analysts on a regular basis and at major industry events, communicates with the media in connection with noteworthy public announcements and supports our investor relations department on quarterly conference calls and regular investor updates.

Manufacturing

Our contract manufacturers provide comprehensive manufacturing services, including assembly and testing of our hardware products and procurement of component materials on our behalf. We believe that outsourcing the manufacturing of our hardware products enables us to preserve working capital, allows for greater flexibility in meeting changes in demand and enables us to be more responsive in delivering diverse product offerings to our customers. As of December 31, 2017, we outsourced the manufacturing of our hardware products to four manufacturers, two of which we primarily rely upon. We and our contract manufacturers purchase several key components of our hardware 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 and use of contract manufacturers.

Research and Development

We believe that strong product development capabilities are essential to our strategy of enhancing our core technology, developing additional security and network modernization features and maintaining comprehensive product and service offerings. Our research and development process leverages innovative technology in response to market data and customer feedback. As part of this process, we regularly review research and development investments in our products and balance them against market demand.

We have assembled a team of highly skilled engineers with significant transcoding, UC application 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 UC, NFV and security product development. We also continue to invest in Kandy.

As of December 31, 2017, we maintained research and development offices in Massachusetts, California, Illinois, Texas, New York, New Jersey and North Carolina, United States; Kanata, Montreal and 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 $101.5 million for the year ended December 2017, $72.8 million for the year ended December 31, 2016, and $77.9 million for the year ended December 31, 2015. The increase in research and development expenses from 2016 to 2017 is primarily due to the inclusion of GENBAND’s research and development expenses from October 27, 2017 to December 31, 2017 in our consolidated results of operations for 2017.

Seasonality

We have experienced quarterly fluctuations in customer activity due to seasonal considerations. We typically experience increases in order volume in the fourth quarter due to greater spending on operating and capital expenditures by our service provider customers. We typically experience reductions in order volume toward the beginning of the calendar year, when our service provider customers are finalizing their annual budgets, which may result in lower revenues in the first quarter. These seasonal effects may vary and do not always correlate to our operating results. Accordingly, they should not be considered a reliable indicator of our future operating results.

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 services 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. In addition, although we believe that the backlog orders are firm, purchase orders may be canceled by the customer prior to shipment without significant penalty. 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 $400 million at December 31, 2017 and approximately $123 million at December 31, 2016.

Our Employees

At December 31, 2017, we had a total of 2,457 employees, comprised of 1,605 employees located in the Americas, 310 employees located in the Middle East, Africa and Europe and 542 employees located in the Asia Pacific region. Certain of our employees are represented by collective bargaining agreements, primarily in Europe. 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,		
	2017	2016	2015
United States	66%	69%	71%
Europe, Middle East and Africa	14	13	13
Japan	7	10	10
Other Asia Pacific	7	5	4
Other	6	3	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.

Our Company History

We were organized as a Delaware corporation on May 19, 2017, initially under the name Solstice Sapphire Investments, Inc., for the purpose of effecting the merger of Sonus and GENBAND. The Merger occurred on October 27, 2017. Upon completion of the Merger, Sonus and GENBAND became wholly-owned subsidiaries of Solstice Sapphire Investments, Inc., which concurrently changed its name to Sonus Networks, Inc. On November 28, 2017, Sonus Networks, Inc. changed its name to Ribbon Communications Inc. Ribbon succeeded to and continues to operate, directly or indirectly, the then existing businesses of Sonus and GENBAND.

Additional Information

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.ribboncommunications.com*) as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Item 1A. Risk Factors

Our business faces significant risks and uncertainties. Certain important factors may have a material adverse effect on our business prospects, financial condition and results of operations, and they should be carefully considered. Accordingly, in evaluating our business, we encourage you to consider the following discussion of risk factors in its entirety in addition to other information contained in or incorporated by reference into this Annual Report on Form 10-K and our other public filings with the Securities and Exchange Commission ("SEC"). Other events that we do not currently anticipate or that we currently deem immaterial may also affect our business, prospects, financial condition and results of operations.

Risks Related to the Sonus-GENBAND Merger

The anticipated benefits and cost savings of our recent merger may not be realized, which could have a material adverse effect on our results of operations and financial condition.

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

The success of the Merger, including anticipated benefits and cost savings, will depend, in part, on our ability to successfully combine and integrate the businesses of Sonus and GENBAND, including processes, policies, procedures, operations, technologies and systems. It is possible that the integration process could result in the loss of key employees, higher than expected costs, diversion of management attention, the disruption of our ongoing businesses or inconsistencies in standards, controls, procedures and policies that adversely affect the combined company's ability to maintain relationships with customers, vendors and employees or to achieve the anticipated benefits and cost savings of the Merger. If we experience difficulties with the integration process, or are unable to successfully combine the businesses of Sonus and GENBAND in an efficient and effective manner, the anticipated benefits and cost savings of the Merger may not be realized fully or at all, or may take longer to realize than anticipated. As part of the integration process, we may also attempt to divest certain assets of the combined company, which may not be possible on favorable terms, or at all, or if successful, may change the profile of the combined company. An inability to realize the full extent of the anticipated benefits of the Merger, as well as any delays encountered in the integration process, could have an adverse effect upon our revenues, level of expenses and operating results, which may adversely affect the value of our common stock.

In addition, Sonus and GENBAND incurred, and we expect to continue to incur, significant costs in connection with consummating the Merger and integrating the operations of the two companies. These include non-recurring transaction fees, including legal, regulatory and other costs associated with closing the transaction, as well as expenses relating to formulating and implementing integration plans, including facilities and systems consolidation costs and employment-related costs. We may incur additional and unforeseen expenses during the integration process. Payment of these costs and expenses may adversely affect our liquidity, and the actual cost savings of the Merger could be less than expected and may take longer to achieve than anticipated, or may not be realized at all.

Third parties may terminate or alter existing contracts or relationships with us.

Third parties, including customers, suppliers, vendors, landlords, licensors and other business partners, with whom either, or both, Sonus and GENBAND had relationships, may terminate or otherwise reduce the scope of their relationship with us because of the Merger. Any such disruptions could cause us to suffer a loss of potential future revenues and/or lose rights that are material to our business.

We entered into a stockholders' agreement with certain GENBAND stockholders in connection with the consummation of the Merger, which provided them with certain rights that may differ from the rights of our other stockholders.

On October 27, 2017, in connection with the consummation of the Merger, we entered into a principal stockholders' agreement (the "Stockholders Agreement") with Heritage PE (OEP) II, L.P. and Heritage PE (OEP) III, L.P. (the "OEP Stockholders"), principal stockholders of GENBAND prior to the Merger. The Stockholders Agreement sets forth certain arrangements and contains various provisions relating to board representation, standstill restrictions and transfer restrictions as further described therein, including the right of the OEP Stockholders to designate up to five directors for nomination to our nine-member board of directors, subject to the OEP Stockholders maintaining certain levels of beneficial ownership of our common stock. Therefore, the OEP Stockholders will be able to exert significant influence over matters requiring board approval, and our stockholders other than the OEP Stockholders will have limited or no ability to influence the outcome of certain key

transactions. The interests of the parties to the Stockholders Agreement may differ from those of other holders of our common stock.

Risks Related to our Business and Industry

Our quarterly revenue and operating results are unpredictable and may fluctuate significantly from quarter to quarter, which could adversely affect our business, results of operations 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 spending;
- 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 mergers, acquisitions and divestitures; 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 booked 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, we rely on the revenues provided by certain large customers. It can be difficult for us to predict the timing of receipt of major customer orders, and we are unable to control their timing decisions. In the past, we have experienced significant variability in the spending patterns and purchasing practices of our large customers on a quarterly and annual basis, and we expect that this variability will continue. 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 or 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 2017, 2016 and 2015. 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. Any failure by us to achieve, sustain or increase profitability on a consistent basis could cause the value of our common stock to decline.

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. The market is shifting from a market dominated by a few large incumbent telecommunications equipment companies, such as Ericsson LM Telephone Company, Huawei Technologies Co. Ltd., and Nokia Corporation (which recently merged with Alcatel-Lucent S.A.), to a market that is characterized by network virtualization, migration to the cloud, and open interfaces. We believe this shift creates opportunities for us, as well as our direct competitors in telecommunications and networking, including:

- Within the network transformation space, mid-size vendors of networking and telecommunications equipment and specialty vendors, including AudioCodes Ltd., Dialogic Inc., Mavenir Systems, Inc., Metaswitch Networks Corporation, Oracle Corporation (Session Border Controller) and ADTRAN, Inc.; and
- Within the enterprise and cloud solutions space, 8x8, Inc., Avaya Inc., Bandwidth Inc., Cisco Inc., (with Tropo Inc./Broadsoft, Inc.), F5 Networks, Inc., Mitel Networks Corporation, Plivo Inc., RingCentral, Inc., Tokbox Inc., Twilio Inc. and Vonage Holdings Corp. (Nexmo, Inc.).

Mergers among any of these or other competitors could strengthen their ability to compete against us, and additional competitors with significant financial resources entering our markets could 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 our 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.

We will not be successful if we do not grow our customer base or if we are unable to generate recurring business from our existing customers.

We rely on certain key customers, and our future success will depend on our ability to generate recurring business from our existing customers and to attract additional customers beyond our current customer base. One customer, Verizon, contributed 17% of our revenue in 2017, and one customer, AT&T, contributed 12% of our revenue in 2016 and 13% of our revenue in 2015. In addition, for the year ended December 31, 2017, our top five customers contributed approximately 41% of our revenue. 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.

Due to the nature of certain of our product offerings, 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 customer orders. 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 that, for 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 adversely affect our results of operations and financial condition.

Consolidation in the telecommunications industry could harm our business.

The telecommunications industry, including many of our customers, has experienced consolidation, including, in the carrier space:
- the pending acquisition of Hawaiian Telecom, Inc. by Cincinnati Bell Inc. (announced in July 2017);
- the acquisition of Level 3 Communications Inc. by CenturyLink Inc. in November 2017;
- the acquisition of XO Communications, LLC by Verizon Communications Inc. in February 2017; and
- the acquisition of Time Warner Cable Inc. and Bright House Networks, LLC by Charter Communications, Inc. in May 2016.

Further, consolidation has occurred in the vendor space, including:
- the pending acquisition of Spoken Communications Inc. by Avaya Holdings Corp. (announced in January 2018);
- the acquisition of Broadsoft, Inc. by Cisco Systems, Inc. in February 2018;
- the acquisition of ShoreTel Inc. by Mitel Networks Corporation in September 2017;
- the combination of Mitel Mobility, Inc., Xura, Inc. and Ranzure Networks, Inc, and re-branding as Mavenir Systems, Inc., by Siris Capital Group LLC, a private equity investment firm, in December 2016;
- the acquisition of Alcatel-Lucent S.A. by Nokia Corporation in November 2016;
- the acquisition of Polycom, Inc. by Siris Capital Group LLC, in September 2016;
- the acquisition of Nexmo, Inc. by Vonage Holdings Corp. in June 2016;
- the acquisition of Tropo Inc. by Cisco Systems, Inc. in May 2015;
- the acquisition of Aruba Networks, Inc. by HP Inc. in May 2015;
- the acquisition of Riverbed Technology, Inc. by Thoma Bravo, LLC, a private equity investment firm, in April 2015;
- the acquisition of Dialogic Inc. by Novacap TMT IV, L.P. in 2014; and
- the acquisitions of Acme Packet, Inc. and Tekelec, Inc. by Oracle Corporation in 2013.

We expect this trend to continue. Consolidation among our customers may cause delays or reductions in capital expenditure plans by such customers and/or increased competitive pricing pressures as the number of available customers declines and the relative bargaining power of customers increases in relation to suppliers. Any of these factors could materially adversely affect our business.

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

We recorded net restructuring expense of $14.3 million in the aggregate in 2017, 2016 and 2015, comprised of $15.2 million for severance and related costs, less $0.9 million of net reversals related to certain facilities. We expect to record approximately $12 million of additional restructuring expense in 2018.

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 both on a timely basis and in accordance with the highest quality standards; and/or
- reduced ability to execute effectively internal administrative processes, including the implementation of key information technology programs.

There can be no assurance that any restructuring actions we have taken in the past, or may take in the future, will improve our financial condition or results of operations.

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 our loss of significant customers and anticipated revenue.

Most of our sales are on an open credit basis, with typical payment terms of 30 to 90 days. We evaluate and monitor individual customer 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 that we believe are adequate to cover exposure to 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 sales derived through our distributors, in particular, represent sources of increased credit risk as distributors tend to have more limited financial resources than other resellers and end-user customers.

Our customers' failure to pay and/or our failure to maintain sufficient reserves could have a material adverse effect on our results of operations and financial condition. 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, results of operations and financial condition.

Disruptions to, or our failure to effectively develop relationships with and manage, distributors, resellers, system integrators and other channel 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.

We continue to enhance our sales strategy, which we expect will include more partner sales engagements to resell our products and services through authorized distributors, value-added resellers (“VARs”), system integrators and other channel partners. Our future success is dependent upon establishing and maintaining successful relationships with a variety of distributors, VARs, system integrators and other channel partners. We may also need to pursue strategic partnerships with vendors that 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 systems integrators. In these instances, the purchase and sale of our products are dependent on the channel partners, who typically control the timing, prioritization and implementation of projects. Project delays, changes in priority or solution re-design decisions by the systems integrator can adversely affect our product sales. If we fail to maintain relationships with our distribution, VAR and systems 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 such shortcomings could have a material adverse impact on our business and results of operations.

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, and thereby materially adversely affect our results of operations and financial condition.

If our strategic plan, including our research and development of innovative new products and the improvement of existing products, is not aligned with our customers' investments in the evolution of their networks, or if our products and services do not meet customers' demands, 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 market 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. 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. Our choices of specific technologies to pursue, and those to de-emphasize, may prove to be inconsistent with our customers' investment spending. 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 or at all, 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.

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. To 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, we may lose current and prospective customers and our results of operations and financial condition could be materially adversely affected.

If our products do not interoperate with our customers' existing networks, we may not retain current customers or attract new 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.

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 likely 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 by our customers. 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 results of operations and cause our stock price to decline.

Virtualization of our product portfolio could slow our revenue growth.

Virtualization of our product portfolio could slow our revenue growth as we move away from hardware products and increasingly focus on software-based products. Historically, we have produced highly complex products that incorporate hardware with embedded software components. As we virtualize our product portfolio, we expect our margins to improve due

to decreased costs tied to production and sales of our hardware products, including costs related to our reliance on third-party contract manufacturers, interruptions or delays in the supply of hardware components from such third-party sources, and existing hardware support services. While we expect our margins to improve as a result of such reductions in cost, our revenues may decline as a result of the decreases in sales of hardware products, many of which have generated higher revenue on a per-unit basis than certain of our software products.

If the market for our voice infrastructure products continues to significantly decline and if our Security and Application products sales to not accelerate as quickly as we anticipate, our operating results could suffer.

In 2017, the macro-environment for our media gateway trunking and softswitch business continued to face significant declining revenues. Our customers are consolidating, which is both delaying and curtailing their capital spending. Even though we continue to transform our company from a media gateway trunking business to a Security and Applications Business (comprised of Session Border Controllers, Kandy and Unified Communications servers), a portion of our current revenue remains dependent upon the commercial success of our voice infrastructure products, which we believe will also remain true for the foreseeable future. If the market for these products declines more than anticipated and if our Security and Application products sales to not accelerate as quickly as we anticipate, our operating results could suffer.

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, which could adversely affect our business, results of operations and financial condition.

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 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 favorable 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.

We depend upon contract manufacturers. If our contract manufacturers fail to perform, or if we change or consolidate manufacturers, we may fail to meet the demands of our customers and damage our customer relationships, which could materially adversely affect our business.

While we currently work with four contract manufacturers, we primarily rely upon two large global manufacturers 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. As 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, which could negatively affect our relationships with customers and result in delayed revenues.

In addition, any future changes to or consolidations of our current contract manufacturers could lead to material shortages or delays in the supply of our products. 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 delay in the supply of our products, which could negatively affect our relationships with customers and result in delayed revenues.

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 in a timely manner, or at all.

We and our contract manufacturers currently purchase several key components of our products, including commercial digital signal processors, from single or limited sources. 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, it 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, it 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 components 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 our inability to obtain components, 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 increases in the prices of components 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 results of operations.

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 and results of operations.

If we are unable 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. If we are unable to maintain or re-license any third-party licenses required in our current products or obtain any new third-party licenses to develop new products and product enhancements, or in the case of any defects in these third-party software products, we could be required to obtain substitute technology of lower quality or performance standards or at greater cost, and we may be delayed or prevented from making these products or enhancements, any of which could seriously harm our sales and the competitiveness of our products unless and until we can secure an alternative source. Such alternate sources may not provide us with the same functionality as that currently provided to us.

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 may 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 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.

Because our larger scale products are sophisticated and designed to be deployed in complex networks around the world, they may have errors or defects that we find only after full deployment. These defects, and any failure to establish a support infrastructure and maintain required support levels, could seriously harm our business.

Our larger scale products are sophisticated and are designed to be deployed in large and complex networks around the world. Because of the nature of our products, they can only be fully tested when substantially deployed in these networks. Some of our customers may discover errors or defects in the software or hardware, or the products may not operate as expected only 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.

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.

Any errors or defects in our products, and any failure to establish a support infrastructure and maintain required support levels, could materially adversely affect our business and results of operations.

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 to these customers. Further, such government sales are subject to potential delays and cutbacks, may require specific testing efforts, or impose significant compliance obligations.

A portion of our total revenue from product sales comes from contracts with U.S. federal government agencies, none of which currently contemplates 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 to such customers. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our products and services, a reduction of revenue or fines or civil or criminal liability if the audit uncovers improper or illegal activities, which could materially adversely impact our operating results.

Furthermore, 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. Sales of our newer products to governmental agencies for broad deployment may not develop quickly, if at all, or be sufficient to offset future declines in sales of these legacy products. Additionally, 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 and subcontracting business are a significant decline in, or reapportioning of, spending by the federal government, changes as a result of the current 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 for products we provide, delays in the payment of our invoices by government payment offices, and general economic conditions. The loss or significant curtailment of any government contracts or subcontracts, whether due to our performance or due to interruptions 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.

Further, sales to government customers may require specific testing efforts or impose significant compliance or certification obligations. For example, 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. However, if we are unable to obtain JITC certification as needed, our DOD sales, and hence our revenue and results of operations, may suffer.

If we fail to realize the anticipated benefits from any recent acquisitions by Sonus and GENBAND 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 any recent acquisitions by either Sonus or GENBAND 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 personnel;
- 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 results of operations;
- 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 and services;
- 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 any of the acquired businesses with their 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 unable 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 and our results of operations may be adversely affected.

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 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 product and service offerings, 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.

Failure to hire and retain key personnel, or the loss of any of our executive officers, could negatively impact our ability to meet our business objectives and impair our future growth.

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 key 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. The challenge of retaining key employees could be increasingly difficult due to the Merger and ongoing integration process. In addition, our ability to attract and retain key employees could be adversely impacted if we do not have a sufficient number of shares available under the Amended and Restated Stock Incentive Plan to issue to our employees, or if our stockholders do not approve requested share increases or a new equity incentive plan. We may not be able to locate suitable employees for any key employee who leaves or offer employment to potential replacements on reasonable terms.

Our future success also 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 executive 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.

The terms of our credit agreement could adversely affect our operating flexibility and pose risks of default or springing maturity, which would negatively impact our liquidity and operations.

Our credit facility with Silicon Valley Bank includes $100 million of commitments, the full amount of which is available for revolving loans, a $15 million sublimit that is available for letters of credit and a $15 million sublimit that is available for swingline loans. The senior secured credit facility is scheduled to mature in December 2021, subject to a springing maturity if, on or before July 14, 2020, the existing promissory note issued to certain shareholders is not converted or extended to March 2022 or later. The credit agreement includes procedures for additional financial institutions to become lenders, or for any existing lender to increase its commitment under the facility, subject to an available increase of $50 million for all incremental commitments under the credit agreement, without amendment. Provisions in the credit agreement impose limitations on our ability to, among other things, incur additional indebtedness, create liens, make acquisitions or engage in mergers, enter into transactions with affiliates, dispose of assets, make certain investments and amend or repay certain junior debt.

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 credit agreement or result in the acceleration of the maturity of indebtedness outstanding under the 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 terms acceptable to us, or at all.

We had $20 million of borrowings outstanding under the credit facility as of December 31, 2017. In addition, we had $2.9 million of letters of credit outstanding under the credit facility as of December 31, 2017. If we are prevented from borrowing or if we are unable to extend, renew or replace the credit facility by the maturity date of December 2021, or an early springing maturity date, on favorable terms, or at all, this could have a material adverse effect on our liquidity and cause our business, operations and financial condition to suffer. If the credit facility is subjected to the early springing maturity, 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 indebtedness on terms acceptable to us, or at all.

Litigation and government investigations could result in significant legal expenses and settlement payments, fines or damage awards.

From time to time, we are subject to litigation regarding intellectual property rights or other claims. In the past, we have also been named as a defendant in securities class action and stockholder 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. For instance, GENBAND was involved in four patent infringement lawsuits involving Metaswitch Networks Ltd., Metaswitch Networks Corp. and Metaswitch Inc. (collectively, “Metaswitch”), three of which are ongoing. At this time, it is not possible to predict the outcome of the ongoing lawsuits, including whether or not any proceedings will continue, and when or how these matters will be resolved or whether we will ultimately receive, and in what sum, amounts previously awarded as a result of these proceedings. Regardless of whether we are ultimately successful in these lawsuits, we will likely elect to continue to incur substantial legal fees in connection with these matters.

We have also been subject to employment claims in connection with employee terminations, and may be subject to additional claims in the future. 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 these claims, regardless of their merits. Further, defending ourselves from these types of claims could divert our management's attention from our operations. The quantity and cost of employment claims may rise as a result of our increasing international expansion and the Merger.

In addition, we are from time to time subject to investigations by the government. For example, we are also fully cooperating with an SEC inquiry regarding the development and issuance of Sonus' first quarter 2015 revenue and earnings guidance. Following recent communications with the SEC's Division of Enforcement (the "Staff"), we have reached an agreement in principle to resolve this matter and, in connection therewith, we are negotiating the terms of an order in which we will neither make admissions nor denials, and in which we will agree to pay a $1.9 million civil penalty and agree not to violate the securities laws in the future. There is no assurance that we will not be subject to similar investigations by the Staff or other government agencies in the future.

If the defenses we claim in our material litigation matters are ultimately unsuccessful, or if we are unable to achieve a favorable settlement with an adverse party or a government agency, we could be liable for large settlement payments, damage awards or fines that could have a material adverse effect on our business and results of operations.

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 or about our customers. Despite our security procedures, such as the encryption of data, 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, corrupt 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. Additionally, the information systems of our customers could be compromised, 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. These types of security breaches could also create exposure to lawsuits, regulatory investigations, increased legal liability and/or reputational damage. In addition, the costs to remediate any cyberattack could be significant. Such consequences could be exacerbated if we or our third-party providers are unable to adequately recover critical systems in a timely manner following a systems failure. Our insurance coverage may be insufficient to cover all losses related to cyberattacks.

Worldwide efforts to contain capital spending and global economic conditions and uncertainties in the geopolitical environment have been and may continue to be materially adverse to our business.

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 customers have canceled or delayed, and current and prospective customers may continue to cancel and 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 have been, and may continue to 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, which may result in erosion of our profit margins and 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, particularly the wireline sector, 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, as well as changes implemented by the current U.S. presidential administration, may continue to put pressure on global economic conditions which, in turn, could materially adversely affect our operating results.

Man-made problems, such as terrorism, and natural disasters may disrupt our operations and harm our operating results.

The continued threat of terrorism and heightened security and military action in response to this threat, or any future acts of terrorism, may cause disruptions to the economies of the United States and other countries. 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 results of operations.

Natural catastrophic events, such as earthquakes, fire, floods, or tornadoes, may also affect our or our customers' operations. For example, 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.

If we fail to maintain appropriate internal controls in the future, we may not be able to report our financial results accurately, which may adversely affect our stock price and our business.

Section 404 of the Sarbanes-Oxley Act of 2002 and the related regulations require our management to report on, and our independent registered public accounting firm to attest to, the effectiveness of our internal control over financial reporting. We have committed and will be required to continue to commit significant financial and managerial resources in order to comply with these requirements.

Further, we are required to integrate GENBAND and other acquired businesses into our system of disclosure controls and procedures and internal control over financial reporting. As may be the case with other companies we acquire, prior to the Merger, GENBAND was not required to implement or maintain the disclosure controls and procedures or internal control over financial reporting that are required of public companies, and we cannot provide assurance as to how long the integration process may take.

Internal control over financial reporting has inherent limitations, including human error, the possibility that controls could be circumvented or become inadequate because of changed conditions, and fraud. If we are unable to maintain effective internal controls, we may not have adequate, accurate or timely financial information, and we may be unable to meet our reporting obligations as a publicly traded company or comply with the requirements of the SEC or the Sarbanes-Oxley Act of 2002. This could result in a restatement of our financial statements, the imposition of sanctions, or investigation by regulatory authorities, and could cause investors to lose confidence in our reported financial information. Any such consequence or other negative effect of our inability to meet our reporting requirements or comply with legal and regulatory requirements, as well as any disclosure of an accounting, reporting or control issue, could adversely affect the trading price of our common stock and our business.

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 interpretations 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, we were required to adopt the new revenue recognition standard in 2018.

In addition, recent U.S. tax legislation signed by President Trump in December 2017 made many changes to the Internal Revenue Code that impact U.S. corporations, including reducing the U.S. corporate income tax rate, limiting certain interest deductions, permitting immediate expensing of certain capital expenditures, adopting elements of a territorial tax system and imposing a one-time transition tax on all undistributed earnings and profits of certain U.S.-owned foreign corporations. Many of these changes are effective immediately, without any transition periods or grandfathering for existing transactions. The legislation is unclear in many respects and could be subject to potential amendments and technical corrections, as well as interpretations and implementing regulations, any of which could lessen or increase certain adverse impacts of the legislation. In addition, it is unclear how these U.S. federal income tax changes will affect state and local taxation, which often uses federal taxable income as a starting point for computing state and local tax liabilities. We will be finalizing the impact on the Company of the tax legislation throughout 2018.

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 $237 million in 2017 as a result of the Merger, $12 million in 2016 as a result of our acquisition of Taqua, LLC (“Taqua”) and $11 million in 2015 as a result of our acquisition of certain assets related to Treq Labs, Inc.’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”). Goodwill, which increased by approximately $286 million in 2017 as a result of the Merger, $9 million in 2016 as a result of our acquisition of Taqua and $1 million in 2015 as a result of our acquisition of the SDN 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. Any material impairment of goodwill or intangible assets could adversely affect our results of operations.

Risks Relating to our Intellectual Property

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 contractual 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 misappropriate 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, which could have a material adverse effect on our business.

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. For instance, GENBAND was involved in four patent infringement lawsuits involving Metaswitch, three of which are ongoing, in which both GENBAND and Metaswitch asserted claims of patent infringement against each other. At this time, it is not possible to predict the outcome of the ongoing lawsuits, including whether or not any proceedings will continue, and when or how these matters will be resolved or whether we will ultimately receive, and in what sum, amounts previously awarded to us as a result of these proceedings.

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, 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. If a third party asserts that our products infringe upon their proprietary rights, we may be forced either to defend ourselves, our customers or contract manufacturers in litigation or to license their patents or other intellectual property for substantial royalty payments. These claims and any resulting licensing arrangement or lawsuit could subject us to significant royalty payments or liability for damages and invalidation of our proprietary rights. Any potential intellectual property litigation also could force us to do one or more of the following:

- delay shipments of, or 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, if feasible.

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 and adversely impact our ability to gain prospective customers. 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. In addition, costs relating to indemnification provisions in our product agreements may be significant.

Risks Relating to our International Operations

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 results of operations.

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 adverse tax policies, tariffs, customs regulations, trade protection measures, export quotas and qualifications to transact business;
- differing regulatory requirements, including tax laws, data privacy laws and labor regulations;
- challenging pricing environments in highly competitive new markets;
- foreign currency exchange controls, restrictions on repatriation of cash and changes in currency exchange rates;
- management communication and integration problems related to entering new markets with different languages, cultures and political systems;
- potential exposure to liability or damage of reputation resulting from a higher incidence of corruption or unethical business practices in some countries;
- greater risk of a failure of employees to comply with both U.S. and foreign laws, including antitrust regulations, the U.S. Foreign Corrupt Practices Act (“FCPA”) and any trade regulations ensuring fair trade practices;
- higher or more variable network service provider fees outside of the United States;
- any need to adapt and localize our products for specific countries;
- our ability to effectively price our products in competitive international markets;
- 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 results of operations 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 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 U.S. 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 U.S. dollar could increase the cost of local operating expenses and procurement of raw materials from sources outside the United States. Therefore, changes in the value of the U.S. dollar against other currencies will affect our revenues, income from operations, net income and the value of balance sheet items originally denominated in other currencies. There is no guarantee that our financial results will not be adversely affected by currency exchange rate fluctuations.

Our business and operations in the United Kingdom are exposed to potential disruptions and uncertainty relating to Brexit.

In March 2017, Prime Minister Theresa May of the United Kingdom formally began the process of withdrawing the United Kingdom from the European Union, following the June 2016 referendum in which the majority of voters in the United Kingdom supported such withdrawal (known as Brexit). Brexit could cause disruptions to and create uncertainty surrounding

our business and operations in the United Kingdom, including affecting relationships with existing and future customers, suppliers and employees. The effects of Brexit will depend on any agreements the U.K. makes to retain access to E.U. markets either during a transitional period or more permanently. The measures could potentially disrupt the markets we serve and the tax jurisdictions in which we operate and adversely change tax benefits or liabilities in these or other jurisdictions. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which E.U. laws to replace or replicate. These developments in turn may inhibit our sales, mobility of our personnel, and our access to capital.

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

We have an 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.

Risks Relating to Legislation and Government Regulation

Failure to comply with the Foreign Corrupt Practices Act or the U.K. 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 FCPA, and the U.K. Bribery Act of 2010 (the "UKBA"), which 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 record-keeping 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 U.K. 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 U.K. government, as applicable, may seek to hold us liable for successor liability violations committed by companies we have acquired or may in the future 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, results of operations and the trading price of our common stock.

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.

Certain of our products incorporating encryption technology are subject to export controls and may be exported only with the required level of export license or through an export license exception. 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. If we were to fail to comply with export licensing, customs regulations, economic sanctions and other laws, we could be subject to substantial civil and criminal penalties, including fines for the Company and incarceration for responsible employees and managers, and the possible loss of export or import privileges. Similarly, 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.

In addition, if our distributors fail to obtain appropriate import, export or re-export licenses or permits, we may also be adversely affected through reputational harm and penalties. Obtaining export licenses can be difficult and time-consuming, and in some cases a license may not be available on a timely basis or at all.

Furthermore, export control laws and economic sanctions prohibit the shipment of certain products to embargoed or sanctioned countries, governments and persons. We cannot assure that a violation of these regulations will not occur, whether knowingly or inadvertently. Any such shipment could have negative consequences including government investigations, penalties, fines, civil and criminal sanctions, and reputational harm.

Additionally, any change in our products or in export or import regulations, economic sanctions 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 delays in the introduction of our products in international markets, 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 results of operations.

Regulation of the telecommunications industry, or changes in governmental regulation, interpretation or legislative reform 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 results of operations.

Other laws and regulations, including in the areas of advertising, consumer affairs, data protection, finance, marketing, privacy, publishing and taxation requirements, are subject to change and differing interpretations. Changes in the political climate or in existing laws or regulations, or their interpretations, or the enactment of new laws or the issuance of new regulations or changes in enforcement priorities or activity could adversely affect our business by, among other things, increasing our administrative, compliance and other costs; forcing us to undergo a corporate restructuring; limiting our ability to engage in inter-company transactions with its affiliates and subsidiaries; increasing our tax obligations, including unfavorable outcomes from audits performed by various tax authorities; affecting our ability to continue to serve our customers and to attract new customers; affecting cash management practices and repatriation efforts; forcing us to alter or restructure our relationships with vendors and contractors; increasing compliance efforts or costs; limiting our use of or access to personal information; restricting our ability to market our products; and/or requiring us to implement additional or different programs and systems.

Compliance with regulations is costly and time-consuming, and we may encounter difficulties, delays or significant expenses in connection with compliance, and we may be exposed to significant penalties, liabilities, reputational harm and loss of business in the event that we fail to comply. While it is not possible to predict when or whether fundamental policy or interpretive changes would occur, these or other changes could fundamentally change the dynamics of our industry or the costs associated with our operations. Changes in public policy or enforcement priorities could materially affect our profitability, our ability to retain or grow business, or in the event of extreme circumstances, our financial condition.

Risks Related to our Common Stock

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 security businesses;
- consolidation among our customers and/or our competitors in the telecommunications industry;
- changes in the financial condition or anticipated capital expenditures 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;

- failure to meet our earnings guidance or securities analysts' estimates;
- changes in financial estimates by securities analysts;
- speculation in the press or investment community, and shorting of our stock by investors;
- 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;
- developments with respect to intellectual property rights, including any related litigation;
- repurchases under our stock buyback program;
- departure of key personnel or other major changes in our board of directors or management;
- changes in governmental regulations;
- our ability to develop and market new and enhanced products on a timely basis;
- 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.

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.

Item 1B. Unresolved Staff Comments

None.

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Item 2. Properties

As of December 31, 2017, we maintained the following facilities:

Location	Principal use	Square footage (approximate)	Lease expiration
Plano, Texas	Engineering/development, customer support, general and administrative and sales	100,300	February 2022
Westford, Massachusetts	Corporate activities, engineering/development, sales and customer support	97,500	August 2028
Paladium (Ottawa), Canada	Engineering/development, customer support and general and administrative	76,500	December 2019
Research Triangle Park, North Carolina	Engineering/development, customer support, general and administrative and sales	71,300	April 2027
Bangalore, India	Engineering/development	60,100	October 2019
Durham, North Carolina	Warehouse	50,300	August 2020
Richardson, Texas	Customer testing	26,500	January 2020
Billerica, Massachusetts	Engineering/development, customer support and sales	23,400	September 2018
Maidenhead, United Kingdom	Engineering/development, customer support and sales	20,400	July 2020
Fremont, California	Engineering/development and general and administrative	16,000	June 2020
Kanata (Ottawa), Canada	Engineering/development and general and administrative	16,000	October 2018
Richardson, Texas (a)	Engineering/development, general and administrative and sales	15,600	September 2021
Freehold, New Jersey	Engineering/development	13,300	January 2024
Mexico City, Mexico	Customer support	11,900	October 2019
Prague, Czech Republic	Customer support	11,500	May 2019
Tel Aviv, Israel	Sales and customer support	7,800	July 2019
Swindon, United Kingdom	Engineering/development and customer support	5,800	December 2018
Galway, Ireland	General and administrative	5,600	January 2023
San Jose, California (b)	Engineering/development	5,500	November 2018
Rochester, New York (c)	Engineering/development and customer support	5,400	October 2019
New York, New York	General and administrative and sales	5,100	August 2020
Tokyo, Japan	Sales and customer support	5,000	May 2020
Schaumburg, Illinois	Engineering/development	4,700	October 2019
Madrid, Spain	Sales and customer support	4,100	September 2019
Montreal (Quebec), Canada	Engineering/development	4,100	November 2018
Immenstaad, Germany	Customer support	4,000	June 2018
Sydney, Australia	Sales and customer support	3,400	October 2018
Gaithersburg, Maryland	Engineering/development and customer support	2,600	January 2019
Hyannis, Massachusetts	Engineering/development	2,200	December 2019
Hong Kong, China	Sales and customer support	2,100	October 2019
Dubai, United Arab Emirates	Sales and customer support	1,200	May 2018
Melbourne, Australia	Sales and customer support	1,000	May 2018

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(a) A portion of this facility was not in use at December 31, 2017 and is currently being subleased as part of a restructuring initiative.

(b) Facility was not in use at December 31, 2017 as part of a restructuring initiative and is currently being actively marketed for sublease.
(c) Facility was not in use at December 31, 2017 as part of a restructuring initiative and is currently being subleased.

We also lease small (under 1,000 square feet) short-term office space in various countries around the world for sales, marketing and services staff. 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

We are fully cooperating with an SEC inquiry regarding the development and issuance of Sonus' first quarter 2015 revenue and earnings guidance. Following recent communications with the SEC's Division of Enforcement (the "Staff"), we have reached an agreement in principle to resolve this matter. We are negotiating the terms of an order with the Staff in which we will neither make admissions nor denials, and in which we will agree to pay a $1.9 million civil penalty and agree not to violate the securities laws in the future. We recorded $1.9 million in the year ended December 31, 2017, including $0.3 million in the three months ended December 31, 2017, for potential fines in connection with this investigation.

In addition, through GENBAND, we are involved in three ongoing patent infringement lawsuits with Metaswitch Networks Ltd., Metaswitch Networks Corp. and Metaswitch Inc. (collectively, "Metaswitch"). First, on January 21, 2014, GENBAND and our indirectly-owned subsidiary, GENBAND US LLC, filed a complaint alleging that Metaswitch infringed certain patents owned by GENBAND. Following unsuccessful mediation, a trial took place and on January 15, 2016 the jury awarded approximately $8,168,000 in past royalty damages to GENBAND, which neither GENBAND nor we have recorded. On September 29, 2016, the court confirmed the jury verdict following motions from both parties. GENBAND is seeking additional royalty and other damages and has appealed a ruling of the court denying a permanent injunction against continued infringement by Metaswitch. GENBAND appealed the denial of its request for a permanent injunction and presented oral argument on this issue before the U.S. Court of Appeals for the Federal Circuit on June 8, 2017. On July 10, 2017, the U.S. Court of Appeals for the Federal Circuit vacated the lower court's denial of a permanent injunction and remanded the case for further consideration of GENBAND's request for a permanent injunction. On December 18, 2017, the lower court held a hearing on all remaining issues regarding the appeal. All briefing for reconsideration has been completed and the court's decision is pending.

A second lawsuit was filed on July 7, 2014 by Metaswitch against GENBAND in which both parties asserted claims of patent infringement against each other. The trial for the second lawsuit concluded on March 17, 2016 with no damages awarded to either party. The court entered a final judgment on April 14, 2016 awarding GENBAND its costs as the prevailing party. On August 28, 2017, the court denied all parties' motions for judgment as a matter of law and for a new trial. On October 26, 2017, the court granted GENBAND's motion for bill of costs and awarded GENBAND approximately $315,000 against Metaswitch, which was subsequently recorded by the Company in early 2018, when received.

Next, on June 2, 2016, the federal district court signed an order lifting a stay and severing and consolidating various non-patent claims and counterclaims that were previously stayed in the first two lawsuits into a third lawsuit. On March 28, 2017, the court dismissed all parties' claims in this third lawsuit without prejudice, concluding that it lacked subject-matter jurisdiction over GENBAND's claims, declining to exercise jurisdiction over Metaswitch's federal Lanham Act counterclaim, and dismissing Metaswitch's remaining counterclaims concluding that it lacked subject-matter jurisdiction over those claims. Immediately following the dismissal of this federal court action on March 28, 2017, GENBAND filed a petition against Metaswitch in Texas state court asserting the claims that GENBAND had previously asserted in the federal court action. Metaswitch filed its answer on April 21, 2017 and asserted counterclaims against GENBAND. On August 16, 2017, Metaswitch then amended its counterclaims against GENBAND. A hearing on discovery motions was held on January 4, 2018. The Texas state court has issued a scheduling order setting trial for this case in November 2018. At this time, it is not possible to predict the outcome of the litigation, but we do not expect the results of this suit to have a material adverse effect on our business or results of operations.

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

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock began publicly trading on The Nasdaq Global Select Market on October 30, 2017 under the symbol "SONS," following the Merger. Effective November 29, 2017, our common stock was quoted on The Nasdaq Global Select Market under the symbol "RBBN."

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 2017		
Fourth quarter (October 30 to December 31)	$ 9.05	$ 6.89

Holders

At March 2, 2018, there were approximately 172 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 2017:

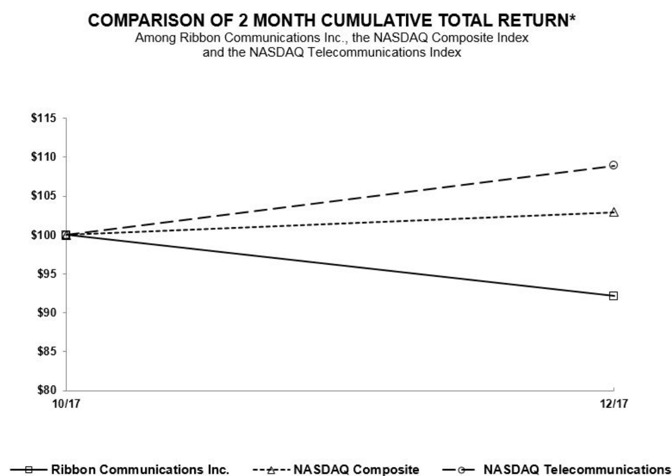
Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs
October 30, 2017 to October 31, 2017	—	$ —	—	$ —
November 1, 2017 to November 30, 2017	3,070	$ 6.95	—	$ —
December 1, 2017 to December 31, 2017	14,201	$ 7.41	—	$ —
Total	17,271	$ 7.33	—	$ —

(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 2017, 17,271 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.

Performance Graph

The following performance graph compares the cumulative total return to stockholders for our common stock for the period from October 30, 2017 (the date Ribbon's common stock began trading on Nasdaq) through December 31, 2017 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 October 30, 2017 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 prior or subsequent filings under the Securities Act of 1933, as amended, or the Exchange Act.



* $100 invested on October 30, 2017 in stock or October 31, 2017 in index, including reinvestment of dividends.
Fiscal year ending December 31.

	10/17	12/17
Ribbon Communications Inc.	$ 100.00	$ 92.13
Nasdaq Composite	$ 100.00	$ 102.94
Nasdaq Telecommunications	$ 100.00	$ 108.92

Item 6. Selected Financial Data

On October 27, 2017, the Merger Date, Sonus and GENBAND completed the Merger. The following table presents selected consolidated financial data of Sonus, prior to the Merger Date, and selected consolidated financial data of Ribbon, on and after the Merger Date. The selected consolidated financial data set forth below as of December 31, 2017 and 2016 and for each of the years ended December 31, 2017, 2016 and 2015 have been derived from the audited consolidated financial statements included elsewhere herein. The selected consolidated financial data set forth below as of December 31, 2015, 2014 and 2013 and for each of the years ended December 31, 2014 and 2013 have been derived from audited consolidated financial statements not included elsewhere herein. 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, 2017 (1)	2016 (2)	2015 (3)	2014 (4)	2013
Revenue:					
Product	$ 181,119	$ 146,381	$ 141,913	$ 182,455	$ 167,272
Service	148,823	106,210	107,121	113,871	109,461
Total revenue	329,942	252,591	249,034	296,326	276,733
Cost of revenue:					
Product	70,250	47,367	50,460	60,284	59,235
Service	58,196	37,613	36,917	42,637	45,038
Total cost of revenue	128,446	84,980	87,377	102,921	104,273
Gross profit	201,496	167,611	161,657	193,405	172,460
Operating expenses:					
Research and development	101,481	72,841	77,908	79,396	69,559
Sales and marketing	83,403	68,539	72,841	80,141	78,365
General and administrative	47,642	35,948	39,846	43,937	40,107
Acquisition- and integration-related expense	14,763	1,152	131	1,558	93
Restructuring expense	9,436	2,740	2,148	5,625	5,411
Total operating expenses	256,725	181,220	192,874	210,657	193,535
Loss from operations	(55,229)	(13,609)	(31,217)	(17,252)	(21,075)
Interest and other income, net	1,537	2,193	1,329	2,611	408
Loss from continuing operations before income taxes	(53,692)	(11,416)	(29,888)	(14,641)	(20,667)
Income tax benefit (provision)	18,440	(2,516)	(2,007)	(2,214)	(1,452)
Net loss	$ (35,252)	$ (13,932)	$ (31,895)	$ (16,855)	$ (22,119)
Loss per share					
Basic	$ (0.60)	$ (0.28)	$ (0.64)	$ (0.34)	$ (0.40)
Diluted	$ (0.60)	$ (0.28)	$ (0.64)	$ (0.34)	$ (0.40)
Shares used to compute loss per share					
Basic	58,822	49,385	49,560	50,245	55,686
Diluted	58,822	49,385	49,560	50,245	55,686

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(1) Includes $69.1 million of revenue and $12.5 million of net loss attributable to GENBAND for the period subsequent to the Merger on October 27, 2017.
(2) Includes $1.9 million of revenue and $4.7 million of net loss attributable to Taqua, LLC for the period subsequent to its acquisition by the Company on September 26, 2016.
(3) 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 periods since January 2, 2015, as these amounts are not significant to the Company's consolidated financial statements.
(4) 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.

Consolidated Balance Sheet Data	December 31,				
(In thousands)	2017	2016	2015	2014	2013
Cash and cash equivalents	$ 57,073	$ 31,923	$ 50,111	$ 41,157	$ 72,423
Marketable securities	$ 17,224	$ 61,836	$ 58,533	$ 64,443	$ 138,882
Investments	$ 9,031	$ 32,371	$ 33,605	$ 42,407	$ 34,364
Total assets	$ 910,883	$ 308,059	$ 312,891	$ 332,635	$ 417,484
Revolving credit facility	$ 20,000	$ —	$ —	$ —	$ —
Long-term debt, related party	$ 22,500	$ —	$ —	$ —	$ —
Other long-term obligations	$ 30,160	$ 11,868	$ 12,416	$ 14,878	$ 15,821

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

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

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

Business Acquisitions

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

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

The Merger has been accounted for as a business combination and the financial results of GENBAND have been included in our consolidated financial statements beginning on the Merger Date. On November 28, 2017, the Company changed its name to "Ribbon Communications Inc."

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 VoIP, VoWiFi and VoLTE. The financial results of Taqua are included in our consolidated financial statements beginning 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 SDN technology, SDN controller software and SDN management software (the "SDN Business"). The SDN Business provides solutions that optimize networks for voice, video and UC for both enterprise and service provider customers. The financial results of the SDN Business are included in our consolidated financial statements beginning on the Treq Asset Acquisition Date.

Financial Overview

Financial Results

We reported losses from operations of approximately $55 million for 2017, $14 million for 2016 and $31 million for 2015. We reported net losses of approximately $35 million for 2017, $14 million for 2016 and $32 million for 2015.

Our revenue was approximately $330 million in 2017, $253 million in 2016 and $249 million in 2015. Our gross profit was approximately $201 million in 2017, $168 million in 2016 and $162 million in 2015. Our gross profit as a percentage of revenue ("total gross margin") was approximately 61% in 2017, 66% in 2016 and 65% in 2015.

Our operating expenses were approximately $257 million in 2017, compared to approximately $181 million in 2016 and approximately $193 million in 2015.

Our 2017 operating expenses included approximately $15 million of acquisition- and integration-related expenses, nearly all related to the Merger, and approximately $9 million of restructuring expense. Our 2017 restructuring expense was primarily related to severance and related costs.

Our 2016 operating expenses included approximately $1 million of acquisition- and integration-related costs for professional and services fees related to our acquisition of Taqua and approximately $3 million of restructuring expense, primarily comprised of approximately $2 million related to our 2016 Restructuring Initiative and approximately $1 million related to our Taqua Restructuring Initiative.

Our 2015 operating expenses included approximately $2 million of restructuring expense, comprised of approximately $4 million of expense related to our 2015 Restructuring Initiative, net of approximately $2 million of reversals of restructuring expense previously recorded in connection with our 2012 Restructuring Initiative.

We recorded stock-based compensation expense of approximately $26 million in 2017, $20 million in 2016 and $22 million in 2015. The expense recorded in 2017 includes approximately $9 million of incremental expense related to the acceleration of stock options and certain full value stock awards in connection with the Merger.

See "Results of Operations" in this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") for additional discussion of our results of operations for the years ended December 31, 2017, 2016 and 2015.

Restructuring and Cost Reduction Initiatives

In connection with the Merger, we implemented a restructuring plan in the fourth quarter of 2017 to eliminate certain redundant positions and facilities within the combined companies (the "Merger Restructuring Initiative"). Accordingly, we recorded $8.5 million of restructuring expense in 2017 related to the Merger Restructuring Initiative. We believe that the payments related to the amount accrued at December 31, 2017 will be completed in 2018. We anticipate that we will record additional future expense in connection with this initiative for headcount and redundant facilities aggregating approximately $12 million. We believe that the payments related to this expected additional future expense will be completed by early 2019.

We assumed GENBAND's restructuring liability aggregating approximately $4 million at the Merger Date (the "GENBAND Restructuring Initiative"), primarily related to headcount reductions. We do not expect to record additional expense in connection with this initiative except for adjustments for changes in estimated costs. We expect that the payments related to this assumed liability will be completed in 2018.

In connection with the acquisition of Taqua, we implemented 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 (the "Audit Committee") approved a broader Taqua restructuring plan related to headcount and redundant facilities (collectively, the "Taqua Restructuring Initiative"). In connection with this initiative, we have recorded approximately $2 million of restructuring expense for severance and related costs and estimated costs related to the elimination of redundant facilities, including adjustments recorded for changes in cost estimates for the planned restructuring activities. The actions under the Taqua Restructuring Initiative have been implemented and accordingly, we do not expect to record additional expense in connection with this initiative. The amounts accrued for severance and related costs were fully paid by the end of the third quarter of 2017. We expect that the amounts accrued for facilities costs will be paid by the end of 2018.

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

To better align our cost structure to our then-current revenue expectations, in April 2015, we announced a cost reduction review. On April 16, 2015, we initiated a restructuring plan to reduce our workforce by approximately 150 positions, or approximately 13% of our worldwide workforce (the "2015 Restructuring Initiative"). We recorded nominal restructuring expense in 2016 and approximately $4 million in 2015 in connection with the 2015 Restructuring Initiative. We made the final payments in connection with this initiative in 2017 and do not expect to either incur additional expense or make additional payments in the future related to the 2015 Restructuring Initiative.

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 revenue recognition, the valuation of inventory, loss contingencies and reserves, 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 hardware-related 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 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 certain of 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 some 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 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 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 determine ESP for our products and certain services by considering multiple factors including, but not limited to, overall market conditions, such as geographic or regional-specific 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.

Effective January 1, 2018, we adopted Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"), along with additional ASUs which, among other things, clarified the implementation of the new revenue guidance and delayed the adoption by one year, to January 1, 2018 (collectively, the "New Revenue Standard"). We will utilize the modified retrospective approach. The New Revenue Standard replaces most of the existing revenue recognition standards and includes expanded disclosure requirements. For a further discussion of the New Revenue Standard, see "Recent Accounting Pronouncements" in this MD&A.

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 estimates of market value in determining inventory valuation are estimates related to economic trends, future demand for 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. Changes 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 restricted stock awards, restricted stock units and performance-based awards is based upon our stock price on the grant date.

In 2015, we began to grant performance-based stock units 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 performance-based stock units.

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 performance-based stock awards 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 indicate that an asset is not recoverable, we will recognize an impairment loss for the amount by which the carrying value of 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 other 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 2017, 2016 and 2015 and determined that our market capitalization was significantly in excess of our carrying value. Subsequent to December 31, 2017, our market capitalization declined to a value less than our book value. Should our market capitalization remain at less than our book value, this may indicate a triggering event and we may be required to undertake an interim goodwill impairment test.

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 2017. We provide for deferred income taxes resulting from temporary differences between financial and taxable income. Such differences arise

primarily from tax net operating loss ("NOL") 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, 2017, we had valuation allowances of approximately $73 million to offset net domestic deferred tax assets of approximately $74 million. In addition, we had valuation allowances to offset Canada Scientific Research and Experimental Development ("SRED") credits carryovers of approximately $10 million and Ireland net deferred tax assets of $6 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 provided for income taxes on the undistributed earnings of our non-U.S. subsidiaries as of December 31, 2017, with the exception of the Company's Irish subsidiary, as we do not plan to permanently reinvest these amounts outside the United States. The repatriation of the undistributed earnings would result in withholding taxes imposed on the repatriation. Consequently, we have recorded a tax liability of $3.2 million, consisting primarily of withholding and distribution taxes, relating to undistributed earnings from these subsidiaries as of December 31, 2017. Had the earnings of the Irish subsidiary been determined to not be permanently reinvested outside the U.S., no additional deferred tax liability would be required due to no withholding taxes or income tax expense being imposed on such repatriation.

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 with the initial determination of the position's sustainability and is measured at the largest amount of benefit that has a greater 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.

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

The impact of certain effects of the Tax Act has been recognized in the period in which the new legislation was enacted per guidance in Staff Accounting Bulletin 118, which allows for a measurement period to complete the accounting for certain elements of the tax reform. We have not yet completed a full evaluation of the impact of the Tax Act on our financial statements, however, we have provided a reasonable estimate for the impact related to remeasured deferred tax assets based on the new federal income tax rate of 21%. We have also provided for the provisional impact related to the Tax Act's change to the federal NOL and AMT carryovers. The total estimated impact of $5 million is reflected in income from continuing operations, and increased the tax benefit for the year ended December 31, 2017. We will continue to make and refine our calculations as

additional analysis is completed. We cannot predict with certainty how the Tax Act will affect the Company's financial position or results of operations.

Results of Operations

Years Ended December 31, 2017 and 2016

Revenue. Revenue for the years ended December 31, 2017 and 2016 was as follows (in millions, except percentages):

	Year ended December 31,		Increase from prior year	
	2017	2016	$	%
Product	$ 181.1	$ 146.4	$ 34.7	23.7%
Service	148.8	106.2	42.6	40.1%
Total revenue	$ 329.9	$ 252.6	$ 77.3	30.6%

Product revenue is comprised of sales of our network transformation, security and applications solutions. The increase in product revenue in 2017 compared to 2016 was primarily the result of the inclusion GENBAND's product revenue approximating $38 million for the period since the Merger Date, approximately $20 million of higher sales of our security and application products and the inclusion of approximately $4 million of 2017 product revenue from Taqua. These increases were partially offset by net decreases in sales of certain other products, primarily our legacy gateway products.

In 2017, approximately 24% of our product revenue was from indirect sales through our channel partner program, compared to approximately 26% in 2016.

In 2017, approximately 20% of our product revenue was attributable to sales to enterprise customers, compared to approximately 19% in 2016. These sales were made through both our direct sales team and indirect sales channel partners.

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

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

Service revenue for the years ended December 31, 2017 and 2016 was comprised of the following (in millions, except percentages):

	Year ended December 31,		Increase from prior year	
	2017	2016	$	%
Maintenance	$ 114.7	$ 87.0	$ 27.7	31.9%
Professional services	34.1	19.2	14.9	77.4%
Total service revenue	$ 148.8	$ 106.2	$ 42.6	40.1%

Our maintenance revenue increased in 2017 compared to 2016 primarily due to the inclusion of approximately $21 million of revenue attributable to GENBAND in 2017 for the period since the Merger Date and the inclusion of approximately $5 million of revenue attributable to Taqua.

The increase in our professional services revenue in 2017 compared to 2016 was primarily due to the inclusion of approximately $10 million of revenue attributable to GENBAND in 2017 for the period since the Merger Date, coupled with an increase in the volume of network transformation solutions projects completed in 2017 compared to 2016.

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

The following customers contributed 10% or more of our revenue in the years ended December 31, 2017 and 2016:

	Year ended December 31,	
	2017	2016
Verizon Communications Inc.	17%	*
AT&T Inc.	*	12%

Revenue earned from customers domiciled outside the United States was approximately 34% of revenue in 2017 and approximately 31% of revenue in 2016. 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 approximately $22 million at December 31, 2017 and approximately $7 million at December 31, 2016. Our deferred service revenue was approximately $93 million at December 31, 2017 and approximately $44 million at December 31, 2016. 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 2018 will increase significantly compared to 2017 levels, primarily due to our acquisition of GENBAND.

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

Overall, we expect that total revenue in 2018 will be significantly higher than our 2017 total revenue due to the inclusion of GENBAND for a full year in 2018. However, we expect that our total revenue will decrease in the first quarter of 2018 and in the 2018 fiscal year compared to the combined revenues of Sonus and GENBAND in the comparable 2017 periods

In connection with the purchase price allocation to record our acquisition of GENBAND, we were required to record at fair value the assumed deferred revenue, resulting in a reduction of approximately $50 million to the assumed deferred revenue and future recognizable revenue. We expect that we will recognize approximately $22 million less revenue in 2018 than GENBAND would have recognized in the same period had we not acquired it. We expect that these purchase accounting-related reductions to future revenue will continue through 2020, primarily related to future service revenue.

Cost of Revenue/Gross Margin. Our cost of revenue consists primarily of amounts paid to third-party manufacturers for purchased materials and services, royalties and manufacturing and services personnel and related costs. Our cost of revenue and gross margins for the years ended December 31, 2017 and 2016 were as follows (in millions, except percentages):

	Year ended December 31,		Increase from prior year	
	2017	2016	$	%
Cost of revenue				
Product	$ 70.2	$ 47.4	$ 22.8	48.3%
Service	58.2	37.6	20.6	54.7%
Total cost of revenue	$ 128.4	$ 85.0	$ 43.4	51.1%
Gross margin				
Product	61.2%	67.6%		
Service	60.9%	64.6%		
Total gross margin	61.1%	66.4%		

The decrease in product gross margin in 2017 compared to 2016 was primarily due to the inclusion of GENBAND since the Merger Date, which decreased our product gross margin by approximately seven percentage points, and impairment expense of approximately $6 million related to the write-off of one of our previously acquired developed technology intangible assets, which decreased our product gross margin by approximately four percentage points. These decreases were partially offset by the impact of our product and customer mix, particularly sales of certain of our security and applications products, which increased our product gross margin by approximately five percentage points in 2017.

The decrease in service gross margin in 2017 compared to 2016 was primarily due to the inclusion of GENBAND

expenses since the Merger Date, which decreased our service gross margin by approximately four percentage points. Although service revenue increased by approximately $43 million in 2017 compared to 2016, the increase in service costs of approximately $21 million contributed to the decline in gross margin. Our service cost of revenue is relatively fixed in advance of any particular quarter and therefore, changes in service revenue will typically have a significant impact on service gross margins.

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

Research and Development Expenses. Research and development expenses consist primarily of salaries and related personnel expenses and prototype costs for the design, development, testing and enhancement of our products. Research and development expenses for the years ended December 31, 2017 and 2016 were as follows (in millions, except percentages):

Year ended December 31,		Increase from prior year	
2017	**2016**	**$**	**%**
$ 101.5	$ 72.8	$ 28.7	39.3%

The increase in research and development expenses in 2017 compared to 2016 was attributable to approximately $19 million of higher employee-related expenses, approximately $7 million of higher product development expense (i.e., third-party development, prototype and test equipment costs), approximately $2 million of higher infrastructure-related expense and approximately $1 million of net increases in other research and development costs. The increase in employee-related expenses was attributable to approximately $14 million of higher salary and related expenses, approximately $2 million of higher stock-based compensation expense and approximately $3 million of higher combined expense in connection with our company-wide bonus program and employee travel, training and related expenses. Our 2017 research and development expenses included approximately $17 million of expense attributable to GENBAND, primarily comprised of approximately $9 million of employee-related expenses, approximately $5 million of product development costs, approximately $1 million of depreciation expense and approximately $1 million of infrastructure expense.

Some aspects of our research and development efforts require significant short-term expenditures, the timing of which may cause significant variability in our expenses. We believe that rapid technological innovation is critical to our long-term success, and we are tailoring our investments to meet the requirements of our customers and market. We believe that our research and development expenses in 2018 will increase from 2017 levels due to the full year impact in 2018 of GENBAND research and development costs and our increased investment in our security strategy, partially offset by cost reductions resulting from our restructuring initiatives.

Sales and Marketing Expenses. Sales and marketing expenses consist primarily of salaries and related personnel costs, commissions, travel and entertainment expenses, promotions, customer trial and evaluations inventory and other marketing and sales support expenses. Sales and marketing expenses for the years ended December 31, 2017 and 2016 were as follows (in millions, except percentages):

Year ended December 31,		Increase from prior year	
2017	**2016**	**$**	**%**
$ 83.4	$ 68.5	$ 14.9	21.7%

The increase in sales and marketing expenses in 2017 compared to 2016 was primarily attributable to the inclusion of GENBAND's expenses, aggregating approximately $14 million, for the 2017 period since the Merger Date, primarily comprised of approximately $10 million of employee-related expenses, $3 million of amortization of acquired intangible assets and $2 million of infrastructure-related expense.

We believe that our sales and marketing expenses will increase in 2018 from 2017 levels due to the full year impact of the inclusion of GENBAND in 2018, partially offset by reductions resulting from our recent restructuring initiatives.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related personnel costs for executive and administrative personnel, recruiting expenses and audit, legal and other professional fees. General and administrative expenses for the years ended December 31, 2017 and 2016 were as follows (in millions, except percentages):

Year ended December 31,		Increase from prior year	
2017	**2016**	**$**	**%**
$ 47.6	$ 35.9	$ 11.7	32.5%

Our 2017 general and administrative expenses included approximately $5 million of expense attributable to GENBAND in the period since the Merger Date. The increase in general and administrative expenses in 2017 compared to 2016 was attributable to approximately $10 million of higher employee-related expenses, approximately $3 million of higher professional fees (i.e., legal, audit and outside services) and approximately $2 million of expense accrued for potential fines in connection with the ongoing U.S. Securities and Exchange Commission ("SEC") investigation. These increases were partially offset by approximately $3 million of lower infrastructure costs.

We believe that our general and administrative expenses will modestly increase in 2018 compared to 2017, primarily due to the full year impact of GENBAND general and administrative expenses in 2018, partially offset by reductions in connection with our recent restructuring initiatives.

Acquisition- and Integration-Related Expenses. Acquisition- and integration-related expenses include those expenses related to acquisitions that we would otherwise not have been incurred. Acquisition-related expenses include professional and services fees, such as legal, audit, consulting, paying agent and other fees, and expenses related to cash payments to certain former executives of the acquired businesses in connection with their employment agreements. Integration-related expenses represent incremental costs related to combining the two companies, such as third-party consulting and other third-party services needed to merge the two separate companies' systems and processes. We recorded approximately $15 million of acquisition- and integration-related expenses in the year ended December 31, 2017, comprised of approximately $13 million of acquisition-related expense and approximately $2 million of integration expense. The acquisition-related expense was comprised of approximately $12 million for professional services fees and $1 million related to cash payments to certain former GENBAND executives. We recorded approximately $1 million of acquisition-related expenses in 2016 in connection with the acquisition of Taqua. We estimate that we will incur additional integration-related expenses in 2018 approximating $10 million.

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

We recorded net restructuring expense of approximately $9 million in 2017, comprised of approximately $9 million in connection with our Merger Restructuring Initiative, less than $1 million in connection with our Taqua Restructuring Initiative and less than $1 million in connection with our 2016 Restructuring Initiative. The net restructuring expense recorded included reversals for changes in estimated costs totaling less than $1 million in the aggregate in connection with the GENBAND Restructuring Initiative, the Taqua Restructuring Initiative and the 2016 Restructuring Initiative. We recorded restructuring expense aggregating approximately $3 million in 2016, primarily for severance and related costs, comprised of approximately $2 million under our 2016 Restructuring Initiative and approximately $1 million related to our Taqua Restructuring Initiative.

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 operations.

Interest Income, net. Interest income and interest expense for the years ended December 31, 2017 and 2016 were as follows (in millions, except percentages):

	Year ended December 31,		Increase (decrease) from prior year	
	2017	2016	$	%
Interest income	$ 1.0	$ 0.9	$ 0.1	7.9 %
Interest expense	(0.7)	(0.1)	0.6	591.8 %
Interest income, net	$ 0.3	$ 0.8	$ (0.5)	(65.8)%

Interest income consisted of interest earned on our cash equivalents, marketable securities and investments. Interest expense in 2017 was primarily comprised of interest on the outstanding revolving credit facility balance assumed in connection with the acquisition of GENBAND, amortization of debt issuance costs in connection with our revolving credit facilities and interest on capital lease obligations. Interest expense in 2016 was comprised of expense related to the amortization of debt issuance costs in connection with our revolving credit facility and expense related to interest on capital lease obligations.

Other Income, Net. Other income, net, in 2017 of approximately $1 million was primarily comprised of the gain on the sale of an intangible asset and foreign currency transaction gains. Other income, net, in 2016 of approximately $1 million was primarily comprised of gains from the sale of intangible assets.

Income Taxes. We recorded a benefit for income taxes of approximately $18 million in 2017 and a provision for income taxes of approximately $3 million in 2016. The benefit recorded in 2017 was primarily the result of the release of an approximately $16 million domestic valuation allowance as a result of net deferred tax liabilities acquired as part of the GENBAND acquisition. The expense recorded in 2016 was primarily related to foreign operations. During 2017 and 2016, 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 our evaluations, we concluded that there was insufficient positive evidence to overcome the more objective negative evidence related to our cumulative losses and other factors. Accordingly, we maintained a valuation against our domestic deferred tax asset. A similar analysis and conclusion was made with regard to the valuation allowance on the deferred tax assets of our Irish subsidiary. In analyzing the deferred tax assets related to our Canada subsidiaries, we concluded that it was more likely than not that the Canadian federal SRED credits would not be realized in a future period.

Years Ended December 31, 2016 and 2015

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

	Year ended December 31,		Increase (decrease) from prior year	
	2016	2015	$	%
Product	$ 146.4	$ 141.9	$ 4.5	3.1 %
Service	106.2	107.1	(0.9)	(0.8)%
Total revenue	$ 252.6	$ 249.0	$ 3.6	1.4 %

The increase in product revenue in 2016 compared to 2015 was primarily the result of an increase in sales of our SBC products, which contributed approximately $5 million of higher product revenue in 2016 compared to 2015, and the inclusion of approximately $1 million of product revenue from Taqua in our 2016 results. These increases were partially offset by net decreases in sales of certain of our other 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 through both our direct sales team and indirect sales channel partners.

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

	Year ended December 31,		Increase (decrease) from prior year	
	2016	2015	$	%
Maintenance	$ 87.0	$ 89.3	$ (2.3)	(2.6)%
Professional services	19.2	17.8	1.4	7.9 %
Total service revenue	$ 106.2	$ 107.1	$ (0.9)	(0.8)%

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 2016 compared to 2015. 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 each of the years ended December 31, 2016 and 2015:

	Year ended December 31,	
	2016	2015
AT&T Inc.	12%	13%

Revenue earned from customers domiciled outside the United States was approximately 31% of total revenue in 2016 and approximately 29% of revenue in 2015.

Our deferred product revenue was approximately $7 million at December 31, 2016 and approximately $12 million at December 31, 2015. Our deferred service revenue was approximately $44 million at December 31, 2016 and approximately $34 million at December 31, 2015.

Cost of Revenue/Gross Margin. Cost of revenue and gross margins for the years ended December 31, 2016 and 2015 were as follows (in millions, except percentages):

	Year ended December 31,		Increase (decrease) from prior year	
	2016	2015	$	%
Cost of revenue				
Product	$ 47.4	$ 50.5	$ (3.1)	(6.1)%
Service	37.6	36.9	0.7	1.9 %
Total cost of revenue	$ 85.0	$ 87.4	$ (2.4)	(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 against certain fixed manufacturing costs, coupled with approximately $5 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.

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, and third-party costs, both against slightly lower revenue, each of which decreased our service gross margin by less than one percentage point.

Research and Development Expenses. Research and development expenses for the years ended December 31, 2016 and 2015 were as follows (in millions, except percentages):

Year ended December 31,		Decrease from prior year	
2016	2015	$	%
$ 72.8	$ 77.9	$ (5.1)	(6.5)%

The decrease in research and development expenses in 2016 compared to 2015 was primarily attributable to approximately $3 million of lower depreciation expense, approximately $1 million of lower expense for product development (i.e., third-party development, prototype and test equipment costs) and approximately $1 million of lower facilities-related expenses.

Sales and Marketing Expenses. Sales and marketing expenses for the years ended December 31, 2016 and 2015 were as follows (in millions, except percentages):

Year ended December 31,		Decrease from prior year	
2016	2015	$	%
$ 68.5	$ 72.8	$ (4.3)	(5.9)%

The decrease in sales and marketing expenses in 2016 compared to 2015 was attributable to approximately $5 million of lower employee-related expenses, approximately $1 million of lower consulting fees and less than $1 million of lower costs for facilities-related expenses and amortization of acquired intangible assets. These decreases were partially offset by approximately $2 million of net increases in other sales and marketing expenses. The decrease in employee-related expenses was attributable to approximately $2 million of lower salary and commissions and related expenses, approximately $2 million of lower employee travel, training and related expenses and approximately $1 million of lower stock-based compensation expense.

General and Administrative Expenses. General and administrative expenses for the years ended December 31, 2016 and 2015 were as follows (in millions, except percentages):

Year ended December 31,		Decrease from prior year	
2016	2015	$	%
$ 35.9	$ 39.8	$ (3.9)	(9.8)%

The decrease in general and administrative expenses in 2016 compared to 2015 was primarily attributable to approximately $3 million of lower employee-related expenses and approximately $1 million of lower combined costs from depreciation expense and professional fees. The decrease in employee-related expenses was primarily attributable to approximately $2 million of lower stock-based compensation expense and approximately $1 million of lower salary and related expenses.

Acquisition- and Integration-Related Expenses. We recorded approximately $1 million of acquisition-related expenses in 2016 in connection with the acquisition of Taqua and less than $1 million of acquisition-related expenses in 2015 in connection with the acquisition of the SDN Business.

Restructuring Expense. We recorded restructuring expense aggregating approximately $3 million in 2016, primarily comprised of approximately $2 million for severance and related costs under our 2016 Restructuring Initiative and approximately $1 million related to our Taqua Restructuring Initiative. The majority of the expense recorded in connection with our Taqua Restructuring Initiative was for severance and related costs, with a minor cost for the elimination of excess facilities.

We recorded approximately $2 million of restructuring expense in 2015, which was primarily comprised of approximately $4 million of expense for severance and related costs in connection with our 2015 Restructuring Initiative, partially offset by approximately $2 million of reversals of expense arising from settlements with landlords to vacate facilities for amounts that were lower than had previously been accrued.

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

	Year ended December 31,		Increase (decrease) from prior year	
	2016	2015	$	%
Interest income	$ 0.9	$ 0.4	$ 0.5	113.3 %
Interest expense	(0.1)	(0.2)	(0.1)	(51.3)%
Interest income, net	$ 0.8	$ 0.2	$ 0.6	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 2016, we sold intangible assets and recognized gains aggregating approximately $1 million. We recorded $1 million of income in 2015 related to the sale of an intangible asset.

Income Taxes. We recorded provisions for income taxes of approximately $3 million in 2016 and $2 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 2016 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 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 our evaluations, we concluded that there was insufficient positive evidence to overcome the more objective negative evidence related to our cumulative losses and other factors. Accordingly, 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 millions):

	Year ended December 31,		
	2017	2016	Change
Net loss	$ (35.2)	$ (13.9)	$ (21.3)
Adjustments to reconcile net loss to cash flows used in operating activities	35.0	35.0	—
Changes in operating assets and liabilities	8.3	(1.9)	10.2
Net cash provided by operating activities	$ 8.1	$ 19.2	$ (11.1)
Net cash provided by (used in) investing activities	$ 21.0	$ (27.3)	$ 48.3
Net cash used in financing activities	$ (4.5)	$ (9.9)	$ 5.4

Our cash, cash equivalents and short- and long-term investments totaled approximately $83 million at December 31, 2017 and $126 million at December 31, 2016. We had cash held by our non-U.S. subsidiaries aggregating approximately $14 million at December 31, 2017 and $5 million at December 31, 2016. If we elect to repatriate all of the funds held by our non-U.S. subsidiaries as of December 31, 2017, we do not believe that the amounts of potential withholding taxes that would arise from the repatriation would have a material effect on our liquidity.

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

in total, with potential further increases of up to $75 million available for a total revolving line of credit of up to $125 million.

On December 21, 2017, we entered into a Senior Secured Credit Agreement (the “Credit Facility”) with Silicon Valley Bank, which refinanced the Prior Credit Agreement. The Credit Facility includes $100 million of commitments, the full amount of which is available for revolving loans, a $15 million sublimit that is available for letters of credit and a $15 million sublimit that is available for swingline loans. The Credit Facility is scheduled to mature in December 2021, subject to a springing maturity if, on or before July 14, 2020, the existing promissory note issued to certain shareholders is not converted or extended to March 2022 or later. The Credit Facility includes procedures for additional financial institutions to become lenders, or for any existing lender to increase its commitment under the facility, subject to an available increase of $50 million for all incremental commitments under the Credit Facility without amendment.

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

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

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

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

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

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

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

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

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

In connection with the Merger, on October 27, 2017, we issued a promissory note for approximately $23 million to certain of GENBAND's equity holders (the "Promissory Note"). The Promissory Note does not amortize and the principal thereon is

payable in full on the third anniversary of its execution. Interest on the promissory note is payable quarterly in arrears and accrues at a rate of 7.5% per year for the first six months after issuance, and thereafter at a rate of 10% per year. The failure to make any payment under the Promissory Note when due and, with respect to payment of any interest, the continuation of such failure for a period of thirty days thereafter, constitutes an event of default under the Promissory Note. If an event of default occurs under the Promissory Note, the payees may declare the entire balance of the Promissory Note due and payable (including principal and accrued and unpaid interest) within five business days of the payees' notification to the Company of such acceleration.

Sonus maintained a credit agreement by and among Sonus, 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 entered into on June 27, 2014 (as amended, the "Sonus Credit Agreement"). The Sonus Credit Agreement expired by its terms on June 30, 2017 and was not renewed. Sonus did not have any amounts outstanding under the Sonus Credit Agreement at December 31, 2016.

On July 29, 2013, Sonus announced that our Board of Directors had authorized a stock buyback program to repurchase up to $100 million of its common stock from time to time on the open market or in privately negotiated transactions. The stock buyback program was funded using Sonus' working capital. During the year ended December 31, 2016, Sonus repurchased and retired 1.3 million shares for approximately $10 million, including transaction fees. Sonus did not repurchase any shares in the year ended December 31, 2017. We did not assume the stock buyback program in connection with the Merger.

Our operating activities provided approximately $8 million of cash in 2017 and $19 million of cash in 2016.

Cash provided by operating activities in 2017 was primarily the result of higher deferred revenue and accounts payable, coupled with decreases in inventory and other operating assets. These were partially offset by higher accounts receivable and lower accrued expenses and other long-term liabilities, plus the impact of our net loss, adjusted for non-cash items. Deferred revenue balances may fluctuate as a result of the timing of invoicing and revenue recognition. The increase in accounts payable relates to the timing of purchases of both services and tangible goods and their related payment arrangements. The increase in accounts receivable primarily relates to higher revenue in 2017 compared to 2016, partially offset by our continued focus on our collections efforts. Our net loss, adjusted for non-cash items such as depreciation, amortization, stock-based compensation, impairment of intangible assets and deferred income taxes, was virtually break-even.

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. Bonuses for the remainder of 2016 were paid in early 2017 based on our results for the second half of 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 may 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 and deferred income taxes, provided approximately $21 million of cash.

Our investing activities provided approximately $21 million of cash in 2017 and used approximately $27 million of cash in 2016. In 2017, net sales of our investments in marketable securities provided approximately $67 million of cash, of which we used approximately $43 million to pay the cash consideration for GENBAND. We used approximately $4 million to purchase property and equipment. In 2016, we used approximately $21 million of cash, net of cash acquired, for business acquisitions, approximately $5 million of cash used for the purchase of property and equipment and approximately $3 million for net investments in marketable securities. The amount used for business acquisitions was comprised of $20 million, net of cash acquired, for the acquisition of Taqua and slightly under $1 million paid as the final consideration installment for the SDN Business.

Our financing activities used approximately $4 million of cash in 2017 and approximately $10 million of cash in 2016. The 2017 amount was primarily comprised of approximately $8 million used to pay withholding obligations related to the net share settlement of restricted and performance-based stock grants upon vesting and $1 million to pay debt issuance costs related to our Credit Agreement, partially offset by approximately $2 million of net borrowings against our Credit Agreement, $1 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 approximately $1 million of proceeds from the exercise of stock options. The 2016 amount was primarily comprised of approximately $10 million used for the repurchase of common stock under our stock buyback program.

Contractual Obligations

Our contractual obligations (both principal and interest) at December 31, 2017 consisted of the following (in millions):

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Capital lease obligations	$ 0.9	$ 0.4	$ 0.5	$ —	$ —
Operating lease obligations *	57.6	14.7	17.7	9.3	15.9
Purchase obligations	49.4	47.9	1.5	—	—
Restructuring severance obligations	9.5	9.5	—	—	—
Debt obligations - principal **	42.5	—	22.5	20.0	—
Employee postretirement defined benefit plans	1.1	0.1	0.1	0.1	0.8
Uncertain tax positions ***	5.1	5.1	—	—	—
	$ 166.1	$ 77.7	$ 42.3	$ 29.4	$ 16.7

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* Includes restructuring payments aggregating approximately $1 million, approximately 50% of which is due in less than one year and the remainder is due in one to three years. Excludes current estimated sublease income aggregating approximately $1 million over the remaining lease terms of the restructured facilities.

** Debt obligations - principal represents both our Promissory Note payable of $22.5 million and the outstanding balance on our Credit Facility of $20 million at December 31, 2017. We periodically make payments and borrow on the revolving credit facility, and accordingly, we have included it in current liabilities in our consolidated balance sheet. However, we have reported the outstanding balance payment due in the table above in the "3-5 years" column based solely on the expiration date of the Credit Facility.

*** 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 18 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, long-term investments and available borrowings under the Credit Agreement will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least twelve months. The rate at which we will consume cash will be dependent on the cash needs of future operations, including changes in working capital, which will, in turn, be directly affected by the levels of demand for our products, the timing and rate of expansion of our business, the resources we devote to developing our products and any litigation settlements. We anticipate devoting substantial capital resources to continue our research and development efforts, to maintain our sales, support and marketing, to complete merger-related integration activities and for other general corporate activities. However, it is difficult to predict future liquidity requirements with certainty. See Note 22 to our consolidated financial statements for a description of our other contingencies.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* (“ASU 2014-09”), its new standard on revenue from contracts with customers, along with additional ASUs which, among other things, clarified the implementation of the new revenue guidance and delayed the adoption by one year, to January 1, 2018 (collectively, the "New Revenue Standard" or "ASC 606"). The New Revenue Standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In applying the revenue model to contracts within its scope, an entity identifies the contract(s) with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to the performance obligations in the contract and recognizes revenue when (or as) the entity satisfies a performance obligation. Certain of the New Revenue Standard'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. Effective January 1, 2018, we adopted the New Revenue Standard using the modified retrospective option, and have substantially completed the implementation of ASC 606 and have identified the necessary

changes to our policies, processes, systems and controls. However, due to the recent acquisition of GENBAND, we have not yet completed all of our internal control procedures. Under the modified retrospective method, we are applying the New Revenue Standard to all contracts not yet completed as of January 1, 2018, recognizing in beginning Accumulated deficit an adjustment for the cumulative effect of the change and providing additional disclosures comparing results to those as if we were still following the previous accounting standards. Currently, we do not have VSOE for certain elements in software bundled arrangements, which results in revenue being recognized ratably over the longest performance period. The majority of our transition adjustment will be related to these arrangements. We currently expect that the adjustment to decrease Accumulated deficit as a result of this change will not exceed $15 million. Additionally, we expect to capitalize certain commission costs resulting directly from securing contracts which are currently expensed. We expect this to result in the capitalization of approximately $1 million of previously expensed commissions.

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

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

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"), which removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step 2 of the goodwill impairment test by instead comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. ASU 2017-04 also clarifies the treatment of foreign currency translation adjustments to reporting units and the income tax effects on goodwill impairment loss measurement. ASU 2017-04 is effective prospectively for us beginning January 15, 2020, with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We elected to early-adopt ASU 2017-04; such early adoption did not have a material impact on our consolidated financial results.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), which removes the prohibition in ASC 740, *Income Taxes,* against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is effective for us beginning January 1, 2019 for both interim and annual reporting periods. 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 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. 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 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 Instrument*s ("ASU 2016-13"), which adds an impairment model that is based on expected losses rather than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for us beginning January 1,

2020 for both interim and annual reporting periods, with early adoption permitted. We do not expect 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 became 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, the adoption of ASU 2016-09 did not have a material impact on our accounting for income taxes. Without the valuation allowance, we would have recognized an increased deferred tax asset approximating $5 million. We have elected to continue to apply forfeiture rates to the 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. ASU 2016-02 eliminates the current GAAP requirement for an entity to use bright-line tests in determining lease classification. ASU 2016-02 is effective for us for both interim and annual periods beginning January 1, 2019. Upon adoption of ASU 2016-02, we will recognize lease obligations for the right to use these assets in connection with our existing lease agreements. We are currently assessing the potential impact of the adoption of ASU 2016-02 on our consolidated financial statements and accordingly, such amounts to be recognized in the balance sheet have yet to be determined.

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 became effective for us for both interim and annual reporting periods beginning January 1, 2017. The adoption of ASU 2015-11 did not have a material impact on our consolidated financial statements.

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, 2017, our cash, cash equivalents, marketable securities and long-term investments totaled $83 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 earnings 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 manage potential losses in fair value by investing in relatively short-term investments, thereby allowing us to hold our investments to 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 $0.1 million for the year ended December 31, 2017. 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, 2017 would have been adversely affected by approximately $2 million and our net loss for the year ended December 31, 2017 would have been adversely affected by approximately $6 million, although the actual effects may differ materially from this hypothetical analysis.

Item 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Ribbon Communications Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Ribbon Communications Inc. and subsidiaries (the "Company") as of December 31, 2017 and 2016, 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, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 8, 2018, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 8, 2018

We have served as the Company's auditor since 2005.

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

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 57,073	$ 31,923
Marketable securities	17,224	61,836
Accounts receivable, net	165,156	53,862
Inventory	21,303	18,283
Other current assets	21,463	12,010
Total current assets	282,219	177,914
Property and equipment, net	24,780	11,741
Intangible assets, net	244,414	30,197
Goodwill	335,716	49,393
Investments	9,031	32,371
Deferred income taxes	8,434	1,542
Other assets	6,289	4,901
	$ 910,883	$ 308,059
Liabilities and Stockholders' Equity		
Current liabilities:		
Revolving credit facility	$ 20,000	$ —
Accounts payable	45,851	6,525
Accrued expenses and other	76,380	27,040
Deferred revenue	100,571	43,504
Total current liabilities	242,802	77,069
Long-term debt, related party	22,500	—
Deferred revenue, net of current	14,184	7,188
Deferred income taxes	2,787	3,047
Other long-term liabilities	13,189	1,633
Total liabilities	295,462	88,937
Commitments and contingencies (Note 22)		
Stockholders' equity:		
Preferred stock, $0.01 par value; 10,000,000 shares authorized at December 31, 2017; 5,000,000 shares authorized at December 31, 2016; none issued and outstanding	—	—
Common stock, 240,000,000 shares authorized, $0.0001 par value, 101,752,856 shares issued and outstanding at December 31, 2017; 120,000,000 shares authorized, $0.001 par value, 49,041,881 shares issued and outstanding at December 31, 2016	10	49
Additional paid-in capital	1,684,768	1,250,744
Accumulated deficit	(1,072,426)	(1,037,174)
Accumulated other comprehensive income	3,069	5,503
Total stockholders' equity	615,421	219,122
	$ 910,883	$ 308,059

See notes to the consolidated financial statements.

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

	Year ended December 31,		
	2017	**2016**	**2015**
Revenue:			
Product	$ 181,119	$ 146,381	$ 141,913
Service	148,823	106,210	107,121
Total revenue	329,942	252,591	249,034
Cost of revenue:			
Product	70,250	47,367	50,460
Service	58,196	37,613	36,917
Total cost of revenue	128,446	84,980	87,377
Gross profit	201,496	167,611	161,657
Operating expenses:			
Research and development	101,481	72,841	77,908
Sales and marketing	83,403	68,539	72,841
General and administrative	47,642	35,948	39,846
Acquisition- and integration-related	14,763	1,152	131
Restructuring	9,436	2,740	2,148
Total operating expenses	256,725	181,220	192,874
Loss from operations	(55,229)	(13,609)	(31,217)
Interest income, net	263	769	207
Other income, net	1,274	1,424	1,122
Loss before income taxes	(53,692)	(11,416)	(29,888)
Income tax benefit (provision)	18,440	(2,516)	(2,007)
Net loss	$ (35,252)	$ (13,932)	$ (31,895)
Loss per share:			
Basic	$ (0.60)	$ (0.28)	$ (0.64)
Diluted	$ (0.60)	$ (0.28)	$ (0.64)
Shares used to compute loss per share:			
Basic	58,822	49,385	49,560
Diluted	58,822	49,385	49,560

See notes to the consolidated financial statements.

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

	Year ended December 31,		
	2017	**2016**	**2015**
Net loss	$ (35,252)	$ (13,932)	$ (31,895)
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(1,940)	54	9
Unrealized gain (loss) on available-for-sale marketable securities, net of reclassification adjustments for realized amounts	146	51	(15)
Employee retirement benefits	(578)	—	—
Other comprehensive income (loss), net of tax	(2,372)	105	(6)
Comprehensive loss, net of tax	$ (37,624)	$ (13,827)	$ (31,901)

See notes to the consolidated financial statements.

RIBBON COMMUNICATIONS INC.
Consolidated Statements of Stockholders' Equity
(in thousands, except share data)

	Common stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total stockholders' equity
	Shares	Amount				
Balances, January 1, 2015	**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**	**49**	**1,250,744**	**(1,037,174)**	**5,503**	**219,122**
Issuance of common stock in connection with employee stock purchase plan	249,621		1,252			1,252
Exercise of stock options	105,688		617			617
Vesting of restricted stock awards and units	2,160,553					—
Vesting of performance-based stock units	145,357					—
Shares of restricted stock returned to the Company under net share settlements to satisfy tax withholding obligations	(807,952)		(7,523)			(7,523)
Shares issued as consideration in connection with acquisition of GENBAND	50,857,708	5	413,977			413,982
Stock-based compensation expense			25,657			25,657
Reclassification between Common stock and Additional paid-in capital to record change in par value of common stock		(44)	44			—
Other comprehensive loss					(2,434)	(2,434)
Net loss				(35,252)		(35,252)
Balances, December 31, 2017	**101,752,856**	**$ 10**	**$ 1,684,768**	**$ (1,072,426)**	**$ 3,069**	**$ 615,421**

See notes to the consolidated financial statements.

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

	Year ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
Net loss	$ (35,252)	$ (13,932)	$ (31,895)
Adjustments to reconcile net loss to cash flows provided by operating activities:			
Depreciation and amortization of property and equipment	8,486	7,970	11,961
Amortization of intangible assets	17,112	7,500	7,107
Stock-based compensation	25,657	19,768	21,699
Impairment of intangible assets	5,471	—	—
Deferred income taxes	(20,361)	1,088	752
Other	(1,340)	(1,265)	(784)
Changes in operating assets and liabilities:			
Accounts receivable	(30,759)	(851)	11,369
Inventory	5,786	4,858	(1,001)
Other operating assets	269	506	4,915
Accounts payable	13,415	(821)	(1,257)
Accrued expenses and other long-term liabilities	(4,263)	(7,778)	(4,134)
Deferred revenue	23,859	2,149	1,137
Net cash provided by operating activities	8,080	19,192	19,869
Cash flows from investing activities:			
Purchases of property and equipment	(3,999)	(4,626)	(7,792)
Business acquisitions, net of cash acquired	(42,951)	(20,669)	(10,897)
Purchases of marketable securities	(28,731)	(78,528)	(54,772)
Sale/maturities of marketable securities	96,112	75,178	67,980
Proceeds from the sale of intangible assets	576	1,298	896
Net cash provided by (used in) investing activities	21,007	(27,347)	(4,585)
Cash flows from financing activities:			
Borrowings under revolving line of credit	15,500	—	—
Principal payments on revolving line of credit	(13,500)	—	—
Principal payments of capital lease obligations	(99)	(43)	(76)
Payment of debt issuance costs	(731)	—	—
Proceeds from the sale of common stock in connection with employee stock purchase plan	1,252	1,360	2,378
Proceeds from the exercise of stock options	617	153	1,757
Payment of tax withholding obligations related to net share settlements of restricted stock awards	(7,523)	(1,810)	(2,344)
Repurchase of common stock	—	(9,530)	(7,917)
Net cash used in financing activities	(4,484)	(9,870)	(6,202)
Effect of exchange rate changes on cash and cash equivalents	547	(163)	(128)
Net increase (decrease) in cash and cash equivalents	25,150	(18,188)	8,954
Cash and cash equivalents, beginning of year	31,923	50,111	41,157
Cash and cash equivalents, end of year	$ 57,073	$ 31,923	$ 50,111
Supplemental disclosure of cash flow information:			
Interest paid	$ 317	$ 41	$ 64
Income taxes paid	$ 2,290	$ 1,249	$ 1,430
Income tax refunds received	$ 274	$ 511	$ 357
Supplemental disclosure of non-cash investing activities:			
Capital expenditures incurred, but not yet paid	$ 1,043	$ 277	$ 375
Property and equipment acquired under capital lease	$ —	$ 36	$ 137
Business acquisition purchase consideration - common stock issued	$ 413,982	$ —	$ —
Business acquisition purchase consideration - note issued to selling equity holders	$ 22,500	$ —	$ —
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	$ 20,515	$ 10,376	$ 9,138

See notes to the consolidated financial statements.

RIBBON COMMUNICATIONS INC.
Notes to Consolidated Financial Statements

(1) NATURE OF THE BUSINESS

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

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

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

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

Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Ribbon 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

Ribbon's net deferred tax assets and the related valuation allowances. Ribbon regularly assesses these estimates and records changes in estimates in the period in which they become known. Ribbon bases its estimates on historical experience and various other assumptions that it believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Reclassifications

Certain reclassifications, not affecting previously reported net loss, have been made to the previously issued financial statements to conform to the current period presentation.

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 final determination of the values of assets acquired and 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 recognizes 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. 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 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 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 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 certain of 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 its products, for certain of its services and for certain maintenance offerings 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 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 a 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 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, overall 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 Instruments

The carrying amounts of Ribbon's financial instruments, which include cash equivalents, investments, accounts receivable and accounts payable, approximate their fair values.

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 current 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.

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.

Effective on the Merger Date, the Company began to record its foreign currency transaction gains (losses) as a component of Other income (expense), net. The Company did not reclassify amounts previously recorded within General and administrative expenses as the amounts were not material to the consolidated results of the Company. The Company recognized net transaction gains of $0.7 million for the year ended December 31, 2017 and 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.

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.

Ribbon 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 Ribbon's revenue recognition criteria. The Company classifies inventory that is not expected to be consumed within one year 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 Merger, as well as previous acquisitions. These intangible assets include a combination of in-process research and development, developed technology, customer relationships, trade names, and internal use software. 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 asset 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. The Company amortizes its intangible assets over their respective useful lives, with the exception of in-process research and development, which has an indefinite life until the product is generally available, at which time such asset is typically reclassified to developed technology, and the Company begins to amortize this 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 more frequently 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 for each of the years ended December 31, 2017, 2016 and 2015 and determined each year that its market capitalization was significantly in excess of its carrying value and accordingly, there was no impairment of goodwill.

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 Ribbon's stock price, expected term of the option, risk-free interest rate and expected dividends.

RIBBON COMMUNICATIONS INC.

Notes to Consolidated Financial Statements (Continued)

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.

Concentrations of Credit Risk

The financial instruments that potentially subject Ribbon 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 both December 31, 2017 and 2016. Historically, the Company has not experienced significant losses due to such bank depository concentration.

Certain components and software licenses from third parties used in Ribbon's products are procured from single sources of supply. The failure of a supplier, including a subcontractor, to deliver on schedule could delay or interrupt Ribbon's delivery of products and thereby materially adversely affect Ribbon's revenues and operating results.

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 $0.3 million for the year ended December 31, 2017, $0.1 million for the year ended December 31, 2016 and $0.9 million for the year ended December 31, 2015.

Operating Segments

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

Loss Contingencies and Reserves

Ribbon is subject to ongoing business risks arising in the ordinary course of business, including legal claims, 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. Ribbon regularly evaluates current information available to determine whether such amounts should be adjusted and records changes in estimates in the period they become known.

An allowance for doubtful accounts is estimated based on the Company's assessment of the collectability of specific customer accounts.

Ribbon accrues for royalties for technology that it licenses from vendors based on established royalty rates and usage. In certain cases, Ribbon has been contacted by third parties who claim that Ribbon's products infringe on certain intellectual property of a third party. Ribbon evaluates these claims and accrues amounts when it is probable that the obligation 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 financial reporting and tax basis 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. The Company records valuation allowances to reduce deferred income tax assets to the amount that is more likely than not to be realized.

The Company has provided for income taxes on the undistributed earnings of its non-U.S. subsidiaries as of December 31, 2017, with the exception of the Company's Irish subsidiary, as the Company does not plan to permanently reinvest these amounts outside the United States. The repatriation of the undistributed earnings would result in withholding taxes imposed on the repatriation. Consequently, the Company has recorded a tax liability of $3.2 million, primarily consisting of withholding and distribution taxes, relating to undistributed earnings from these subsidiaries as of December 31, 2017. Had the earnings of the Irish subsidiary been determined to not be permanently reinvested outside the U.S., no additional deferred tax liability would be required due to no withholding taxes or income tax expense being imposed on such repatriation.

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.

Defined Benefit Plans

In connection with the Merger, the Company assumed defined benefit plans for some of GENBAND's employees at various international locations. The Company recognizes retirement benefit assets or liabilities in the consolidated balance sheets reflecting the funded status of pension and other retirement benefit plans. Retirement benefit assets and liabilities are adjusted for the difference between the benefit obligations and the plan assets at fair value (measured at year-end), with the offset recorded directly to stockholders' equity through accumulated other comprehensive income (loss), net of tax. The amount recorded in stockholders' equity represents the after-tax unamortized actuarial gains or losses, unamortized transition obligations and unamortized prior service costs. The amounts included in the Company's consolidated financial statements as of and for the year ended December 31, 2017 represent the activity for the period from the Merger Date to December 31, 2017.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* (“ASU 2014-09”), its new standard on revenue from contracts with customers, along with additional ASUs which, among other things, clarified the implementation of the new revenue guidance and delayed the adoption by one year, to January 1, 2018 (collectively, the "New Revenue Standard" or "ASC 606"). The New Revenue Standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In applying the revenue model to contracts within its scope, an entity identifies the contract(s) with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to the performance obligations in the contract and recognizes revenue when (or as) the entity satisfies a performance obligation. Certain of the New Revenue Standard'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. Effective January 1, 2018, the Company adopted the New Revenue Standard using the modified retrospective option and has identified the necessary changes to its policies, processes, systems and controls. However, due to the recent acquisition of GENBAND, the Company has not yet completed all of its internal control procedures. Under the modified retrospective method, the Company is applying the New Revenue Standard to all contracts not yet completed as of January 1, 2018, recognizing in beginning Accumulated deficit an adjustment for the cumulative effect of the change and providing additional disclosures comparing results to those as if the Company was still following the previous accounting standards. Currently, the Company does not have VSOE for certain elements in software bundled arrangements, which results in revenue being recognized ratably over the longest performance period. The majority of the Company's transition adjustment will be related to these arrangements. The Company currently expects that the adjustment to decrease Accumulated deficit as a result of this change will not exceed $15 million. Additionally, the Company expects to capitalize certain commission costs

resulting directly from securing contracts which are currently expensed. The Company expects this to result in the capitalization of approximately $1 million of previously expensed commissions expense.

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

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

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"), which removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step 2 of the goodwill impairment test by instead comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. ASU 2017-04 also clarifies the treatment of foreign currency translation adjustments to reporting units and the income tax effects on goodwill impairment loss measurement. ASU 2017-04 is effective prospectively for the Company beginning January 15, 2020, with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company elected to early-adopt ASU 2017-04; such early adoption did not have a material impact on its consolidated financial results.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), which removes the prohibition in ASC 740, *Income Taxes,* against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is effective for us beginning January 1, 2019 for both interim and annual reporting periods. The Company does 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 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 the Company beginning January 1, 2018 for both interim and annual reporting periods. Entities must apply the guidance retrospectively to all periods presented but may apply it prospectively from the earliest date practicable if retrospective application would be impracticable. The Company does not expect the adoption of ASU 2016-15 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 than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for the Company beginning January 1, 2020 for both interim and annual reporting periods, with early adoption permitted. The Company does not expect 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 became 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 full valuation allowance on the Company's federal and state income taxes, the adoption of ASU 2016-09 did not have a material impact on its accounting for income taxes. Without the valuation allowance, the Company would have recognized an increased deferred tax asset approximating $5 million. The Company has elected to continue to apply forfeiture rates to the 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. ASU 2016-02 eliminates the current GAAP requirement for an entity to use bright-line tests in determining lease classification. ASU 2016-02 is effective for the Company for both interim and annual periods beginning January 1, 2019. Upon adoption of ASU 2016-02, the Company will recognize lease obligations for the right to use these assets in connection with its existing lease agreements. The Company is currently assessing the potential impact of the adoption of ASU 2016-02 on its consolidated financial statements and accordingly, such amounts to be recognized on the balance sheet have yet to be determined.

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 became effective for the Company for both interim and annual reporting periods beginning January 1, 2017. The adoption of ASU 2015-11 did not have a material impact on its consolidated financial statements.

(3) BUSINESS ACQUISITIONS

GENBAND Merger

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

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

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

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

RIBBON COMMUNICATIONS INC.

Notes to Consolidated Financial Statements (Continued)

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

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

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

As of December 31, 2017, the valuation of acquired assets, identifiable intangible assets and certain assumed liabilities is preliminary. The Company is still in the process of investigating the facts and circumstances existing as of the Merger Date in order to finalize its valuation. The Company expects to finalize the valuation of the assets acquired and liabilities assumed in the third quarter of 2018.

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

Fair value of consideration transferred:		
Cash consideration:		
Repayment of GENBAND long-term debt and accrued interest, related party	$	47,973
Payment of GENBAND management fees due to majority shareholder		10,302
Less cash acquired		(15,324)
Net cash consideration		42,951
Fair value of Sonus stock issued		413,982
Promissory note issued to GENBAND equity holders		22,500
Fair value of total consideration	$	479,433

Fair value of assets acquired and liabilities assumed:		
Current assets, net of cash acquired	$	99,126
Property and equipment		16,770
Intangible assets:		
In-process research and development		5,600
Developed technology		129,000
Customer relationships		101,300
Trade names		900
Goodwill		285,825
Other noncurrent assets		6,732
Revolving credit facility		(17,930)
Deferred revenue		(32,390)
Other current liabilities		(80,023)
Deferred revenue, net of current		(6,804)
Other long-term liabilities		(28,673)
	$	479,433

The valuation of the acquired intangible assets is inherently subjective and relies on significant unobservable inputs. The Company used an income approach to value the acquired developed technology, customer relationships and trade name intangible assets. The valuation for each of these intangible assets was based on estimated projections of expected cash flows to be generated by the assets, discounted to the present value at discount rates commensurate with perceived risk. The valuation assumptions take into consideration the Company's estimates of customer attrition, technology obsolescence and revenue growth projections. The Company will reclassify its in-process research and development intangible assets to developed technology intangible assets in the periods that the related products became generally available and begin to record amortization expense for such developed technology intangible assets at that time. The Company is amortizing the identifiable intangible

assets in relation to the expected cash flows from the individual intangible assets over their respective useful lives, which have a weighted average life of 8.3 years (see Note 9). Goodwill resulting from the transaction is primarily due to expected synergies between the combined companies and is not deductible for tax purposes.

Pro Forma Results

The following unaudited pro forma information presents the condensed combined results of operations of Sonus and GENBAND for the years ended December 31, 2017 and 2016 as if the Merger had been completed on January 1, 2016, with adjustments to give effect to pro forma events that are directly attributable to the Merger. These pro forma adjustments include a reduction of historical GENBAND revenue for the fair value adjustment related to acquired deferred revenue, an increase in amortization expense for the acquired identifiable intangible assets, a decrease in historical GENBAND interest expense reflecting the extinguishment of certain of GENBAND's debt as a result of the Merger, net of the interest expense recorded in connection with the promissory note issued to certain GENBAND equity holders as part of the purchase consideration and the elimination of revenue and costs related to sales transactions between Sonus and GENBAND. Pro forma adjustments also include the elimination of acquisition- and integration-related costs directly attributable to the acquisition and incremental stock-based compensation expense directly attributable to the acquisition from the year ended December 31, 2017 and inclusion of such costs in the year ended December 31, 2016.

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

	Year ended December 31,	
	2017	**2016**
	(unaudited)	
Revenue	$ 615,286	$ 631,914
Net loss	$ (69,741)	$ (147,394)
Loss per share	$ (0.69)	$ (1.46)

Taqua, LLC

The Company acquired Taqua, a privately-held company, on September 26, 2016 (the "Taqua Acquisition Date"). Taqua enables the transformation of software-based service provider networks to deliver next-generation voice, video and messaging services, including VoIP, VoWiFi and VoLTE. 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 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 Company regularly reassesses the historical and updated forecasted sales and will adjust the amount recorded for estimated contingent consideration as required. As of December 31, 2017, 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.

The Company finalized its valuation of the identifiable intangible assets in the second quarter of 2017. During the first

quarter of 2017 and the fourth quarter of 2016, the Company recorded changes to the initial preliminary purchase price allocation. The primary adjustments in the first quarter of 2017 were a $0.4 million increase to current liabilities and a $0.1 million increase to noncurrent liabilities. 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 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 $2.2 million. Based on this final purchase price allocation, the Company recorded $9.6 million of goodwill, which is primarily due to expected synergies between the combined companies and expanded market opportunities resulting from the expanded product offering portfolio. The goodwill is deductible for tax purposes.

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

Fair value of consideration transferred:		
Cash, net of cash acquired	$	19,919
Fair value of assets acquired and liabilities assumed:		
Current assets	$	3,347
Property and equipment		1,478
Intangible assets:		
Developed technology		2,100
Customer relationships		9,510
Goodwill		9,581
Other noncurrent assets		23
Current liabilities		(5,435)
Long-term liabilities		(685)
	$	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 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 December 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 were not significant to the Company's consolidated financial statements.

SDN Business of Treq Labs, Inc.

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 SDN technology, SDN controller software and SDN management software (the "SDN Business"). The SDN Business provides solutions that optimize networks for voice, video and UC for both enterprise and service provider customers. 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, 2017. 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 final allocation of the purchase consideration for the SDN Business is as follows (in thousands):

Fair value of consideration transferred:		
Cash, net of cash acquired	$	11,647
Fair value of assets acquired:		
Intangible assets:		
In-process research and development	$	9,100
Developed technology		1,500
Goodwill		1,047
	$	11,647

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 million of its in-process research and development intangible assets to its developed technology intangible assets. During the three months ended March 31, 2016, the Company reclassified the remaining $1.6 million 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. 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.

Acquisition- and Integration-Related Expenses

Acquisition- and integration-related expenses include those expenses related to acquisitions that would otherwise not have been incurred by the Company. The acquisition-related expenses include professional and services fees, such as legal, audit, consulting, paying agent and other fees, and expenses related to cash payments to certain former executives of the acquired businesses in connection with their employment agreements. The integration-related expenses represent incremental costs related to combining the two companies, such as third-party consulting and other third-party services related to merging the two separate companies' systems and processes. The amount recorded in the year ended December 31, 2017 primarily relates to the Merger, with a nominal amount related to the acquisition of Taqua. 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.

The components of acquisition-related costs incurred in the years ended December 31, 2017, 2016 and 2015 are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Professional and services fees (acquisition-related)	$ 11,916	$ 1,152	$ 131
Management bonuses (acquisition-related)	931	—	—
Integration-related expenses	1,916	—	—
	$ 14,763	$ 1,152	$ 131

(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,		
	2017	2016	2015
Weighted average shares outstanding—basic	58,822	49,385	49,560
Potential dilutive common shares	—	—	—
Weighted average shares outstanding—diluted	58,822	49,385	49,560

Options to purchase the Company's common stock, unvested shares of restricted stock and unvested shares underlying performance-based stock grants aggregating 2.5 million shares for the year ended December 31, 2017 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, unvested shares underlying performance-based stock grants and 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 and 8.2 million shares for the year ended December 31, 2015 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, 2017, the Company sold $51.6 million of its available-for-sale securities, primarily to provide the cash consideration and other acquisition-related payments in connection with the Merger. During the year ended December 31, 2016, the Company sold $4.9 million of its available-for-sale securities. 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.

Investments with continuous unrealized losses for one year or greater at December 31, 2017 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, 2017.

RIBBON COMMUNICATIONS INC.

Notes to Consolidated Financial Statements (Continued)

The amortized cost, gross unrealized gains and losses and fair value of the Company's cash equivalents and investments at December 31, 2017 and 2016 were comprised of the following (in thousands):

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

	December 31, 2016			
	Amortized cost	Unrealized gains	Unrealized losses	Fair value
Cash equivalents	$ 6,619	$ —	$ —	$ 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)	$ 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

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

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

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

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

The following table shows the fair value of the Company's financial assets at December 31, 2017 and 2016. 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):

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

		Fair value measurements at December 31, 2016 using:		
	Total carrying value at December 31, 2016	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	$ 6,619	$ 6,619	$ —	$ —
Short-term investments				
Municipal obligations	$ 3,261	$ —	$ 3,261	$ —
U.S. government agency notes	16,477	—	16,477	—
Corporate debt securities	41,852	—	41,852	—
Certificates of deposit	246	—	246	—
	$ 61,836	$ —	$ 61,836	$ —
Investments				
U.S. government agency notes	$ 19,437	$ —	$ 19,437	$ —
Corporate debt securities	10,476	—	10,476	—
Certificates of deposit	2,458	—	2,458	—
	$ 32,371	$ —	$ 32,371	$ —

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,	
	2017	2016
Accounts receivable	$ 165,229	$ 53,872
Allowance for doubtful accounts	(73)	(10)
Accounts receivable, net	$ 165,156	$ 53,862

The Company's allowance for doubtful accounts activity was as follows (in thousands):

Year ended December 31,	Balance at beginning of year	Charges to expense	Charges (credits) to other accounts (deferred revenue)	Write-offs	Balance at end of year
2017	$ 10	$ 154	$ (56)	$ (35)	$ 73
2016	$ 10	$ 10	$ —	$ (10)	$ 10
2015	$ 58	$ 17	$ —	$ (65)	$ 10

(7) INVENTORY

Inventory consisted of the following (in thousands):

	December 31,	
	2017	2016
On-hand final assemblies and finished goods inventories	$ 18,374	$ 15,346
Deferred cost of goods sold	4,569	4,237
	22,943	19,583
Less current portion	(21,303)	(18,283)
Noncurrent portion (included in Other assets)	$ 1,640	$ 1,300

(8) PROPERTY AND EQUIPMENT

Property and equipment consisted of the following (in thousands):

	Useful Life	December 31, 2017	December 31, 2016
Equipment	2-5 years	$ 67,415	$ 63,622
Software	2-5 years	21,977	19,378
Furniture and fixtures	3-5 years	1,892	698
Leasehold improvements	Shorter of the life of the lease or estimated useful life (1-5 years)	18,428	11,757
		109,712	95,455
Less accumulated depreciation and amortization		(84,932)	(83,714)
Property and equipment, net		$ 24,780	$ 11,741

The Company recorded depreciation and amortization expense related to property and equipment of $8.5 million for the year ended December 31, 2017, $8.0 million for the year ended December 31, 2016 and $12.0 million for the year ended December 31, 2015. During each of the years ended December 31, 2017 and 2016, 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, 2017	December 31, 2016
Cost	$ 664	$ 173
Less accumulated depreciation	(180)	(68)
Property and equipment under capital leases, net	$ 484	$ 105

The net book values of the Company's property and equipment by geographic area were as follows (in thousands):

	December 31, 2017	December 31, 2016
United States	$ 17,576	$ 7,939
Canada	1,740	246
Asia/Pacific	3,853	2,963
Europe	1,400	593
Other	211	—
	$ 24,780	$ 11,741

(9) INTANGIBLE ASSETS AND GOODWILL

The Company's intangible assets at December 31, 2017 and 2016 consisted of the following (in thousands):

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

December 31, 2016	Weighted average amortization period (years)	Cost	Accumulated amortization	Net carrying value
Developed technology	6.54	$ 34,980	$ 16,453	$ 18,527
Customer relationships	5.78	19,540	7,870	11,670
Internal use software	3.00	730	730	—
	6.23	$ 55,250	$ 25,053	$ 30,197

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

Amortization expense for intangible assets for the years ended December 31, 2017, 2016 and 2015 was as follows (in thousands):

	Year ended December 31,			
	2017	2016	2015	Statement of operations classification
Developed technology	$ 18,358	$ 6,038	$ 5,222	Cost of revenue - product
Customer relationships	4,145	1,462	1,723	Sales and marketing
Trade names	80	—	—	Sales and marketing
Internal use software	—	—	162	Cost of revenue - product
	$ 22,583	$ 7,500	$ 7,107	

In connection with the preparation of its financial statements for the fourth quarter of 2017, the Company reviewed its intangible assets and other long-lived assets for impairment indicators. The Company determined that a triggering event had occurred relative to one of its developed technology intangible assets that had been previously acquired. During 2017, the Company discontinued its ongoing development of this technology and determined that there were no alternative uses of the technology within either its existing or future product lines. As a result, the Company recorded an impairment charge of $5.5 million to write down the carrying value of the asset to zero. This expense is included as a component of Cost of revenue - product in the Company's consolidated statements of operations for the year ended December 31, 2017.

RIBBON COMMUNICATIONS INC.

Notes to Consolidated Financial Statements (Continued)

Estimated future amortization expense for the Company's intangible assets at December 31, 2017 was as follows (in thousands):

Years ending December 31,		
2018	$	46,013
2019		39,109
2020		38,590
2021		32,472
2022		26,534
Thereafter		61,696
	$	244,414

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, 2017 and 2016 were as follows (in thousands):

	Year ended December 31,	
	2017	2016
Balance at January 1		
Goodwill	$ 52,499	$ 43,416
Accumulated impairment losses	(3,106)	(3,106)
	49,393	40,310
Acquisition of GENBAND	285,825	—
Acquisition of Taqua and subsequent purchase accounting adjustments	498	9,083
Balance at December 31	$ 335,716	$ 49,393

The components of the Company's goodwill balances at December 31, 2017 and 2016 were as follows:

	December 31,	
	2017	2016
Goodwill	$ 338,822	$ 52,499
Accumulated impairment losses	(3,106)	(3,106)
	$ 335,716	$ 49,393

(10) ACCRUED EXPENSES

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2017	2016
Employee compensation and related costs	$ 37,782	$ 15,879
Professional fees	13,743	1,243
Other	24,855	9,918
	$ 76,380	$ 27,040

(11) RESTRUCTURING ACCRUALS

The Company recorded restructuring expense aggregating $9.4 million in the year ended December 31, 2017, $2.7 million in the year ended December 31, 2016 and $2.1 million in the year ended December 31, 2015.

Merger Restructuring Initiative

In connection with the Merger, the Company's management approved a restructuring plan in the fourth quarter of 2017 to eliminate certain redundant positions and facilities within the combined companies (the "Merger Restructuring Initiative"). In connection with this initiative, the Company recorded $8.5 million of restructuring expense in 2017 for severance and related costs for approximately 120 employees. The Company expects to record additional restructuring expense in 2018 in connection with this initiative for redundant facilities and severance for approximately 40 additional employees as it continues to combine the two businesses and benefit from operational synergies. The Company expects the amount accrued at December 31, 2017 will be paid in 2018. The Company anticipates it will record additional future expense in connection with this initiative for headcount and redundant facilities aggregating approximately $12 million. The Company believes that the payments related to this expected additional future expense will be completed by early 2019.

A summary of the Merger Restructuring Initiative accrual activity for the year ended December 31, 2017 is as follows (in thousands):

Year ended December 31, 2017	Balance at January 1, 2017	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2017
Severance	$ —	$ 8,508	$ —	$ (913)	$ 7,595

The Company assumed GENBAND's previously recorded restructuring liability, totaling $4.1 million, on the Merger Date (the "GENBAND Restructuring Initiative"). Of this amount, $3.7 million related to severance and related costs and $0.4 million related to facilities. The Company does not expect to record additional expense in connection with this initiative with the exception of adjustments for changes in estimated costs. The Company expects that the payments related to this assumed liability will be completed in 2018. A summary of the GENBAND Restructuring Initiative accrual activity for the year ended December 31, 2017 is as follows (in thousands):

Year ended December 31, 2017	Balance at January 1, 2017	Liability assumed in connection with Merger	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2017
Severance	$ —	$ 3,663	$ —	$ (158)	$ (1,589)	$ 1,916
Facilities	—	431	—	(123)	(103)	205
	$ —	$ 4,094	$ —	$ (281)	$ (1,692)	$ 2,121

2016 Restructuring Initiative

In July 2016, the Company announced a program (the "2016 Restructuring Initiative") to further accelerate its investment in new technologies, as the communications industry migrates to a cloud-based architecture and as the Company pursues new strategic initiatives, such as new products and an expanded go-to-market footprint in selected geographies and discrete vertical markets. The Company recorded $2.0 million of restructuring expense in the aggregate in connection with this initiative, comprised of $1.9 million for severance and related costs and $0.1 million to abandon its facility in Rochester, New York (the "Rochester Facility"). The actions under the 2016 Restructuring Initiative have been implemented and accordingly, the Company does not expect to record additional expense in connection with this initiative. The amounts accrued for severance and related costs had been fully paid by the end of the third quarter of 2017. The Company expects that the amounts accrued for facilities will be paid by the end of October 2019, when the lease on the Rochester Facility expires.

In connection with the 2016 Restructuring Initiative, the Company recorded $0.5 million of restructuring expense in the year ended December 31, 2017, including adjustments for changes in estimated costs, comprised of $0.4 million for severance and related costs and $0.1 million related to the Company's Rochester Facility. The Company recorded $1.5 million of expense in the year ended December 31, 2016 related to headcount reductions. Summaries of the 2016 Restructuring Initiative accrual activity for the years ended December 31, 2017 and 2016 are as follows (in thousands):

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Notes to Consolidated Financial Statements (Continued)

Year ended December 31, 2017	Balance at January 1, 2017	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2017
Severance	$ 497	$ 405	$ (26)	$ (876)	$ —
Facilities	—	126	—	(31)	95
	$ 497	$ 531	$ (26)	$ (907)	$ 95

Year ended December 31, 2016	Balance at January 1, 2016	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2016
Severance	$ —	$ 1,484	$ —	$ (987)	$ 497

Taqua Restructuring Initiative

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

In connection with the Taqua Restructuring Initiative, the Company recorded $0.7 million of restructuring expense, including adjustments for changes in estimated costs, in the year ended December 31, 2017, comprised of $0.2 million for severance and related costs and $0.5 million related to redundant facilities. The Company recorded $1.2 million of restructuring expense for this initiative in the year ended December 31, 2016, comprised of $1.0 million for severance and related costs and $0.2 million related to redundant facilities. Summaries of the Taqua Restructuring Initiative accrual activity for the years ended December 31, 2017 and 2016 are as follows (in thousands):

Year ended December 31, 2017	Balance at January 1, 2017	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2017
Severance	$ 384	$ 245	$ (49)	$ (580)	$ —
Facilities	218	508	—	(361)	365
	$ 602	$ 753	$ (49)	$ (941)	$ 365

Year ended December 31, 2016	Balance at January 1, 2016	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2016
Severance	$ —	$ 971	$ —	$ (587)	$ 384
Facilities	—	218	—	—	218
	$ —	$ 1,189	$ —	$ (587)	$ 602

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, 2017 and 2016 are as follows (in thousands):

Year ended December 31, 2017	Balance at January 1, 2017	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2017
Severance	$ 168	$ —	$ —	$ (168)	$ —

Year ended December 31, 2016	Balance at January 1, 2016	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at December 31, 2016
Severance	$ 749	$ —	$ 67	$ (648)	$ 168

Balance Sheet Classification

The current portions of accrued restructuring are included as a component of Accrued expenses in the consolidated balance sheets. The long-term portions of accrued restructuring are included as a component of Other long-term liabilities in the consolidated balance sheets. The long-term portions of accrued restructuring were $0.2 million at December 31, 2017 and $0.1 million at December 31, 2016. These amounts represent future lease payments on restructured facilities.

(12) DEBT

Assumed Senior Secured Credit Agreement

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

Senior Secured Credit Facility

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

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

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

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Notes to Consolidated Financial Statements (Continued)

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

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

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

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

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

At December 31, 2017, the Company had an outstanding debt balance of $20.0 million at an interest rate of 4.51% and $2.9 million of outstanding letters of credit at an interest rate of 2.00% under the Credit Facility.

Promissory Note

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

Credit Agreement

Sonus maintained a credit agreement by and among Sonus, 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, entered into on June 27, 2014 (as amended, the "Sonus Credit Agreement"). The Sonus Credit Agreement expired by its terms on June 30, 2017 and was not renewed. Sonus did not have any amounts outstanding under the Sonus Credit Agreement at December 31, 2016.

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Notes to Consolidated Financial Statements (Continued)

(13) LONG-TERM LIABILITIES

Long-term liabilities consisted of the following (in thousands):

	December 31,	
	2017	2016
Capital lease obligations	$ 837	$ 124
Deferred rent	1,359	1,812
Restructuring	10,176	1,267
Pension obligations	7,524	—
Taxes payable	2,079	—
Other	2,544	790
	24,519	3,993
Current portion	(11,330)	(2,360)
Long-term liabilities, net of current portion	$ 13,189	$ 1,633

The current portions of long-term liabilities are included as components of Accrued expenses in the Company's consolidated balance sheets.

(14) COMMON STOCK REPURCHASES

On July 29, 2013, Sonus announced that its Board of Directors had authorized a stock buyback program to repurchase up to $100 million of its common stock from time to time on the open market or in privately negotiated transactions. The timing and amount of any shares repurchased was determined by Sonus' management based on its evaluation of market conditions and other factors. The buyback program did not have a fixed expiration date but could be suspended or discontinued at any time. The buyback program was funded using Sonus' working capital. Ribbon did not assume the stock buyback program in connection with the Merger.

During the year ended December 31, 2017, Sonus did not repurchase any shares under the stock buyback program. During the year ended December 31, 2016, Sonus spent $9.5 million, including transaction fees, to repurchase and retire 1.3 million shares of its common stock under the buyback program.

(15) STOCK-BASED COMPENSATION PLANS

Amended and Restated Stock Incentive Plan

The Company's Amended and Restated Stock Incentive Plan (the "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"), performance-based stock units ("PSUs") and other stock-based awards to employees, officers, directors (including those directors who are not employees or officers of the Company), consultants and advisors of the Company and its subsidiaries.

At its 2017 Annual Meeting of Stockholders held on June 9, 2017 (the "2017 Annual Meeting"), the Company's stockholders approved amendments to the Plan including, among other things, to increase the number of shares of the Company's common stock authorized for issuance under the Plan by 900,000 shares; provide that any dividends or dividend equivalents on applicable unvested equity grants will be paid to a participant only if and when such shares become free from the restrictions on transferability and forfeitability; explicitly require a participant who accepts an award under the Plan to be bound by any clawback policy that the Company has in effect or may adopt in the future; and eliminate the fungible ratio applied to awards of shares of restricted stock, restricted stock units , performance awards or other stock units (collectively, full value awards") granted on or after June 9, 2017, but maintained the fungible ratios applied to prior grants of full value awards such

that 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 Plan upon forfeiture of such awards at the previous applicable ratio.

In connection with the Merger, the Company assumed the Plan with all of its then-current terms and conditions.

At December 31, 2017, there were 5.4 million shares available for future issuance under the 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 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 Plan. Accordingly, at December 31, 2017, there were no shares available for future issuance under the 2012 Plan.

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 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 Plan. Accordingly, at December 31, 2017, there were no shares available for future issuance under the 2008 Plan.

Treatment of Equity Awards in Connection with the Merger

In connection with the Merger, the Company accelerated the vesting of all outstanding stock options and certain outstanding full value awards. In addition, the vesting schedules of certain remaining unvested full value awards were adjusted. Such vesting and adjustments are described as follows:

Stock options - each stock option outstanding as of five business days prior to the Merger Date became vested in full as of that date (to the extent not previously vested), and the holders of such stock options were permitted to exercise their stock options from October 20, 2017 through October 24, 2017, after which date all remaining stock options, with certain exceptions, were canceled. The Company accelerated the vesting of 0.3 million stock options and subsequently canceled 4.5 million vested unexercised stock options in connection with this transaction. This activity is included in the stock options table below. Any stock options granted under the 2008 Plan and 2012 Plan were not canceled, as these plans do not permit such cancellations. These stock options will continue to be outstanding until they are either exercised or expire.

RSAs and RSUs - as prescribed by the Company's Plan, any unvested RSAs and RSUs that were scheduled to vest within one year from the Merger Date became vested in full as of the Merger Date. The vesting schedules of the remaining unvested RSAs and RSUs were then accelerated by one year. Certain executives had specific terms and conditions related to their RSAs detailed in their employment agreements or amendments thereto (the "employment terms"). The accelerated vesting of and future vesting schedule adjustments to the RSAs held by these individuals were completed in accordance with their individual employment terms. In accordance with the terms of their RSA grants, unvested RSAs held by the then-current members of the Board of Directors were accelerated on a pro rata basis based on the amount of time the unvested RSAs were outstanding compared to the originally scheduled vesting date. Unvested PSUs granted to the Company's former President and Chief Executive Officer, who separated from the Company effective December 13, 2017 (the "former CEO"), were converted to RSAs in accordance with his employment terms; certain of those converted grants were accelerated, and the remaining RSAs would continue to vest according to their terms, but with the elimination of any required satisfaction of the performance metrics associated with the awards when they were originally granted as PSUs. Accordingly, the release of the former CEO's RSAs that were converted from PSUs is included in the RSA table below. In total, the Company accelerated the vesting of and released 1.1 million RSAs and approximately 36,000 RSUs in connection with the Merger. The activity related to these RSAs and RSUs is included in the applicable tables below.

PSUs - any unvested PSUs were accelerated in accordance with the employment agreement of each individual PSU

holder. The remaining unvested units will continue to vest according to their terms, with the exception of the PSU grants held by the former CEO, as discussed above. The Company accelerated the vesting of and released approximately 98,000 PSUs in connection with this transaction. The activity related to these PSUs is included in the PSU table below.

Executive Equity Arrangements

In 2015, the Company began to grant PSUs to certain of its executives. The terms of each PSU grant are such that up to one-third of the shares subject to the respective PSU grant will vest, if at all, on each of the respective first, second and third anniversaries of the date of grant, depending on the Company's total shareholder return ("TSR") compared 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 fiscal years as defined by each grant (each, a "Performance Period"). The shares determined to be earned will vest on the anniversary of the grant date following each Performance Period. Shares subject to the PSUs that fail to be earned will be forfeited.

All of the PSUs include 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 date of return, the volatility of each entity and the pair-wise covariance between each entity. These results were then used to calculate the grant date fair values of the respective PSUs. Because all of the PSUs granted have market conditions, the Company is required to record expense for the PSUs through their respective final vesting dates regardless of the number of shares that are ultimately earned.

On March 31, 2017, the Company granted an aggregate of 165,000 PSUs with both market and service conditions to five of its executives.

On April 1, 2016, the Company granted an aggregate of 131,250 PSUs with both market and service conditions to six of its executives (the "2016 PSUs"). In February 2017, the Compensation Committee determined that the performance metrics for the 2016 PSUs for the 2016 Performance Period had been achieved at the 90.4% level, and accordingly, 24,106 shares in the aggregate were released to the four executives holding such outstanding grants on March 16, 2017. The unearned shares relating to the 2016 Performance Period, aggregating 2,560 shares, were forfeited on March 16, 2017. These amounts are included in the PSU table below.

On March 16, 2015, the Company granted an aggregate of 131,250 PSUs with both market and service conditions to eight of its executives (the "2015 PSUs"). In February 2017, the Compensation Committee determined that the performance metrics for the 2015 PSUs for the 2016 Performance Period had been achieved at the 76.0% level, and accordingly, 23,750 shares in the aggregate were released to the four remaining executives holding such outstanding grants on April 1, 2017. The unearned shares relating to the 2016 Performance Period, aggregating 7,500 shares, were forfeited on April 1, 2017.

In connection with the Merger, as previously described above, PSUs held by the former CEO were converted to RSAs and certain other PSUs were accelerated and released in accordance with the individual employment terms of each PSU grantee. The vesting schedules of the remaining unvested PSUs were adjusted to continue to vest on their terms.

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. 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.

On December 14, 2017, the Company announced that, on and effective December 13, 2017, the Board of Directors appointed Franklin (Fritz) W. Hobbs as the Company's President and Chief Executive Officer, and the Former CEO resigned his position as the Company's President and Chief Executive Officer and as a member of the Board of Directors. In connection with the separation of the Former CEO from the Company and in accordance with his employment agreement with the

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Notes to Consolidated Financial Statements (Continued)

Company, as amended, the Company accelerated the vesting of his then-unvested RSAs (including those that had been converted from PSUs in connection with the Merger, as described above). These shares are reported as "Vested" in the RSA table below. However, due to the terms of the Former CEO's separation agreement with the Company and applicable employment laws, the shares were not released until January 2018. Accordingly, these shares were not considered outstanding as of December 31, 2017.

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, 2017 was as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2016	5,610,106	$ 15.73		
Granted	7,760	$ 6.67		
Exercised	(105,688)	$ 5.85		
Forfeited	(35,907)	$ 13.82		
Expired	(5,041,084)	$ 16.02		
Outstanding at December 31, 2017	435,187	$ 14.71	4.30	$ 66
Vested or expected to vest at December 31, 2017	435,187	$ 14.71	4.30	$ 66
Exercisable at December 31, 2017	435,187	$ 14.71	4.30	$ 66

The grant date fair values of options to purchase common stock granted in the years ended December 31, 2017, 2016 and 2015 were estimated using the Black-Scholes valuation model with the following assumptions:

	Year ended December 31,		
	2017	2016	2015
Risk-free interest rate	1.22% - 1.95%	1.00% - 1.61%	1.46%-1.75%
Expected dividends	—	—	—
Weighted average volatility	51.1%	54.8%	54.3%
Expected life (years)	5.0	5.0-10.0	5.0-6.0

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 historical option patterns and expectations of future employee actions.

The weighted average grant-date fair values of options granted during the year were $3.05 for the year ended December 31, 2017, $4.39 for the year ended December 31, 2016 and $7.30 for the year ended December 31, 2015.

The total intrinsic values of options exercised during the year were $0.2 million for the year ended December 31, 2017, $42,000 for the year ended December 31, 2016 and $0.9 million for the year ended December 31, 2015.

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The Company received cash from option exercises of $0.6 million in the year ended December 31, 2017, $0.2 million in the year ended December 31, 2016 and $1.8 million in the year ended December 31, 2015.

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, 2017 was as follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at January 1, 2017	2,030,028	$ 9.69
Granted	1,763,912	$ 6.77
Unvested PSUs converted to RSAs in connection with the Merger	95,834	$ 9.44
Vested	(2,080,179)	$ 8.93
Forfeited	(113,013)	$ 8.80
Unvested balance at December 31, 2017	1,696,582	$ 7.68

The activity related to the Company's RSUs for the year ended December 31, 2017 was as follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at January 1, 2017	110,219	$ 11.95
Granted	—	$ —
Vested	(80,374)	$ 7.06
Forfeited	(11,913)	$ 8.66
Unvested balance at December 31, 2017	17,932	$ 6.99

The total fair value of vested restricted stock grant shares was $19.1 million in the year ended December 31, 2017, $10.1 million in the year ended December 31, 2016 and $8.5 million in the year ended December 31, 2015.

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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Notes to Consolidated Financial Statements (Continued)

The activity related to the Company's PSUs for the year ended December 31, 2017 was as follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at January 1, 2017	147,085	$ 12.11
Granted	165,000	$ 8.45
Unvested PSUs converted to RSAs in connection with the Merger	(95,834)	$ 9.44
Vested	(145,357)	$ 9.44
Forfeited	(10,060)	$ 11.87
Unvested balance at December 31, 2017	60,834	$ 9.65

The total fair value of vested performance-based stock grant shares was $1.4 million in the year ended December 31, 2017, $0.2 million in the year ended December 31, 2016 and $0.6 million in the year ended December 31, 2015.

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.

In May 2017, the Compensation Committee determined to suspend all offering periods under the ESPP, effective September 1, 2017, until such time after the Merger Date as the Compensation Committee determines is best in its sole discretion.

At December 31, 2017, 5.0 million shares, the maximum number of shares that may be issued under the ESPP, were authorized, and 1.4 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, 2017, 2016 and 2015 as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Product cost of revenue	$ 514	$ 359	$ 317
Service cost of revenue	1,448	1,314	1,524
Research and development	7,337	5,014	5,439
Sales and marketing	4,885	6,209	5,423
General and administrative	11,473	6,872	8,996
	$ 25,657	$ 19,768	$ 21,699

There was no income tax benefit for employee stock-based compensation expense for the years ended December 31, 2017, 2016 and 2015 due to the valuation allowance recorded.

Stock-based compensation expense recorded for the year ended December 31, 2017 included $8.6 million of incremental expense related to the acceleration of stock options and full value awards and subsequent adjustments to the vesting schedules of the remaining unvested full value awards in connection with the Merger. In addition, the Company recorded $1.6 million of incremental expense related to the accelerated vesting of RSAs held by the Former CEO in connection with his separation from the Company effective December 13, 2017. These incremental amounts were all recorded in the fourth quarter of 2017.

During the three months ended March 31, 2017, the Company reversed $1.0 million of incremental expense to correct an error in 2016 related to the acceleration of certain stock awards held by an executive who separated from the Company in 2016. Management had reviewed and considered the impact of the error and determined that it was not material to the Company's consolidated financial results for the third and fourth quarters of 2016, as well as the 2016 fiscal year. Management has also determined that the correction of this error is not material to the results of operations for the 2017 reporting periods.

At December 31, 2017, there was $7.5 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 weighted average period of approximately two years.

Common Stock Reserved

Common stock reserved for future issuance at December 31, 2017 consists of the following:

Amended and Restated Stock Incentive Plan	5,359,243
ESPP	1,431,513
	6,790,756

The Company's policy is to issue authorized but unissued shares upon the exercise of stock options, grant restricted common stock awards and settlement of restricted stock units and performance-based stock units, and authorize the purchase of shares of the Company's common stock under the ESPP.

(16) EMPLOYEE DEFINED CONTRIBUTION PLANS

The Company offers 401(k) savings plans to eligible employees. In the year ended December 31, 2015, the Company did not provide a matching contribution for deferral contributions made by employees and accordingly, did not record expense related to its employee defined contribution plan. However, in June 2016, at the recommendation of the Compensation Committee, the Company’s Board of Directors elected to reinstate a discretionary limited 401(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 assumed GENBAND's 401(k) savings plan in connection with the Merger.

The Company recorded $1.4 million of expense in the year ended December 31, 2017 and $0.6 million of expense related to its employee defined contribution plans in the year ended December 31, 2016. Effective January 1, 2018, the Company will match 50% of each employee's contributions to the 401(k) program up to 4% of the employee's eligible earnings, for a maximum match of 2% of eligible earnings.

(17) NON-U.S. EMPLOYEE DEFINED BENEFIT PLANS

In connection with the Merger, the Company assumed GENBAND's defined benefit retirement plans that cover some employees at various international locations. The Company has also adopted GENBAND's policy to contribute amounts at least sufficient to satisfy the minimum amount required by applicable law and regulations, or to directly pay benefits where appropriate. Benefits under the defined benefit plans are typically based either on years of service and the employee's compensation (generally during a fixed number of years immediately before retirement) or on annual credits. The range of assumptions that are used for the non-U.S. defined benefit plans reflect the different economic environments within the various countries.

A reconciliation of the changes in the benefit obligations and fair value of the assets of the defined benefit plans for the period from the Merger Date to December 31, 2017, the funded status of the plans and the amounts recognized in the consolidated balance sheet as of December 31, 2017 are as follows (in thousands):

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Notes to Consolidated Financial Statements (Continued)

Changes in projected benefit obligations:		
Projected benefit obligation at Merger Date	$	10,515
Service cost		68
Interest cost		25
Participant contributions		5
Benefits paid		(3)
Net actuarial loss on obligation		562
Currency loss		312
Projected benefit obligation at December 31, 2017	$	11,484
Changes in plan assets:		
Fair value of plan assets at Merger Date	$	3,776
Actual return on plan assets		(8)
Employer contributions		22
Participant contributions		5
Additional charges		(4)
Benefits paid		(3)
Currency gain		105
Fair value of plan assets at December 31, 2017	$	3,893
Funded status at December 31, 2017	$	(7,591)
Amounts recognized in accumulated other comprehensive loss consist of:		
Net actuarial loss	$	578
Amounts recognized in the consolidated balance sheet consist of:		
Accrued compensation and benefits (current pension liability)	$	(67)
Other long-term liabilities (non-current pension liability)		(7,524)
Net amount recognized	$	(7,591)

Plans with underfunded or non-funded accumulated benefit obligations at December 31, 2017 are as follows (in thousands):

Aggregate projected benefit obligation	$	11,484
Aggregate accumulated benefit obligation	$	7,793
Aggregate fair value of plan assets	$	3,893

Net periodic benefit costs for the period from the Merger Date to December 31, 2017 are as follows (in thousands):

Service cost	$	68
Interest cost		25
Expected return on plan assets		(8)
Additional charges		4
Net periodic benefit costs	$	89

The Company made benefit payments of $3,000 for the period from the Merger Date to December 31, 2017. Expected benefit payments for the next ten years are as follows:

Years ending December 31,		
2018	$	67
2019		68
2020		49
2021		50
2022		50
2023 to 2027		847
	$	1,131

The change in plan assets and benefit obligations recognized in other comprehensive loss before tax for the period from the Merger Date to December 31, 2017 was as follows (in thousands):

Net loss	$	578

The Company defers all actuarial gains and losses resulting from variances between actual results and economic estimates or actuarial assumptions. The unrecognized actuarial gains and losses are recorded as unrealized pension actuarial gains (losses) in accumulated other comprehensive loss. These unrecognized gains and losses are amortized as a component of net periodic benefit cost when the net gains and losses exceed 10% of the greater of the market value of plan assets or the projected benefit obligation at the beginning of the year. No amortization of accumulated other comprehensive loss, net, into net periodic benefit cost is expected for the year ended December 31, 2018.

The principal weighted average assumptions used to determine the benefit obligation at December 31, 2017 are as follows:

Discount rate	1.31%
Rate of compensation increase	3.38%

The principal weighted average assumptions used to determine net period benefit cost for the period from the Merger Date to December 31, 2017 are as follows:

Discount rate	1.49%
Expected long-term return on plan assets	1.23%
Rate of compensation increase	3.38%

Assumed discount rates are used in the measurement of the projected, accumulated and vested benefit obligations and the service and interest components of net periodic pension cost. Estimated discount rates reflect the rates at which the pension benefits could be effectively settled. The Company determines the discount rates of the plans in the Euro zone using the iBoxx Euro Corporate AA Bond indices with appropriate adjustments for the duration of the plan obligations. In other international locations, the Company determines the discount rates based primarily on local AA to AAA rated Corporate Bond Indices and the Citigroup Pension Discount Curve with the duration appropriate to the duration of the plan obligations.

The plans in the Netherlands and Switzerland are funded through insurance contracts, which provide guaranteed interest credit. The fair value of the contract is derived from the insurance company's assessment of the minimum value of the benefits provided by the insurance contract. The methodology used to value the plan assets assumes that the value of the plan assets equals the guaranteed insured benefits. For consistency, the same discount rate used in the valuation of the benefit obligations is used to place a value on the plan assets. The assets are assumed to grow each year in line with the discount rate, and therefore, the expected return on the assets is set equal to the discount rate. The fair value of the combined plan assets was $3.9 million at December 31, 2017. The Company classifies the fair value of these plan assets as Level 2 in the fair value hierarchy as discussed in Note 5.

During the period from the Merger Date to December 31, 2017, employees in the Netherlands and Switzerland made contributions to the respective pension plans aggregating $5,000. Employee contributions to these plans are based on a fixed 5% of the relevant pensionable earnings. The Company funds these plans by contributing at least the minimum amount required by applicable regulations and as recommended by an independent actuary. During the period from October 27, 2017 to December 31, 2017, the Company contributed $22,000 to its pension plans and expects to contribute approximately $0.2 million to its pension plans in 2018.

(18) INCOME TAXES

The components of loss from continuing operations before income taxes consisted of the following (in thousands):

	Year ended December 31,		
	2017	2016	2015
Income (loss) before income taxes:			
United States	$ (55,932)	$ (11,973)	$ (29,595)
Foreign	2,240	557	(293)
	$ (53,692)	$ (11,416)	$ (29,888)

The provision (benefit) for income taxes from continuing operations consisted of the following (in thousands):

	Year ended December 31,		
	2017	2016	2015
Provision (benefit) for income taxes:			
Current:			
Federal	$ (200)	$ 12	$ 60
State	115	24	150
Foreign	1,960	1,378	982
Total current	1,875	1,414	1,192
Deferred:			
Federal	49,570	(301)	(7,069)
State	(4,833)	(1,007)	4,962
Foreign	(816)	338	155
Change in valuation allowance	(64,236)	2,072	2,767
Total deferred	(20,315)	1,102	815
Total	$ (18,440)	$ 2,516	$ 2,007

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Notes to Consolidated Financial Statements (Continued)

A reconciliation of the Company's effective tax rate for continuing operations to the statutory federal rate is as follows:

	Year ended December 31,		
	2017	2016	2015
U.S. statutory income tax rate	(35.0)%	(35.0)%	(35.0)%
State income taxes, net of federal benefit	(1.2)	—	—
Foreign income taxes	0.5	7.9	3.6
Foreign tax audit	—	5.2	—
Acquisition costs	6.0	—	—
Foreign deemed dividends	3.8	5.0	1.7
Stock-based compensation	(26.8)	38.9	14.4
Tax credits	33.3	(11.6)	(3.3)
Uncertain tax positions	1.2	—	—
NOL and credit limitations	18.9	—	—
Valuation allowance	(29.0)	1.9	24.3
Goodwill amortization	1.7	6.7	2.2
Meals and entertainment	0.5	1.4	0.8
Tax reform	(8.8)	—	—
Other, net	0.6	1.6	(2.0)
Effective income tax rate	(34.3)%	22.0 %	6.7 %

The following is a summary of the significant components of deferred income tax assets and liabilities (in thousands):

	December 31,	
	2017	2016
Assets:		
Net operating loss carryforwards	$ 58,624	$ 77,425
Research and development tax credits	24,499	24,440
Other tax credits	—	230
Intangible assets	—	9,270
Deferred revenue	5,886	3,176
Accrued expenses	10,786	6,699
Inventory	5,980	5,010
Stock-based compensation	7,452	14,295
Fixed assets	727	2,879
Other temporary differences	1,556	13
	115,510	143,437
Valuation allowance	(89,600)	(141,895)
Total deferred tax assets	25,910	1,542
Liabilities:		
Purchased intangible assets	(17,092)	(3,047)
Unremitted foreign income	(3,171)	—
Total deferred tax liabilities	(20,263)	(3,047)
Total net deferred tax assets	$ 5,647	$ (1,505)
The deferred tax assets and liabilities based on tax jurisdictions are presented in the Company's consolidated balance sheets as follows:		
Deferred income taxes - noncurrent assets	$ 8,434	$ 1,542
Deferred income taxes - noncurrent liabilities	(2,787)	(3,047)
	$ 5,647	$ (1,505)

At December 31, 2017, the Company had cumulative federal and state net operating losses ("NOLs") of $221.5 million. The federal NOL carryforwards expire at various dates from 2020 through 2037. The state NOL carryforwards expire at various dates from 2018 through 2037.

The Company adopted ASU 2016-09 in 2017, which amended the tax accounting for stock-based compensation. Of the federal NOL at December 31, 2016, $150.8 million was attributable to stock option deductions. As of December 31, 2017, the financial reporting NOL and tax NOL were in alignment. At December 31, 2016, the Company's federal NOL carryforwards for tax return purposes were $14.0 million greater than its recognized federal NOL for financial reporting purposes, primarily due to excess tax benefits (stock-based compensation deductions in excess of financial reporting compensation costs) not recognized for financial statement purposes until realized. Prior to the adoption of ASU 2016-09, the tax benefit of this loss would be recognized for financial statement purposes in the period in which the tax benefit reduces income taxes payable, which will not be recognized until the Company recognizes a reduction in taxes payable from all other NOL carryforwards. In addition, the Company had $0.7 million of deferred taxes as of December 31, 2017 related to stock-based compensation expense recognized for financial reporting purposes that is not deductible for 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 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 $24.5 million that expire at various dates from 2018 through 2037.

Under the provisions of the Internal Revenue Code, the net operating losses and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities. Net operating losses 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 a similar state provision. The Company incurred a change in ownership as defined in the Internal Revenue Code, and as a result, expects that approximately $31 million of federal and state net operating loss carryforwards and approximately $21 million of research and development tax credits will expire unused. There was no impact to the financial statements due to the Company's full valuation allowance against these assets.

During 2017, the valuation allowance against the deferred tax asset related to net operating losses in Canada was reversed, amounting to a tax benefit approximating $2 million. It had become apparent that the entity had been sufficiently profitable in each of the last three years plus the current year to recognize the deferred tax asset related to the net operating loss carryovers. The valuation allowance was reversed due to the objective verifiable evidence provided by the most recent history of positive income generated by Sonus Canada. The loss carryovers will also be utilized due to the impact of the amalgamation of Sonus Canada into GENBAND Canada. While the Company is recognizing the deferred tax asset related to the net operating losses carried over, it is still carrying a valuation allowance, at 100%, against the SRED credit carryovers associated with the development activity performed in Canada. The newly combined entity has determined that it has excess credit carryover and the objective verifiable evidence is negative in that these credits will likely expire unused.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to: reducing the U.S. federal corporate tax rate from 35% to 21%; requiring companies to pay a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries; generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; requiring a current inclusion in U.S. federal taxable income of certain earnings (the Global Intangible Low-taxed Income ("GILTI")) of controlled foreign corporations; eliminating the corporate alternative minimum tax ("AMT") and changing how existing AMT credits can be realized; creating the base erosion anti-abuse tax ("BEAT"); creating a new limitation on deductible interest expense; (8) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017; providing a tax deduction for foreign derived intangible income ("FDII") ; and changing rules related to deductibility of compensation for certain officers.

The impact of certain effects of the Tax Act has been recognized in the period in which the new legislation was enacted per guidance in Staff Accounting Bulletin 118, which allows for a measurement period to complete the accounting for certain elements of the tax reform. The Company has not yet completed a full evaluation of the impact of the Tax Act on its financial statements; however, it has provided a reasonable estimate for the impact related to remeasured deferred tax assets based on the new federal income tax rate of 21%. The Company has also provided for the provisional impact related to the Tax Act's change to the federal NOL and AMT carryovers. The total estimated impact of $4.8 million is reflected in income from continuing operations, and increased the tax benefit for the year ended December 31, 2017. The Company will continue to make and

refine its calculations as additional analysis is completed. The Company cannot predict with certainty how the Tax Act will affect the Company's financial position or results of operations.

The Tax Act reduces the corporate tax rate to 21% effective January 1, 2018. Consequently, the Company has recorded a decrease related to net deferred tax assets of $36.5 million and a decrease to the valuation allowance of $38.4 million, with a corresponding provisional net income tax benefit of $1.9 million for the year ended December 31, 2017.

The Tax Act changed the NOL carryover rules and created a new limitation on their use. NOLs created after December 31, 2017 may be carried forwarded indefinitely but are limited to 80% of taxable income in any year. As a result of this change, the Company believes it is appropriate to offset some of its indefinite-lived deferred tax liabilities against its deferred tax assets, and as a result, recognized a $2.8 million estimated benefit in the year ended December 31, 2017.

The Tax Act eliminated the corporate AMT. As a result, the Tax Act made any AMT credit carryovers refundable to the extent not used against the regular tax liability in the 2018 through 2021 tax years. The Company recognized an estimated benefit of $0.1 million in the year ended December 31, 2017 as a result of this change.

The Deemed Repatriation Transition Tax ("Transition Tax") is a tax on previously untaxed accumulated and current earnings and profits ("E&P") of certain of the Company's foreign subsidiaries. To determine the amount of the Transition Tax, the Company must determine, in addition to other factors, the amount of post-1986 E&P of the relevant subsidiaries, as well as the amount of non-U.S. income taxes paid on such earnings. Due to the net E&P deficit of the Company's foreign subsidiaries, the Company does not believe it will incur the Transition Tax and has not recorded a provision Transition Tax obligation.

With regards to the BEAT, the GILTI, the deduction for FDII and other provisions of the Tax Act, the Company will require additional detailed analysis in order to assess its impact.

During 2017 and 2016, 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 a valuation allowance against its domestic deferred tax asset amounting to $73.1 million at December 31, 2017 and $141.9 million at December 31, 2016. A similar analysis and conclusion was made with regard to the valuation allowance on the deferred tax assets of the Company's Ireland subsidiary, acquired as part of the acquisition of GENBAND, resulting in a valuation allowance of $6.2 million at December 31, 2017. In analyzing the deferred tax assets related to the Company's Canada subsidiaries, the Company concluded that it was more likely than not that the Canadian federal Scientific Research and Experimental Development ("SRED") credits would not be realized in a future period. This resulted in a valuation allowance of $10.3 million.

A reconciliation of the Company's unrecognized tax benefits is as follows (in thousands):

	2017	2016	2015
Unrecognized tax benefits at January 1	$ 8,969	$ 8,888	$ 8,875
Increases related to current year tax positions	139	36	13
Increases related to prior period tax positions	430	723	—
Increases related to business acquisitions	2,012	—	—
Decreases related to prior period tax positions	(7,022)	(81)	—
Settlements	—	(597)	—
Unrecognized tax benefits at December 31	$ 4,528	$ 8,969	$ 8,888

The Company recorded liabilities for potential penalties and interest of $0.2 million for the year ended December 31, 2017, $0.1 million for the year ended December 31, 2016 and $13,000 for the year ended December 31, 2015. The Company had cumulative deferred tax liabilities recorded related to interest and penalties of $0.6 million for the year ended December 31, 2017, $0.2 million for the year ended December 31, 2016 and $0.2 million for the year ended December 31, 2015. Some of the unrecognized tax benefit items are expected to reverse in 2018 due to statute of limitation lapses.

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Notes to Consolidated Financial Statements (Continued)

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 2014 through 2017 remain open to examination by the major taxing jurisdictions to which the Company is subject. The Company's federal NOLs generated prior to 2014 could be adjusted on examination even though the year in which the loss was generated is otherwise closed by the statute of limitations.

As of December 31, 2017, the Company had ongoing income tax audits in certain foreign countries. Management believes that an adequate provision has been recorded for any adjustments that may result from tax examinations.

The 2017 acquisition of GENBAND was accounted for as a non-taxable business combination. GENBAND had previously been treated as a partnership for U.S. tax purposes. Consequently, U.S. federal and state deferred taxes were recorded as part of the business combination based on the differences between the tax basis of the acquired assets and assumed 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 cumulated losses and other factors. The Company recorded a valuation allowance against the acquired deferred tax assets. The Company recorded identifiable intangible assets as part of the purchase accounting for the acquisition. For U.S. tax purposes, the future amortization of these intangibles will be non-deductible, thereby creating income. Since the Company will be filing a consolidated U.S. tax return, the benefit from these identifiable intangible assets will be utilizable. The Company is required to determine its ability to use the tax benefit against the valuation allowance previously established. The Company has determined that it is more likely than not that these benefits will be recognized. As a result, the valuation allowance has been reduced for the assumed net deferred tax liabilities, resulting in an income tax benefit of $16.4 million. This benefit is included as a component of the Company's provision for income taxes for the year ended December 31, 2017.

The 2016 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. The 2015 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.

(19) MAJOR CUSTOMERS

The following customers contributed 10% or more of the Company's revenue in at least one of the years ended December 31, 2017, 2016 and 2015:

	Year ended December 31,		
	2017	2016	2015
Verizon Communications Inc.	17%	*	*
AT&T Inc.	*	12%	13%

At December 31, 2017, two customers accounted for 10% or more of the Company's accounts receivable balance, representing approximately 31% in the aggregate of total accounts receivable. At December 31, 2016, no customer accounted for 10% or more of the Company's accounts receivable balance. 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.

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Notes to Consolidated Financial Statements (Continued)

(20) 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,		
	2017	2016	2015
United States	66%	69%	71%
Europe, Middle East and Africa	14	13	13
Japan	7	10	10
Other Asia Pacific	7	5	4
Other	6	3	2
	100%	100%	100%

The Company's service revenue is comprised of the following (in thousands):

	Year ended December 31,		
	2017	2016	2015
Maintenance	$ 114,735	$ 86,995	$ 89,280
Professional services	34,088	19,215	17,841
	$ 148,823	$ 106,210	$ 107,121

(21) RELATED PARTIES

As a portion of the consideration for the Merger, on October 27, 2017, the Company issued a promissory note for $22.5 million to certain of GENBAND's equity holders who following the Merger, owned greater than five percent of the Company's outstanding shares. As described in Note 12 above, the promissory note does not amortize and the principal thereon is payable in full on the third anniversary of its execution. Interest on the promissory note is payable quarterly in arrears and accrues at a rate of 7.5% per year for the first six months after issuance, and thereafter at a rate of 10% per year. The failure to make any payment under the promissory note when due and, with respect to payment of any interest, the continuation of such failure for a period of thirty days thereafter, constitutes an event of default under the promissory note. If an event of default occurs under the promissory note, the payees may declare the entire balance of the promissory note due and payable (including principal and accrued and unpaid interest) within five business days of the payees' notification to the Company of such acceleration.

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 was an independent member of the Company's Board of Directors through the Merger Date and also served 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.

(22) COMMITMENTS AND CONTINGENCIES

Leases

The Company leases its facilities under operating leases, which expire at various times through 2028. 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 2028.

Escalation clauses, free rent and other lease concessions are recognized on a straight-line basis over the minimum lease term. Rent expense was $5.9 million for the year ended December 31, 2017, $4.5 million for the year ended December 31, 2016 and $5.2 million for the year ended December 31, 2015.

Future minimum payments under operating lease arrangements as of December 31, 2017 were as follows (in thousands):

Years ending December 31,	
2018	$ 14,703
2019	11,067
2020	6,632
2021	5,612
2022	3,680
Thereafter	15,866
	$ 57,560

Litigation and Contingencies

The Company is fully cooperating with an SEC inquiry regarding the development and issuance of Sonus' first quarter 2015 revenue and earnings guidance. Following recent communications with the SEC's Division of Enforcement (the "Staff"), the Company has reached an agreement in principle to resolve this matter. The Company is negotiating the terms of an order with the Staff in which it will neither admit nor deny, and that as part of the settlement the Company will pay a $1.9 million civil penalty and agree not to violate the securities laws in the future. The Company recorded $1.9 million in the year ended December 31, 2017, including $0.3 million in the three months ended December 31, 2017, for potential fines in connection with this investigation.

In addition, through GENBAND, the Company is involved in three ongoing patent infringement lawsuits with Metaswitch Networks Ltd., Metaswitch Networks Corp. and Metaswitch Inc. (collectively, "Metaswitch"). First, on January 21, 2014, GENBAND and the Company's indirectly-owned subsidiary, GENBAND US LLC, filed a complaint alleging that Metaswitch infringed certain patents owned by GENBAND. Following unsuccessful mediation, a trial took place and on January 15, 2016 the jury awarded approximately $8,168,000 in past royalty damages to GENBAND, which neither GENBAND nor the Company has recorded. On September 29, 2016, the court confirmed the jury verdict following motions from both parties. GENBAND is seeking additional royalty and other damages and has appealed a ruling of the court denying a permanent injunction against continued infringement by Metaswitch. GENBAND appealed the denial of its request for a permanent injunction and presented oral argument on this issue before the U.S. Court of Appeals for the Federal Circuit on June 8, 2017. On July 10, 2017, the U.S. Court of Appeals for the Federal Circuit vacated the lower court's denial of a permanent injunction and remanded the case for further consideration of GENBAND's request for a permanent injunction. On December 18, 2017, the lower court held a hearing on all remaining issues regarding the appeal. All briefing for reconsideration has been completed and the court's decision is pending.

A second lawsuit was filed on July 7, 2014 by Metaswitch against GENBAND in which both parties asserted claims of patent infringement against each other. The trial for the second lawsuit concluded on March 17, 2016 with no damages awarded to either party. The court entered a final judgment on April 14, 2016 awarding GENBAND its costs as the prevailing party. On August 28, 2017, the court denied all parties' motions for judgment as a matter of law and for a new trial. On October 26, 2017, the court granted GENBAND's motion for bill of costs and awarded GENBAND approximately $315,000 against Metaswitch, which was subsequently recorded by the Company in early 2018, when received.

On June 2, 2016, the federal district court signed an order lifting a stay and severing and consolidating various non-patent claims and counterclaims that were previously stayed in the first two lawsuits into a third lawsuit. On March 28, 2017, the court dismissed all parties' claims in this third lawsuit without prejudice, concluding that it lacked subject-matter jurisdiction over GENBAND's claims, declining to exercise jurisdiction over Metaswitch's federal Lanham Act counterclaim, and dismissing Metaswitch's remaining counterclaims concluding that it lacked subject-matter jurisdiction over those claims. Immediately following the dismissal of this federal court action on March 28, 2017, GENBAND filed a petition against Metaswitch in Texas state court asserting the claims that GENBAND had previously asserted in the federal court action. Metaswitch filed its answer

RIBBON COMMUNICATIONS INC.

Notes to Consolidated Financial Statements (Continued)

on April 21, 2017 and asserted counterclaims against GENBAND. On August 16, 2017, Metaswitch then amended its counterclaims against GENBAND. A hearing on discovery motions was held on January 4, 2018. The Texas state court has issued a scheduling order setting trial for this case in November 2018. At this time, it is not possible to predict the outcome of the litigation, but the Company does not expect the results of these Metaswitch-related matters to have a material adverse effect on its business or consolidated financial statements.

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

(23) QUARTERLY RESULTS (UNAUDITED)

The following tables present the Company's quarterly operating results for the years ended December 31, 2017 and 2016. 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.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter (1)
	(In thousands, except per share data)			
Fiscal 2017				
Revenue	$ 53,368	$ 55,733	$ 74,629	$ 146,212
Cost of revenue	19,620	19,331	20,082	69,413
Gross profit	$ 33,748	$ 36,402	$ 54,547	$ 76,799
Income (loss) from operations	$ (10,782)	$ (12,703)	$ 3,919	$ (35,663)
Net income (loss)	$ (10,646)	$ (12,345)	$ 3,453	$ (15,714)
Earnings (loss) per share (3):				
Basic	$ (0.22)	$ (0.25)	$ 0.07	$ (0.18)
Diluted	$ (0.22)	$ (0.25)	$ 0.07	$ (0.18)
Shares used in computing earnings (loss) per share:				
Basic	49,114	49,543	49,753	86,567
Diluted	49,114	49,543	50,131	86,567

RIBBON COMMUNICATIONS INC.

Notes to Consolidated Financial Statements (Continued)

	First Quarter	Second Quarter	Third Quarter (2)	Fourth Quarter
	(In thousands, except per share data)			
Fiscal 2016				
Revenue	$ 59,151	$ 60,857	$ 65,011	$ 67,572
Cost of revenue	20,748	20,629	21,425	22,178
Gross profit	$ 38,403	$ 40,228	$ 43,586	$ 45,394
Loss from operations	$ (3,881)	$ (2,708)	$ (4,316)	$ (2,704)
Net loss	$ (4,654)	$ (2,916)	$ (3,731)	$ (2,631)
Loss per share (3):				
Basic	$ (0.09)	$ (0.06)	$ (0.08)	$ (0.05)
Diluted	$ (0.09)	$ (0.06)	$ (0.08)	$ (0.05)
Shares used in computing loss per share:				
Basic	49,484	49,423	49,402	49,232
Diluted	49,484	49,423	49,402	49,232

(1) Includes the results of GENBAND for the period subsequent to October 27, 2017.

(2) Includes the results of Taqua for the period subsequent to September 26, 2016.

(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 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of the end of the period covered by this 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, 2017.

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, 2017. 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, 2017, our internal control over financial reporting was effective.

Our evaluation excluded GENBAND, which was acquired on October 27, 2017. Our consolidated statement of operations for the year ended December 31, 2017 included gross revenue of $69.1 million and $12.5 million of net loss. Our balance sheet as of December 31, 2017 included total assets of $617.5 million and net assets of $398.9 million attributable to GENBAND. In accordance with guidance issued by the Securities and Exchange Commission, companies are allowed to exclude acquisitions from their assessment of internal control over financial reporting during the first year subsequent to the acquisition while integrating the acquired operations.

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, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Ribbon Communications Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Ribbon Communications Inc. and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2017, of the Company and our report dated March 8, 2018, expressed an unqualified opinion on those financial statements.

As described in Management's Annual Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at GENBAND, which was acquired on October 27, 2017 and whose financial statements constitute $617.5 million and $398.9 million of total and net assets, respectively, $69.1 million of revenues and $12.5 million of net loss of the consolidated financial statement amounts as of and for the year ended December 31, 2017. Accordingly, our audit did not include the internal control over financial reporting at GENBAND.

Basis for Opinion

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 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 are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 8, 2018

Item 9B. Other Information

None.

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 2018 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, 2017 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 2018 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, 2017 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 2018 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, 2017 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 2018 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, 2017 and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this Item 14 will be included in our definitive Proxy Statement with respect to our 2018 Annual Meeting of Stockholders to be filed with the SEC and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

1) Financial Statements

The consolidated financial statements of the Company are listed in the index under Part II, Item 8, of this Annual Report 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 the signature page of this Annual Report, which Exhibit Index is incorporated herein by reference.

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

Exhibit No.		Description
2.1	**	Agreement and Plan of Merger, dated as of May 23, 2017, by and among the registrant, Sonus, Inc., Solstice Sapphire, Inc., Green Sapphire Investments LLC, Green Sapphire LLC, GENBAND Holdings Company, GENBAND Inc., and GENBAND II, Inc. (incorporated by reference to Exhibit 2.1 to Sonus, Inc.'s Current Report on Form 8-K, filed May 23, 2017 with the SEC).
3.1		Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K12B, filed October 30, 2017 with the SEC).
3.2		Certificate of Amendment of the Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed November 28, 2017 with the SEC).
3.3	*	Amended and Restated By-Laws of the Registrant.
10.1		Principal Stockholders Agreement, dated October 27, 2017, by and among the Registrant, Heritage PE (OEP) II, L.P. and Heritage PE (OEP) III, L.P. (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K12B, filed October 30, 2017 with the SEC).
10.2		Registration Rights Agreement, dated as of October 27, 2017, by and among the Registrant, Heritage PE (OEP) II, L.P. and Heritage PE (OEP) III, L.P. (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K12B, filed October 30, 2017 with the SEC).
10.3		Promissory Note, dated as of October 27, 2017 (incorporated by reference to Exhibit 99.3 to the Registrant's Current Report on Form 8-K12B, filed October 30, 2017 with the SEC).
10.4		Senior Secured Credit Facilities Credit Agreement, dated as of December 21, 2017, among the Registrant, as a Guarantor, Sonus Networks, Inc., as the Borrower, Silicon Valley Bank, as Administrative Agent, Issuing Lender, Swingline Lender and Lead Arranger, and the other lenders party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed December 26, 2017 with the SEC).
10.5	+*	Form of Indemnity Agreement for Officers and Directors.
10.6	+	Amended and Restated 2000 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 99.4 to the Registrant's Registration Statement on Form S-8, filed October 31, 2017 with the SEC).
10.7	+*	Senior Management Cash Incentive Plan, dated October 27, 2017.
10.8	+	Amended and Restated Employment Agreement between the Registrant and Raymond P. Dolan, accepted on February 23, 2015 (incorporated by reference to Exhibit 10.17 to Sonus, Inc.'s Annual Report on Form 10-K, filed February 25, 2015 with the SEC).
10.9	+	Letter Agreement, dated as of December 13, 2017, between the Registrant and Raymond P. Dolan (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed December 14, 2017 with the SEC).
10.10		Lease, dated August 11, 2010, between Michelson Farm-Westford Technology Park IV Limited Partnership and the Registrant with respect to the property located at 4 Technology Park Drive, Westford, Massachusetts (incorporated by reference to Exhibit 10.1 to Sonus, Inc.'s Quarterly Report on Form 10-Q, filed November 2, 2010 with the SEC).
10.11		First Amendment to Lease, dated October 27, 2010, between Michelson Farm-Westford Technology Park IV Limited Partnership and the Registrant with respect to the property located at 4 Technology Park Drive, Westford, Massachusetts (incorporated by reference to Exhibit 10.2 to Sonus, Inc.'s Quarterly Report on Form 10-Q, filed November 2, 2010 with the SEC).
10.12		Second Amendment to Lease, dated as of June 16, 2017, by and between Michelson Farm-Westford Technology Park IV Limited Partnership and the Registrant with respect to the property located at 4 Technology Park Drive, Westford, Massachusetts (incorporated by reference to Exhibit 10.1 to Sonus, Inc.'s Current Report on Form 8-K, filed June 21, 2017 with the SEC).
10.13	+	2008 Stock Incentive Plan of the Registrant (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8, filed October 31, 2017 with the SEC).
10.14	+	Form of Nonstatutory Stock Option Award Agreement Granted under the 2008 Stock Incentive Plan (incorporated by reference to Exhibit 10.29 to Sonus, Inc.'s Annual Report on Form 10-K, filed March 6, 2013 with the SEC).
10.15	+	2012 Amended Performance Technologies Incorporated Omnibus Incentive Plan (incorporated by reference to Exhibit 99.2 to the Registrant's Registration Statement on Form S-8, filed with the SEC effective October 31, 2017).

10.16	+	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 Sonus, Inc.'s Quarterly Report on Form 10-Q, filed April 29, 2014 with the SEC).
10.17	+	Amended and Restated Employment Agreement by and between with Jeffrey Snider, accepted May 22, 2017 (incorporated by reference to Exhibit 10.1 to Sonus, Inc.'s Quarterly Report on Form 10-Q, filed August 4, 2017 with the SEC).
10.18	+	Consulting Agreement, dated as of October 31, 2017, between the Registrant and Jeffrey M. Snider (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed October 31, 2017 with the SEC).
10.19		Earn-Out Agreement, dated as of January 2, 2015, by and among the Registrant, Treq Labs, Inc. and Karl F. May as the Seller Representative (incorporated by reference to Exhibit 10.1 to the Sonus, Inc.'s Current Report on Form 8-K, filed January 8, 2015 with the SEC).
10.20	+	Employment Agreement between the Registrant and Kevin Riley, dated July 30, 2014 (incorporated by reference to Exhibit 10.1 to Sonus, Inc.'s Quarterly Report on Form 10-Q, filed April 29, 2016 with the SEC).
10.21	+	Employment Agreement between the Registrant and Michael Swade, accepted September 29, 2014 (incorporated by reference to Exhibit 10.2 to Sonus, Inc.'s Quarterly Report on Form 10-Q, filed April 29, 2016 with the SEC).
10.22	+	Employment Agreement between the Registrant and Susan Villare, accepted on February 3, 2012 (incorporated by reference to Exhibit 10.1 to Sonus, Inc.'s Amendment No. 1 to Current Report on Form 8-K/A, filed July 8, 2016 with the SEC).
10.23	+	Letter Agreement between the Registrant and Susan Villare, accepted on July 7, 2016 (incorporated by reference to Exhibit 10.2 to Sonus, Inc.'s Amendment No. 1 to Current Report on Form 8-K/A, filed July 8, 2016 with the SEC).
10.24	+	Amended and Restated Stock Incentive Plan of the Registrant (incorporated by reference to Exhibit 99.3 to the Registrant's Registration Statement on Form S-8, filed with the SEC on October 31, 2017).
10.25	+	Form of Nonstatutory Stock Option Award Agreement Granted under the Amended and Restated Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to Sonus, Inc.'s Quarterly Report on Form 10-Q filed July 29, 2016 with the SEC).
10.26	+	Form of Restricted Stock Award Agreement Granted under the Amended and Restated Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to Sonus, Inc.'s Quarterly Report on Form 10-Q, filed July 29, 2016 with the SEC).
10.27	+	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 Sonus, Inc.'s Quarterly Report on Form 10-Q, filed July 29, 2016 with the SEC).
10.28	+*	Form of Restricted Stock Unit Award Agreement for Awards, dated October 24, 2017.
10.29	+*	Form of Retention Bonus Agreement.
10.30	+*	Amended and Restated Employment Agreement between the Registrant and Daryl Raiford, effective as of December 24, 2010, as amended on December 13, 2016.
10.31	+*	Retention Bonus Agreement between the Registrant and Daryl Raiford, dated as of December 12, 2016.
21.1	*	Subsidiaries of the Registrant.
23.1	*	Consent of Independent Registered Public Accounting Firm, Deloitte & Touche LLP
31.1	*	Certificate of Ribbon Communications Inc. Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	*	Certificate of Ribbon Communications Inc. Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	#	Certificate of Ribbon Communications Inc. Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	#	Certificate of Ribbon Communications Inc. Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS		XBRL Instance Document
101.SCH		XBRL Taxonomy Extension Schema
101.CAL		XBRL Taxonomy Extension Calculation Linkbase
101.DEF		XBRL Taxonomy Extension Definition Linkbase

101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

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* Filed herewith.

\# Furnished herewith.

\+ 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.

** Certain schedules and exhibits have been omitted pursuant to Item 601(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.

SIGNATURES

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.

RIBBON COMMUNICATIONS INC.

By: /s/ Franklin W. Hobbs
Franklin W. Hobbs
President and Chief Executive Officer

March 8, 2018

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/ Franklin W. Hobbs Franklin W. Hobbs	President, Chief Executive Officer and Director (Principal Executive Officer)	March 8, 2018
/s/ Daryl E. Raiford Daryl E. Raiford	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	March 8, 2018
/s/ Eric Marmurek Eric Marmurek	Senior Vice President, Finance (Principal Accounting Officer)	March 8, 2018
/s/ Richard J. Lynch Richard J. Lynch	Chairman	March 8, 2018
/s/ Kim S. Fennebresque Kim S. Fennebresque	Director	March 8, 2018
/s/ Bruns H. Grayson Bruns H. Grayson	Director	March 8, 2018
/s/ Beatriz V. Infante Breatriz V. Infante	Director	March 8, 2018
/s/ Kent J. Mathy Kent J. Mathy	Director	March 8, 2018
/s/ Scott E. Schubert Scott E. Schubert	Director	March 8, 2018
/s/ Rick W. Smith Rick W. Smith	Director	March 8, 2018

Exhibit 3.3

RIBBON COMMUNICATIONS INC.

AMENDED AND RESTATED BY-LAWS

Article I - General.

1.1 **Offices**. The registered office of Ribbon Communications Inc. (the "Company") shall be in the City of Wilmington, County of New Castle, State of Delaware. The Company may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the Company may require.

1.2 **Seal**. The seal, if any, of the Company shall be in the form of a circle and shall have inscribed thereon the name of the Company, the year of its organization and the words "Corporate Seal, Delaware."

1.3 **Fiscal Year**. The fiscal year of the Company shall be the period from January 1 through December 31.

Article II - Stockholders.

2.1 **Place of Meetings**. Each meeting of the stockholders shall be held upon notice as hereinafter provided, at such place, if any, as the Board of Directors shall have determined and as shall be stated in such notice.

2.2 **Annual Meeting**. The annual meeting of the stockholders shall be held each year on such date and at such time as the Board of Directors may determine. At each annual meeting the stockholders entitled to vote shall elect such members of the Board of Directors as are standing for election, by ballot, and they may transact such other corporate business as may properly be brought before the meeting.

2.3 **Quorum**. At all meetings of the stockholders the holders of a majority in voting power of the shares of stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum requisite for the transaction of business except as otherwise provided by law, the Company's Certificate of Incorporation (the "Certificate of Incorporation"), or these by-laws. Whether or not there is such a quorum at any meeting, the chairman of the meeting or the stockholders entitled to vote thereat, present in person or by proxy, by a majority vote, may adjourn the meeting from time to time without notice of such adjourned meeting if the time and place, if any, thereof, are announced at the meeting at which the adjournment is taken. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. At such adjourned meeting, at which a quorum shall be present, any business may be transacted that might have been transacted if the meeting had been held as originally called. The stockholders present in person or by proxy at a duly called meeting at which a quorum is present may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

2.4 **Right to Vote; Proxies**. Subject to the provisions of the Company's Certificate of Incorporation, each holder of a share or shares of capital stock of the Company having the right to vote at any meeting shall be entitled to one vote for each such share of stock held by him. Any stockholder entitled to vote at any meeting of stockholders may vote either in person or by proxy, but no proxy that is dated more than three years prior to the meeting at which it is offered shall confer the right to vote thereat unless the proxy provides that it shall be effective for a longer period. A proxy may be granted by a writing executed by the stockholder or his authorized agent or by transmission or authorization of transmission of a telegram, cablegram, or other means of electronic transmission to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization, or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, subject to the conditions set forth in Section 212 of the General Corporation Law of the State of Delaware, as it may be amended from time to time (the "General Corporation Law"). A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power.

2.5 **Voting**.

(a) At all meetings of stockholders, when a quorum is present, in all matters other than the election of directors, the affirmative vote of the holders of a majority in voting power of the shares of stock present in person or represented by proxy at the meeting and entitled to vote on such matter shall be the act of the stockholders unless a different or minimum vote is required by the Certificate of Incorporation, these by-laws, the rules or regulations of any stock exchange applicable to the Company, or any law or regulation applicable to the Company or its securities, in which case such different or minimum vote shall be the applicable vote on the matter.

(b) At all meetings of stockholders at which directors are to be elected, other than in a Contested Election Meeting (as defined below), when a quorum is present, a nominee for election as a director at such meeting shall be elected to the Board of Directors if the votes cast "for" such nominee's election exceed the votes cast "against" such nominee's election (with "abstentions" and "broker non-votes" not counted as a vote "for" or "against" such nominee's election). In a Contested Election Meeting, when a quorum is present, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at such Contested Election Meeting and entitled to vote on the election of directors. If directors are to be elected by a plurality vote, stockholders shall not be permitted to vote against a nominee. A meeting of stockholders shall be a "Contested Election Meeting" if the number of nominees for election as directors exceeds the number of directors to be elected at such meeting, as of the tenth (10th) day preceding the date of the Company's first notice to stockholders of such meeting sent pursuant to Section 2.6 or Section 2.9, as applicable, of these by-laws (the "Determination Date"); provided, however, that if, in accordance with Section 2.12 of these by-laws, stockholders are entitled to nominate persons for election as a director after the otherwise applicable Determination Date, the Determination Date shall instead be the last day on which stockholders are entitled to nominate persons for election as a director in accordance with Section 2.12.

2.6 **Notice of Annual Meetings**. Unless otherwise provided by law, the Certificate of Incorporation or these by-laws, notice of the date, time, place (if any), and the means of remote communications (if any), by which stockholders and proxyholders may be deemed to be present in person and vote, of each annual meeting of the stockholders shall be given, at least ten (10) days but not more than sixty (60) days prior to the meeting, to each stockholder of record entitled to vote. Such notice shall be given personally or by mail or, to the extent and in the manner permitted by applicable law, by a form of electronic transmission consented to by the stockholder to whom the notice is given. Notices are deemed given as provided in Section 6.2(a) of these by-laws. The Board of Directors may postpone, reschedule or cancel any annual meeting of the stockholders at its discretion, even after notice thereof has been given. Notice need not be given to any stockholder who submits a written waiver of notice signed by him or waives notice by electronic transmission, whether before or after the time of such meeting. Attendance of a stockholder at a meeting of stockholders shall constitute a waiver of notice of such meeting, except when the stockholder attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any annual meeting of the stockholders need be specified in any waiver of notice.

2.7 **Stockholders' List**. A complete list of the stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order and showing the address of each stockholder, and the number of shares registered in the name of each stockholder, shall be prepared by the Company at least ten (10) days before every meeting of stockholders. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, at least ten (10) days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of meeting, or (ii) during ordinary business hours, at the principal place of business of the Company. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonable accessible electronic network.

2.8 **Special Meetings**. Special meetings of the stockholders for any purpose or purposes, unless otherwise provided by law, may be called only by a majority of the Whole Board (as defined below) or (for so long as the Principal Stockholders Agreement, dated October 27, 2017, by and among the Company, Heritage PE (OEP) II, L.P., Heritage PE (OEP) III, L.P. and certain other stockholder parties thereto as such agreement may be amended from time to time (the "Stockholders Agreement") remains in effect) a majority of the Independent Directors (as such term is defined in the Stockholders Agreement, the "Independent Directors"). The Board of Directors may postpone, reschedule or cancel any special meeting of the stockholders at its discretion, even after notice thereof has been given.

2.9 **Notice of Special Meetings**. Unless otherwise provided by law, the Certificate of Incorporation or these by-laws, notice of the date, time, place (if any), the means of remote communications (if any), by which stockholders and proxyholders may be deemed to be present in person and vote, and the purpose or purposes of each special meeting of the stockholders shall be given, at least ten (10) days but not more than sixty (60) days prior to the meeting, to each stockholder of record entitled to vote. Such notice shall be given personally or by mail or, to the extent and in the manner permitted by applicable law, by a form of electronic transmission consented to by the stockholder to whom the notice is given. Notices are deemed given as provided in Section 6.2(a) of these by-laws. No business may be transacted at such meeting except that referred to in said notice, or in a supplemental notice given also in compliance with the provisions hereof, or such other business as may be germane or supplementary to that stated in said notice or notices as determined by the Board of Directors. Notice need not be given to any stockholder who submits a written waiver of notice signed by him or waives notice by electronic transmission, whether before or after the time of such meeting. Attendance of a stockholder at a meeting of stockholders shall constitute a waiver of notice of such meeting, except when the stockholder attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any special meeting of the stockholders need be specified in any waiver of notice.

2.10 **Inspectors**. The Company shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. Such inspectors shall have the powers and duties set forth in Section 231 of the General Corporation Law as currently in effect or as the same may hereafter be amended. Each inspector, before discharging his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of such inspector's ability. At the meeting for which the inspector or inspectors are appointed, he or they shall, in addition to the duties set forth in Section 231 of the General Corporation Law, receive and take charge of the proxies and ballots, and decide all questions touching on the qualifications of voters, the validity of proxies, and the acceptance and rejection of votes. If any inspector previously appointed shall fail to attend or refuse or be unable to act at a meeting of stockholders, the presiding officer shall appoint an inspector to act at the meeting.

2.11 **Stockholders' Consent in Lieu of Meeting**. Unless otherwise provided in the Company's Certificate of Incorporation, any action required to be taken at any annual or special meeting of stockholders of the Company, or any action that may be taken at any annual or special meeting of such stockholders, may be taken only at such a meeting, and not by written consent of stockholders.

2.12 **Notice of Stockholder Business and Nominations**.

(a) Annual Meetings of Stockholders. (1) Nominations of persons for election to the Board of Directors of the Company and the proposal of other business to be considered by the stockholders may be made at an annual meeting of stockholders only (A) pursuant to the Company's notice of meeting (or any supplement thereto), (B) subject to the Stockholders Agreement (for so long as the Stockholders Agreement remains in effect), by or at the direction of the Board of Directors or any committee thereof, or (C) subject to the Stockholders Agreement (for so long as the Stockholders Agreement remains in effect), by any stockholder of the Company who was a stockholder of record of the Company at the time the notice provided for in this Section 2.12 is delivered to the Secretary of the Company, who is entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 2.12.

(1) For any nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (C) of paragraph (a)(1) of this Section 2.12, the stockholder must have given timely notice thereof in writing to the Secretary of the Company and any such proposed business (other than the nominations of persons for election to the Board of Directors) must constitute a proper matter for stockholder action. To be timely, a stockholder's notice shall be delivered to the Secretary at the principal executive offices of the Company not later than the close of business on the ninetieth (90th) day, nor earlier than the close of business on the one hundred twentieth (120th) day, prior to the first anniversary of the preceding year's annual meeting (provided, however, that in the event that no annual meeting was held in the prior year or the date of the annual meeting is more than thirty (30) days before or more than seventy (70) days after such anniversary date, notice by the stockholder must be so delivered not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Company). For purposes of the first annual meeting following the adoption of these By-Laws, the date of the first anniversary of the preceding year's annual meeting shall be deemed to be June 9, 2018. In no event shall the public announcement of an adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above. Such stockholder's notice shall set forth: (A) as to each person whom the stockholder proposes to nominate for election as a director (i) all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to and in accordance with Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and (ii) such person's written consent to being named in the Company's proxy statement as a nominee and to serving as a director if elected; (B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the by-laws of the Company, the language of the proposed amendment), the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the Company's books, and of such beneficial owner, (ii) the class or series and number of shares of capital stock of the Company which are owned beneficially and of record by such stockholder and such beneficial owner, (iii) a description of any agreement, arrangement or understanding with respect to the nomination or proposal between or among such stockholder and such beneficial owner, any of their respective affiliates or associates, and any others acting in concert with any of the foregoing, (iv) a description of any agreement, arrangement or understanding (including any derivative or short positions, profit interests, options, warrants, stock appreciation or similar rights, hedging transactions, and borrowed or loaned shares) that has been entered into as of the date of the stockholder's notice by, or on behalf of, such stockholder and such beneficial owners, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of, such stockholder or such beneficial owner, with respect to shares of stock of the Company, (v) a representation that the stockholder is a holder of record of stock of the Company entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business or nomination, and (vi) a representation whether the stockholder or the beneficial owner, if any, intends or is part of a group which intends (a) to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the Company's

outstanding capital stock required to approve or adopt the proposal or elect the nominee and/or (b) otherwise to solicit proxies or votes from stockholders in support of such proposal or nomination. The foregoing notice requirements of this Section 2.12 shall be deemed satisfied by a stockholder with respect to business other than a nomination if the stockholder has notified the Company of his, her or its intention to present a proposal at an annual meeting in compliance with applicable rules and regulations promulgated under the Exchange Act and such stockholder's proposal has been included in a proxy statement that has been prepared by the Company to solicit proxies for such annual meeting. The Company may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as a director of the Company.

(2) Notwithstanding anything in the second sentence of paragraph (a)(2) of this Section 2.12 to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Company is increased effective at the annual meeting and there is no public announcement by the Company naming the nominees for the additional directorships at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section 2.12 shall also be considered timely, but only with respect to nominees for the additional directorships, if it shall be delivered to the Secretary at the principal executive offices of the Company not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Company.

(b) Special Meetings of Stockholders. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Company's notice of meeting. Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Company's notice of meeting (1) subject to the Stockholders Agreement (for so long as the Stockholders Agreement remains in effect), by or at the direction of the Board of Directors or any committee thereof, or (2) provided that the Board of Directors has determined that directors shall be elected at such meeting and subject to the Stockholders Agreement (for so long as the Stockholders Agreement remains in effect), by any stockholder of the Company who is a stockholder of record at the time the notice provided for in this Section 2.12 is delivered to the Secretary of the Company, who is entitled to vote at the meeting and upon such election and who complies with the notice procedures set forth in this Section 2.12. In the event the Company calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder entitled to vote in such election of directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Company's notice of meeting, if the stockholder's notice required by paragraph (a)(2) of this Section 2.12 shall be delivered to the Secretary at the principal executive offices of the Company not earlier than the close of business on the one hundred twentieth (120th) day prior to such special meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such special meeting or the tenth (10th) day following the day on which public announcement is first made by the Company of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall the public announcement of an adjournment or postponement of a special meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

(c) General. (0) Only such persons who are nominated in accordance with the procedures set forth in this Section 2.12 shall be eligible to be elected at an annual or special meeting of stockholders of the Company to serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 2.12. Except as otherwise provided by law, the chairman of the meeting shall have the power and duty (A) to determine whether a nomination or any business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 2.12 (including whether the stockholder or beneficial owner, if any, on whose behalf the nomination or proposal is made solicited (or is part of a group which solicited) or did not so solicit, as the case may be, proxies or votes in support of such stockholder's nominee or proposal in compliance with such stockholder's representation as required by clause (a)(2)(C)(vi) of this Section 2.12) and (B) if any proposed nomination or business was not made or proposed in compliance with this Section 2.12, to declare that such nomination shall be disregarded or that such proposed business shall not be transacted. Notwithstanding the foregoing provisions of this Section 2.12, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual or special meeting of stockholders of the Company to present a nomination or proposed business, such nomination shall be disregarded and such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Company. For purposes of this Section 2.12, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting of stockholders.

(1) For purposes of this Section 2.12, "public announcement" shall include disclosure in a press release reported by the Dow Jones News Service, Associated Press or other national news service or in a document publicly filed by the Company with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(2) Notwithstanding the foregoing provisions of this Section 2.12, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.12; provided however, that any references in these by-laws to the Exchange Act or the rules promulgated thereunder are not intended to and shall not limit any requirements applicable to nominations or proposals as to any other business to be considered pursuant to this Section 2.12 (including paragraphs (a)(1)(C) and (b) hereof), and compliance with paragraphs (a)(1)(C) and (b) of this Section 2.12 shall be the exclusive means for a stockholder to make nominations or submit other business (other than, as provided in the penultimate sentence of (a)(2), matters brought properly under and in compliance with Rule 14a-8 of the Exchange Act, as may be amended from time to time). Nothing in this Section 2.12 shall be deemed to affect any rights (A) of stockholders to request inclusion of proposals in the Company's proxy statement pursuant to applicable rules and regulations promulgated under the Exchange Act or (B) of the holders of any series of Preferred Stock to elect directors pursuant to any applicable provisions of the Company's Certificate of Incorporation.

2.13 **Conduct of Meetings**. The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting by the person presiding over the meeting. The Board of Directors may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board of Directors, the person presiding over any meeting of stockholders shall have the right and authority to convene, to recess and to adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such presiding person, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the presiding person of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the Company, their duly authorized and constituted proxies or such other persons as the presiding person of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. The presiding person at any meeting of stockholders, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall, if the facts warrant, determine and declare to the meeting that a matter or business was not properly brought before the meeting and if such presiding person should so determine, such presiding person shall so declare to the meeting and any such matter or business not properly brought before the meeting shall not be transacted or considered. Unless and to the extent determined by the Board of Directors or the person presiding over the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Article III - Directors.

3.1 **Number of Directors**.

(a) Except as otherwise provided by law, the Company's Certificate of Incorporation, or these by-laws, the property and business of the Company shall be managed by or under the direction of a board of directors. Directors need not be stockholders, residents of Delaware, or citizens of the United States. The use of the phrase "Whole Board" herein refers to the total number of directors which the Company would have if there were no vacancies or unfilled newly-created directorships.

(b) The number of directors constituting the full Board of Directors shall be as determined from time to time by resolution adopted by a majority of the Whole Board in a manner consistent (for so long as it remains in effect) with the Stockholders Agreement. Each director shall be elected annually at each annual meeting of the Company's stockholders. Members of the Board of Directors shall hold office until the annual meeting of stockholders at which their respective successors are elected and qualified or until their earlier death, incapacity, resignation, or removal.

(c) Except as the General Corporation Law, the Company's Certificate of Incorporation or the Stockholders Agreement (for so long as the Stockholders Agreement is in effect) may otherwise require, newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the Board of Directors resulting from death, incapacity, disqualification, resignation, or removal from office or other cause may only be filled by the affirmative vote of a majority of the remaining directors then in office, although less than a quorum, or by the sole remaining director. Any director so chosen shall hold office until the next annual election of the directors and until such director's successor shall be elected and qualified. No decrease in the number of directors shall shorten the term of any incumbent director.

3.2 **Resignation**. Any director of the Company may resign at any time by giving notice in writing or by electronic transmission to the Chairman of the Board, the President, or the Secretary of the Company. Such resignation shall take effect at the time specified therein, at the time of receipt if no time is specified therein and at the time of acceptance if the effectiveness of such resignation is conditioned upon its acceptance. Unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

3.3 **Removal**. Except as may otherwise be provided by the General Corporation Law, the Company's Certificate of Incorporation or the Stockholders Agreement (for so long as the Stockholders Agreement is in effect), any director or the entire Board of Directors may be removed from office at any time, (a) for cause by the affirmative vote of the holders of a majority of the voting power of the shares of the Company's stock entitled to vote for the election of directors, voting together as a single class, or (b) without cause by (i) subject to clause (ii), the affirmative vote of the holders of at least 66 2/3% of the voting power of the shares of the Company's stock entitled to vote for the election of directors, voting together as a single class or (ii) in the event recommended by at least two-thirds of the Whole Board, including the approval of a majority of the Independent Directors, the affirmative vote of the holders of a majority of the voting power of the shares of the Company's stock entitled to vote for the election of directors, voting together as a single class.

3.4 **Place of Meetings and Books**. The Board of Directors may hold their meetings and keep the books of the Company outside the State of Delaware, at such places as they may from time to time determine.

3.5 **General Powers**. In addition to the powers and authority expressly conferred upon them by these by-laws, the board may exercise all such powers of the Company and do all such lawful acts and things as are not by law or by the Company's Certificate of Incorporation or by these by-laws directed or required to be exercised or done by the stockholders.

3.6 **Committees**. The Board of Directors may designate one or more committees, each committee to consist of one or more directors of the Company. Any such committee, to the extent provided in the resolution of the Board of Directors or in these by-laws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Company to the extent permitted by law, and may authorize the seal of the Company to be affixed to all papers which may require it. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors.

3.7 **Powers Denied to Committees**. Committees of the Board of Directors shall not, in any event, have the power or authority to: (i) approve or adopt, or recommend to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the General Corporation Law to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any by-law of the Company.

3.8 **Substitute Committee Member**. Subject to the restrictions set forth in the Stockholders Agreement (for so long as the Stockholders Agreement is in effect), the Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. Subject to the restrictions set forth in the Stockholders Agreement (for so long as the Stockholders Agreement is in effect), in the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of such absent or disqualified member. Any committee shall keep regular minutes of its proceedings and report the same to the Board of Directors as may be required by the Board of Directors.

3.9 **Compensation of Directors**. The Board of Directors shall have the power to fix the compensation of directors and members of committees of the Board. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors, may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director and may receive stock options, grants and issuances of restricted stock under the Company's equity incentive plan(s). No such payment shall preclude any director from serving the Company in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

3.10 **Regular Meetings**. No notice shall be required for regular meetings of the Board of Directors for which the time and place (within or without the State of Delaware) have been fixed by resolution of the Board of Directors.

3.11 **Special Meetings**. Special meetings of the Board of Directors may be held at any time or place, within or without the State of Delaware, whenever called by a majority of the directors then constituting the full Board of Directors. Notice of a special meeting of the Board of Directors shall be given by the person or persons calling the meeting at least forty-eight hours before the special meeting to each director, personally or by telephone, facsimile, electronic mail or other electronic transmission to the extent and in the manner permitted by applicable law. Notice need not be given to any director who submits a written waiver of notice signed by him or waives notice by electronic transmission, whether before or after the time of such meeting. Attendance of any director at a meeting shall constitute a waiver of notice of such meeting, except when such director attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any special meeting of the directors need be specified in any waiver of notice.

3.12 **Quorum**. At all meetings of the Board of Directors, a majority of the Whole Board shall be necessary and sufficient to constitute a quorum for the transaction of business, and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically permitted or provided by law, or by the Company's Certificate of Incorporation, or by these by-laws. If at any meeting of the board there shall be less than a quorum present, a majority of those directors present may adjourn the meeting from time to time until a quorum is obtained, and no further notice of the adjourned meeting need be given if the time and place, if any, thereof, are announced at the meeting at which the adjournment is taken.

3.13 **Telephonic Participation in Meetings**. Members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting thereof by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to this by-law shall constitute presence in person at such meeting.

3.14 **Action by Consent**. Unless otherwise restricted by the Company's Certificate of Incorporation or these by-laws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board of Directors or such committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmissions are filed with the minutes of proceedings of the Board of Directors or committee in accordance with applicable law.

Article IV - Officers.

4.1 **Selection; Statutory Officers**. The officers of the Company shall be chosen by the Board of Directors. There shall be a President, a Secretary, and a Treasurer, and there may be a Chairman of the Board of Directors, one or more Vice Presidents, one or more Assistant Secretaries, and one or more Assistant Treasurers, as the Board of Directors may elect. Any number of offices may be held by the same person, except that the offices of President and Secretary shall not be held by the same person simultaneously.

4.2 **Time of Election**. The officers designated in Section 4.1 shall be chosen by the Board of Directors at its first meeting after each annual meeting of stockholders. None of said officers need be a director.

4.3 **Additional Officers**. The Board of Directors may appoint such other officers and agents as it shall deem necessary, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors.

4.4 **Terms of Office**. Each officer of the Company shall hold office until his successor is chosen and qualified, or until his earlier resignation or removal. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors, but such removal shall be without prejudice to the contractual rights of such officer. Any officer may resign at any time upon written notice or notice by electronic transmission to the Company.

4.5 **Compensation of Officers**. The Board of Directors shall have power to fix the compensation of all officers of the Company. It may authorize any officer, upon whom the power of appointing subordinate officers may have been conferred, to fix the compensation of such subordinate officers.

4.6 **Chairman of the Board**. The Chairman of the Board of Directors shall preside at all meetings of the stockholders and directors, and shall have such other duties as may be assigned to him from time to time by the Board of Directors.

4.7 **President**. Unless the Board of Directors otherwise determines, the President shall be the chief executive officer and head of the Company. Unless there is a Chairman of the Board, the President shall preside at all meetings of directors (if he is also a director) and stockholders. Under the supervision of the Board of Directors, the President shall have the general control and management of its business and affairs, subject, however, to the right of the Board of Directors to confer any specific power, except such as may be by law exclusively conferred on the President, upon any other officer or officers of the Company. The President shall perform and do all acts and things incident to the position of President and such other duties as may be assigned to him from time to time by the Board of Directors.

4.8 **Vice-Presidents**. The Vice-Presidents shall perform such duties on behalf of the Company as may be respectively assigned to them from time to time by the Board of Directors or by the President. The Board of Directors may designate one of the Vice-Presidents as the Executive Vice-President, and in the absence or inability of the President to act, such Executive Vice-President shall have and possess all of the powers and discharge all of the duties of the President, subject to the control of the Board of Directors.

4.9 **Treasurer**. The Treasurer shall have the care and custody of all the funds and securities of the Company that may come into his hands as Treasurer, and the power and authority to endorse checks, drafts and other instruments for the payment of money for deposit or collection when necessary or proper and to deposit the same to the credit of the Company in such bank or banks or depository as the Board of Directors, or the officers or agents to whom the Board of Directors may delegate such authority, may designate, and he may endorse all commercial documents requiring endorsements for or on behalf of the Company. He may sign all receipts and vouchers for the payments made to the Company. He shall render an account of his transactions to the Board of Directors as often as the board or the committee shall require the same. He shall enter regularly in the books to be kept by him for that purpose full and adequate account of all moneys received and paid by him on account of the Company. He shall perform all acts incident to the position of Treasurer, subject to the control of the Board of Directors. He shall when requested, pursuant to vote of the Board of Directors, give a bond to the Company conditioned for the faithful performance of his duties, the expense of which bond shall be borne by the Company.

4.10 **Secretary**. The Secretary shall keep the minutes of all meetings of the Board of Directors and of the stockholders; he shall attend to the giving and serving of all notices of the Company. Except as otherwise ordered by the Board of Directors, he shall attest the seal of the Company upon all contracts and instruments executed under such seal and shall affix the seal of the Company thereto and to all certificates of shares of capital stock of the Company. He shall have charge of the stock certificate book, transfer book and stock ledger, and such other books and papers as the Board of Directors may direct. He shall, in general, perform all the duties of Secretary, subject to the control of the Board of Directors.

4.11 **Assistant Secretary**. The Board of Directors or any two of the officers of the Company acting jointly may appoint or remove one or more Assistant Secretaries of the Company. Any Assistant Secretary upon his appointment shall perform such duties of the Secretary, and also any and all such other duties as the Board of Directors or the President or the Executive Vice-President or the Treasurer or the Secretary may designate.

4.12 **Assistant Treasurer**. The Board of Directors or any two of the officers of the Company acting jointly may appoint or remove one or more Assistant Treasurers of the Company. Any Assistant Treasurer upon his appointment shall perform such of the duties of the Treasurer, and also any and all such other duties as the Board of Directors or the President or the Executive Vice-President or the Treasurer or the Secretary may designate.

4.13 **Subordinate Officers**. The Board of Directors may select such subordinate officers as it may deem desirable. Each such officer shall hold office for such period, have such authority, and perform such duties as the Board of Directors may prescribe. The Board of Directors may, from time to time, authorize any officer to appoint and remove subordinate officers and to prescribe the powers and duties thereof.

Article V - Stock.

5.1 **Stock**. The shares of the Company shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Company. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the Company by any two authorized officers of the Company, including, but not limited to, the Chairman of the Board of Directors, a Vice-Chairman of the Board of Directors, the President, a Vice-President, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary representing the number or shares registered in certificate form and shall be sealed with the corporate seal of the Company. The certificates of stock of the Company shall be numbered and shall be entered in the books of the Company as they are issued. Any or all the signatures on the certificate may be a facsimile. In case any

officer or officers, transfer agent or registrar who shall have signed, or whose facsimile signature or signatures shall have been used on, any such certificate or certificates shall cease to be such officer or officers, transfer agent or registrar of the Company, whether because of death, resignation or otherwise, before such certificate or certificates shall have been issued, such certificate or certificates may nevertheless be issued by the Company with the same effect as though the person or persons who signed such certificate or certificates or whose facsimile signature shall have been used thereon had not ceased to be such officer or officers, transfer agent or registrar of the Company.

5.2 **Fractional Share Interests**. The Company may, but shall not be required to, issue fractions of a share. If the Company does not issue fractions of a share, it shall (i) arrange for the disposition of fractional interests by those entitled thereto, (ii) pay in cash the fair value of fractions of a share as of the time when those entitled to receive such fractions are determined, or (iii) issue scrip or warrants in registered form (either represented by a certificate or uncertificated) or in bearer form (represented by a certificate) that shall entitle the holder to receive a full share upon the surrender of such scrip or warrants aggregating a full share. A certificate for a fractional share or an uncertificated fractional share shall, but scrip or warrants shall not unless otherwise provided therein, entitle the holder to exercise voting rights, to receive dividends thereon, and to participate in any of the assets of the Company in the event of liquidation. The Board of Directors may cause scrip or warrants to be issued subject to the conditions that they shall become void if not exchanged for certificates representing full shares or uncertificated full shares before a specified date, or subject to the conditions that the shares for which scrip or warrants are exchangeable may be sold by the Company and the proceeds thereof distributed to the holders of scrip or warrants, or subject to any other conditions that the Board of Directors may impose.

5.3 **Transfers of Stock**. Subject to any transfer restrictions then in force, the shares of stock of the Company shall be transferable only upon its books by the holders thereof in person or by their duly authorized attorneys or legal representatives, and upon the surrender of the certificate or certificates for such shares properly endorsed (or, with respect to uncertificated shares, by delivery of duly executed instructions or in any other manner permitted by applicable law). The Company shall be entitled to treat the holder of record of any share or shares of stock as the holder in fact thereof and accordingly shall not be bound to recognize any equitable or other claim to or interest in such share on the part of any other person whether or not it shall have express or other notice thereof save as expressly provided by the laws of Delaware.

5.4 **Record Date**. For the purpose of determining the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or the allotment of any rights, or entitled to exercise any rights in respect of any change, conversion, or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty (60) days nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. If no such record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; and the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto. A determination of stockholders of record entitled to notice of or to vote at any meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

5.5 **Transfer Agent and Registrar**. The Board of Directors may appoint one or more transfer agents or transfer clerks and one or more registrars and may require all certificates of stock to bear the signature or signatures of any of them.

5.6 **Dividends**.

(a) **Power to Declare**. Dividends upon the capital stock of the Company, subject to the provisions of the Company’s Certificate of Incorporation, if any, may be declared by the Board of Directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Company’s Certificate of Incorporation and the General Corporation Law.

(b) **Reserves**. Before payment of any dividend, there may be set aside out of any funds of the Company lawfully available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Company, or for such other purpose as the directors shall think conducive to the interest of the Company, and the directors may modify or abolish any such reserve in the manner in which it was created.

5.7 **Lost, Stolen, or Destroyed Certificates**. No certificates for shares of stock of the Company (or uncertificated shares, as the case may be) shall be issued in place of any certificate alleged to have been lost, stolen, or destroyed, except upon production of such evidence of the loss, theft, or destruction and upon indemnification of the Company and its agents to such extent and in such manner as the Board of Directors may from time to time prescribe.

5.8 **Inspection of Books**. Any stockholder, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the Company’s stock ledger, a list of its stockholders, and its other books and records; and no stockholder shall have any right to inspect any account or book or document of the Company except as conferred by law.

Article VI - Miscellaneous Management Provisions.

6.1 **Checks, Drafts, and Notes**. All checks, drafts, or orders for the payment of money, and all notes and acceptances of the Company shall be signed by such officer or officers, or such agent or agents, as the Board of Directors may designate.

6.2 **Notices**.

(a) Notices to directors may be given personally or by telephone, mail, facsimile, electronic mail or other electronic transmission to the extent and in the manner permitted by applicable law. Notices to stockholders may be given personally or by mail or, to the extent and in the manner permitted by applicable law, by a form of electronic transmission consented to by the stockholder to whom the notice is given. In accordance with Section 232 of the General Corporation Law, notices are deemed given (i) if by mail, when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder’s address as it appears on the records of the Company, or, if a stockholder shall have filed with the Secretary of the Company a written request that notices to such stockholder be mailed to some other address, then directed to such stockholder at such other address; (ii) if by facsimile, when directed to a number at which the stockholder has consented to receive notice; (iii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive such notice; (iv) if by posting on an electronic network together with a separate notice to the stockholder of such specific posting, upon the later to occur of (A) such posting and (B) the giving of such separate notice of such posting; and (v) if by any other form of electronic transmission, when directed to the stockholder in the manner consented to by the stockholder. Notice shall be deemed to have been given to all stockholders of record who share an address if notice is given in accordance with Section 233 of the General Corporation Law. An affidavit of the Secretary, Assistant Secretary or any transfer agent of the Company that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

(b) Whenever any notice is required to be given under the provisions of any applicable law or of the Company’s Certificate of Incorporation or of these by-laws, a written waiver of notice, signed by the person or persons entitled to said notice, or a waiver of notice by electronic transmission, whether before or after the time stated therein or the meeting or action to which such notice relates, shall be deemed equivalent to notice. Attendance of a person at a

meeting shall constitute a waiver of notice of such meeting except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

6.3 **Conflict of Interest**. No contract or transaction between the Company and one or more of its directors or officers, or between the Company and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board or committee thereof that authorized the contract or transaction, or solely because any such director's or officer's votes are counted for such purpose, if: (i) the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the Board of Directors or committee in good faith authorizes the contract or transaction by the affirmative vote of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or (ii) the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders of the Company entitled to vote thereon, and the contract or transaction as specifically approved in good faith by vote of such stockholders; or (iii) the contract or transaction is fair as to the Company as of the time it is authorized, approved, or ratified, by the Board of Directors, a committee or the stockholders. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee that authorizes the contract or transaction.

6.4 **Voting of Securities Owned by the Company**. Subject always to the specific directions of the Board of Directors, (i) any shares or other securities issued by any other entity and owned or controlled by the Company may be voted in person at any meeting of security holders of such other entity by the President of the Company if he is present at such meeting, or in his absence by the Treasurer of the Company if he is present at such meeting, and (ii) whenever, in the judgment of the President, it is desirable for the Company to execute a proxy or written consent in respect to any shares or other securities issued by any other entity and owned by the Company, such proxy or consent shall be executed in the name of the Company by the President, without the necessity of any authorization by the Board of Directors, affixation of corporate seal or countersignature or attestation by another officer, provided that if the President is unable to execute such proxy or consent by reason of sickness, absence from the United States or other similar cause, the Treasurer may execute such proxy or consent. Any person or persons designated in the manner above stated as the proxy or proxies of the Company shall have full right, power and authority to vote the shares or other securities issued by such other entity and owned by the Company the same as such shares or other securities might be voted by the Company.

Article VII - Indemnification.

7.1 **Right to Indemnification**. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding"), by reason of being or having been a director or officer of the Company or, while a director or officer of the Company, serving or having served at the request of the Company as a director, trustee, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (an "Indemnitee"), shall be indemnified and held harmless by the Company to the fullest extent permitted by applicable law, as the same exists or may hereafter be amended, against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such Indemnitee in connection therewith and such indemnification shall continue as to an Indemnitee who has ceased to be a director, trustee, officer, employee, or agent and shall inure to the benefit of the Indemnitee's heirs, executors, and administrators; provided, however, that, except as provided in Section 7.2 hereof with respect to Proceedings to enforce rights to indemnification or Advancement of Expenses, the Company shall indemnify any such Indemnitee in connection with a Proceeding (or part thereof) initiated by such Indemnitee only if such Proceeding (or part thereof) was approved by the Board of Directors of the Company. The right to indemnification conferred in this Article 7 shall be a contract right and shall include the right to be paid by the Company the expenses (including attorneys' fees) incurred in defending any such Proceeding in advance of its final disposition (an "Advancement of Expenses"); provided, however, that, to the extent required by law, such Advancement of Expenses shall be made only upon the Company's receipt of an undertaking (an "Undertaking"), by or on behalf of such Indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (a "Final Adjudication") that such Indemnitee is not entitled to be indemnified for such expenses under this Article 7 or otherwise.

7.2 **Right of Indemnitee to Bring Suit**. If a claim under Section 7.1 hereof is not paid in full by the Company within sixty days after a written claim has been received by the Company, except in the case of a claim for an Advancement of Expenses, in which case the applicable period shall be twenty days, the Indemnitee may at any time thereafter bring suit against the Company to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Company to recover an Advancement of Expenses pursuant to the terms of an Undertaking, the Indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit to the fullest extent permitted by applicable law. In (i) any suit brought by the Indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the Indemnitee to enforce a right to an Advancement of Expenses) it shall be a defense that, and (ii) in any suit by the Company to recover an Advancement of Expenses pursuant to the terms of an Undertaking the Company shall be entitled to recover such expenses upon a Final Adjudication that, the Indemnitee has not met the applicable standard of conduct set forth in Section 145 of the General Corporation Law. Neither the failure of the Company (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the Indemnitee is proper in the circumstances because the Indemnitee has met the applicable standard of conduct set forth in Section 145 of the General Corporation Law, nor an actual determination by the Company (including its Board of Directors, independent legal counsel, or its stockholders) that the Indemnitee has not met such applicable standard of conduct, shall create a presumption that the Indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the Indemnitee, be a defense to such suit. In any suit brought by the Indemnitee to enforce a right to indemnification or to an Advancement of Expenses hereunder, or by the Company to recover an Advancement of Expenses pursuant to the terms of an Undertaking, the burden of proving that the Indemnitee is not entitled to be indemnified, or to such Advancement of Expenses, under this Article 7 or otherwise shall be on the Company.

7.3 **Non-Exclusivity of Rights**. The rights to indemnification and to the Advancement of Expenses conferred in this Article 7 shall not be exclusive of any other right that any person may have or hereafter acquire under any law, the Company's Certificate of Incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

7.4 **Insurance**. The Company may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Company or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Company would have the power to indemnify such person against such expense, liability or loss under this Article 7 or under the General Corporation Law.

7.5 **Indemnification of Employees and Agents of the Company**. The Company may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification, and to the Advancement of Expenses, to any employee or agent of the Company to the fullest extent of the provisions of this Article 7 with respect to the indemnification and Advancement of Expenses of directors and officers of the Company.

7.6 **Amendment or Repeal**. Any repeal or modification of the foregoing provisions of this Article VII shall not adversely affect any right or protection hereunder of any Indemnitee in respect of any act or omission occurring prior to the time of such repeal or modification.

Article VIII - Amendments.

8.1 **Amendments**. Subject always to any limitations imposed by the Company’s Certificate of Incorporation, these by-laws may be altered, amended, or repealed, or new by-laws may be adopted, by resolution of the Board of Directors duly adopted by a majority of the Whole Board, including (for so long as the Stockholders Agreement remains in effect) the approval of a majority of the Independent Directors. With respect to the power of holders of capital stock to adopt, amend and repeal by-laws of the Company, notwithstanding any other provision of these by-laws or any provision that might otherwise permit a lesser vote or no vote, in addition to any vote of the holders of any class or series of capital stock of the Company required herein or by law, the affirmative vote of the holders of the voting power of at least 66 2/3% of the shares of the Company’s stock entitled to vote thereon, voting together as a single class, shall be required for any such alteration, amendment, repeal, or adoption by the vote of the holders of any class or series of the capital stock of the Company.

Exhibit 10.5

RIBBON COMMUNICATIONS INC.

INDEMNITY AGREEMENT

This Indemnity Agreement (this "Agreement") is made and entered into effective as of [ ], by and between Ribbon Communications Inc., a Delaware corporation (the “Corporation”), and [ ] (the “Indemnitee”). This Agreement supersedes and replaces any and all previous agreements between the Company and its predecessors and the Indemnitee covering the subject matter of this Agreement.

WHEREAS, it is essential to the Corporation to retain and attract as directors and/or officers the most capable persons available;

WHEREAS, the possibility of corporate litigation subjects directors and officers to expensive litigation risks at the same time that the availability of directors' and officers' liability insurance is limited;

WHEREAS, the Corporation has agreed to indemnify its directors and officers so as to provide them with the maximum possible protection permitted by law; and

WHEREAS, the General Corporation Law of the State of Delaware, Section 145, and the Corporation's Certificate of Incorporation and/or By-laws provide that indemnification of the directors and officers of the Corporation may be authorized by agreement, and thereby contemplates that contracts of this nature may be entered into between the Corporation and the Indemnitee with respect to indemnification of the Indemnitee as a director and/or officer of the Corporation.

NOW, THEREFORE, for good and valuable consideration, the sufficiency and adequacy of which are hereby acknowledged, the Corporation and the Indemnitee do hereby agree as follows:

1. Agreement to Serve. The Indemnitee agrees to serve or continue to serve as [director and/or officer and/or employee] of the Corporation for so long as [s/he] is duly [elected or appointed or employed or until such time as [s/he] tenders [his/her] resignation in writing or is otherwise terminated or removed from office]. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries) and Indemnitee.

2. Definitions. As used in this Agreement:

(a) The term "Proceeding" shall include any threatened, pending or completed action, suit, arbitration, administrative hearing or other proceeding, whether brought by or in the right of the Corporation or otherwise, whether brought while the Indemnitee is acting or serving as a Director and/or officer of the Corporation or subsequent to the Indemnitee serving in such capacity, and whether of a civil, criminal, administrative or investigative nature, and any appeal therefrom, in which the Indemnitee and/or the Corporation may be or may have been involved as a party or otherwise, (i) by reason of the status of the Indemnitee as a director and/or officer of the Corporation or as a director, partner, trustee, officer, employee or agent of another corporation, domestic or foreign, non-profit or for-profit, partnership, joint venture, trust or other enterprise at the request of the Corporation (“Corporate Status”), or (ii) by reason of any action alleged to have been taken by [his/her] or of any alleged inaction on [his/her] part in such Corporate Status.

(b) The term "Expenses" shall include, without limitation, attorneys’ fees, retainers, court costs, transcript costs, fees and expenses of experts, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and other disbursements or expenses of the types customarily incurred in connection with investigations, judicial or administrative proceedings or appeals, and any expenses of establishing a right to indemnification under Paragraph 10 of this Agreement, in each case to the extent actually and reasonably incurred by a person. The term “Expenses” shall not include the amount of judgments, fines or penalties against Indemnitee or amounts paid in settlement in connection with such matters.

(c) References to "other enterprise" shall include, without limitation, employee benefit plans; references to "fines" shall include, without limitation, any excise tax assessed with respect to any employee benefit plan; references to "serving at the request of the Corporation" shall include, without limitation, any service as a director and/or officer of the Corporation which imposes duties on, or involves services by, such director and/or officer with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to be best interests of the Corporation" as referred to in this Agreement.

3. Proceedings Other than by or in the Right of the Corporation. The Corporation shall indemnify the Indemnitee in accordance with the provisions of this Agreement if the Indemnitee was or is a party to or threatened to be made a party to or otherwise involved in any Proceeding (other than a Proceeding by or in the right of the Corporation), by reason of the Indemnitee’s Corporate Status or by reason of any action alleged to have been taken or omitted in such capacity, against all Expenses, judgments, fines, penalties and amounts paid in settlement actually and reasonably incurred by [his/her] or it on [his/her] or its behalf in connection with such Proceeding, if the Indemnitee acted in good faith and in a manner [s/he] or it reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal Proceeding, had no reasonable cause to believe [his/her] or its conduct was unlawful, provided, that, in no event shall the Indemnitee be entitled to indemnification hereunder to the extent that such indemnification is prohibited by the General Corporation Law of the State of Delaware. The termination of Proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the Indemnitee did not act in good faith and in a manner which [s/he] or it reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal Proceeding, had reasonable cause to believe that [his/her] or its conduct was unlawful. Notwithstanding anything to the contrary in this Paragraph, except as set forth in Paragraph 10 below, the Corporation shall not indemnify the Indemnitee in connection with a Proceeding (or part thereof) initiated by the Indemnitee, as the case may be, unless the initiation thereof was approved by the Board of Directors of the Corporation.

4. Proceedings by or in the Right of the Corporation. The Corporation shall indemnify the Indemnitee in accordance with the provisions of this Agreement if the Indemnitee was or was or is a party to or threatened to be made a party to or otherwise involved in any Proceeding by or in the right of the Corporation to procure a judgment in its favor by reason of the Indemnitee's Corporate Status or by reason of any action alleged to have been taken or omitted in such capacity, against all Expenses and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred by [his/her] or it or on [his/her] or its behalf in connection with such Proceeding, if the Indemnitee acted in good faith and in a manner [s/he] reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which the Indemnitee shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of Delaware or the court in which such Proceeding was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, the Indemnitee is fairly and reasonably entitled to indemnity for such Expenses which the Court of Chancery of Delaware or such other court shall deem proper.

5. Exception to Right of Indemnification. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision;

(b) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law; or

(c) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation, or (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

6. Costs and Expenses Relating to Service as a Witness. The Corporation shall indemnify the Indemnitee in accordance with the provisions of this Agreement with respect to all Expenses incurred or suffered by the Indemnitee as a result of the service, attendance or appearance by the Indemnitee as a witness (or in any other non-party capacity) in any Proceeding (including any part of a Proceeding such as appearance at a hearing, deposition or trial or any actions taken in response to any subpoena, order, discovery request or the like) if such service, attendance or appearance relates to or results from the Indemnitee's Corporate Status or by reason of any action alleged to have been taken or omitted in such capacity.

7. Indemnification for Expenses of Successful Party. Notwithstanding the other provisions of this Agreement, to the extent that the Indemnitee has been successful, on the merits or otherwise, in defense of any Proceeding, or in defense of any claim, issue or matter therein, [s/he] shall be indemnified against Expenses actually and reasonably incurred by [him/her] or it or on [him/her] or its behalf in connection therewith. Without limiting the foregoing, if any Proceeding or any claim, issue or matter therein is disposed of, on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to the Indemnitee, (ii) an adjudication that the Indemnitee was liable to the Corporation, (iii) a plea of guilty or nolo contendere by the Indemnitee, (iv) an adjudication that the Indemnitee did not act in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation, and (v) with respect to any criminal Proceeding, an adjudication that the Indemnitee had reasonable cause to believe [his/her] conduct was unlawful, the Indemnitee shall be considered for the purposes hereof to have been wholly successful with respect thereto.

8. Notifications and Defense of Claim. As a condition precedent to [his/her] or its right to be indemnified, the Indemnitee must notify the Corporation in writing as soon as practicable of any Proceeding for which indemnity will or could be sought. With respect to any Proceeding of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to the Indemnitee. After notice from the Corporation to the Indemnitee of its election to assume such defense, the Corporation shall not be liable to the Indemnitee for any Expenses subsequently incurred by the Indemnitee in connection with such Proceeding, other than as provided below in this Paragraph 8. The Indemnitee shall have the right to employ [him/her] or its own counsel in connection with such Proceeding, but the Expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of the Indemnitee unless (i) the employment of counsel by the Indemnitee has been authorized by the Corporation, (ii) counsel to the Indemnitee and to the Corporation shall have reasonably concluded that there may be a conflict of interest or position on any significant issue between the Corporation and the Indemnitee in the conduct of the defense of such Proceeding or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such Proceeding, in each of which cases the Expenses of counsel for the Indemnitee shall be at the expense of the Corporation, except as otherwise expressly provided by this Agreement. The Corporation shall not be entitled, without the prior written consent of the Indemnitee, to assume the defense of any Proceeding brought by or in the right of the Corporation or as to which counsel for the Indemnitee shall have reasonably made the conclusion provided for in clause (ii) above. The Corporation shall not be required to indemnify the Indemnitee under this Agreement for any amounts paid in settlement of any Proceeding affected without its written consent. The Corporation shall not settle any Proceeding in any manner that would impose any penalty or limitation on the Indemnitee without the Indemnitee's written consent. Neither the Corporation nor the Indemnitee will unreasonably withhold or delay its consent to any proposed settlement.

9. Advance of Expenses. Subject to the provisions of Paragraph 10 below, in the event that the Corporation does not assume the defense pursuant to Paragraph 10 of this Agreement of any Proceeding of which the Corporation receives notice under this Agreement, any Expenses incurred by or on behalf of the Indemnitee in connection with any such Proceeding shall be paid by the Corporation in advance of the final disposition of such Proceeding, provided, however, that the payment of such Expenses incurred by or on behalf of the Indemnitee in advance of the final disposition of such Proceeding shall be made only upon receipt of an undertaking by or on behalf of the Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined that the Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Agreement. Such undertaking shall be accepted without reference to the financial ability of the Indemnitee to make repayment.

10. Procedure for Indemnification. Any indemnification or advancement of Expenses pursuant to Paragraphs 3, 4, 7, or 9 of this Agreement shall be made promptly, and in any event within 60 days after receipt by the Corporation of the written request of the Indemnitee unless with respect to requests under Paragraphs 3, 4 or 9 the Corporation determines within such 60-day period that the Indemnitee did not meet the applicable standard of conduct set forth in Paragraph 3 or 4, as the case may be. Such determination shall be made in each instance by (a) a majority vote of the directors of the Corporation consisting of persons who are not at that time parties to the Proceeding in question ("Disinterested Directors"), (b) a committee of two or more Disinterested Directors designated by a majority vote of the Disinterested Directors, (c) if there are no Disinterested Directors or if appointed by a majority vote of the Disinterested Directors, independent legal counsel (who may be regular legal counsel to the Corporation) or (d) by a majority vote of the stockholders of the Corporation. The right to indemnification or advances of Expenses as granted by this Agreement shall be enforceable by the Indemnitee in any court of competent jurisdiction if the Corporation denies such request, in whole or in part, or if no disposition thereof is made within the 60-day period referred to above. The Indemnitee's Expenses incurred in connection with successfully establishing [his/her] or its right to indemnification, in whole or in part, in any such Proceeding shall also be indemnified by the Corporation. Unless otherwise provided by law, the burden of proving that the Indemnitee is not entitled to indemnification or advancement of Expenses under this Agreement shall be on the Corporation.

11. Other Rights. The indemnification and advancement of Expenses provided by this Agreement shall not be deemed exclusive of any other rights to which the Indemnitee may be entitled under the Certificate of Incorporation of the Corporation, as amended and/or restated from time to time, the By-laws of the Corporation, as amended and/or restated from time to time, the General Corporation Law of the State of Delaware, any other law (common or statutory), and other agreement or any vote of stockholders or Disinterested Directors, or otherwise, both as to action in the Indemnitee's official capacity and as to action in any other capacity while holding office for the Corporation, and shall continue as to the Indemnitee even though the Indemnitee shall have ceased to be a director or officer, and shall inure to the benefit of the estate, heirs, executors and administrators of the Indemnitee.

12. Partial Indemnification. If the Indemnitee is entitled under any provision of this Agreement to indemnification by the Corporation for some or a portion of the Expenses, judgments, fines, penalties or amounts paid in settlement actually and reasonably incurred by [him/her] or it or on [him/her] or its behalf in connection with any Proceeding but not, however, for the total amount thereof, the Corporation shall nevertheless indemnify the Indemnitee for the portion of such Expenses, judgments, fines, penalties or amounts paid in settlement to which the Indemnitee is entitled.

13. Allowance for Compliance with SEC Requirements. The Indemnitee acknowledges that the Securities and Exchange Commission ("SEC") has expressed the opinion that indemnification of directors and officers for liabilities under the Securities Act of 1933 ("Act") is against public policy as expressed in the Act and is, therefore, unenforceable. The Indemnitee each hereby acknowledge and agree that it will not be a breach of this Agreement for the Corporation to undertake with the SEC in connection with the registration for sale of any shares or other securities of the Corporation from time to time that, in the event a claim for indemnification against such liabilities (other than the payment by the Corporation of expenses incurred or paid by a director or officer of the Corporation in the successful defense of any Proceeding) is asserted in connection with such shares or other securities being registered, the Corporation will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of competent jurisdiction on the question of whether or not such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue. The Indemnitee further agree that such submission to a court of competent jurisdiction shall not be a breach of this Agreement.

14. Reimbursement to Corporation by Indemnitee; Limitation on Amounts Paid by Corporation. To the extent the Indemnitee has been indemnified by the Corporation hereunder and later receives payments from any insurance carrier covering the same Expenses, judgments, fines, penalties, or amounts paid in settlement so indemnified by the Corporation hereunder, the Indemnitee shall immediately reimburse the Corporation hereunder for all such amounts received from the insurer.

Notwithstanding anything contained herein to the contrary, the Indemnitee shall not be entitled to recover amounts under this Agreement which, when added to the amount of any insurance proceeds or indemnification payments made to, or on behalf of, the Indemnitee under the Certificate of Incorporation or By-laws of the Corporation, in the aggregate exceed the expenses, judgments, fines, penalties and amounts paid in settlement actually and reasonably incurred by the Indemnitee ("Excess Amounts"). To the extent the Corporation or any insurance carrier has paid Excess Amounts to the Indemnitee the Indemnitee shall be obligated to immediately reimburse the Corporation for such Excess Amounts.

15. Continuation of Rights and Obligations. All rights and obligations of the Corporation, the Indemnitee hereunder shall continue in full force and effect despite the subsequent amendment or modification of the Corporation's Certificate of Incorporation or By-laws, as such are in effect on the date hereof, and such rights and obligations shall not be affected by any such amendment or modification, any resolution of directors or stockholders of the Corporation, or by any other corporate action which conflicts with or purports to amend, modify, limit or eliminate any of the rights or obligations of the Corporation, the Indemnitee hereunder.

16. Assignment. This Agreement shall not be assigned by the Corporation, the Indemnitee without the prior written consent of the other parties hereto, except that the Corporation may freely assign its rights and obligations under this Agreement to any subsidiary for whom the Indemnitee is serving as a director and/or officer thereof; provided, however, that no permitted assignment shall release the assignor from its obligations hereunder. Subject to the foregoing, this Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, successors and assigns, including, without limitation, any successor to the Corporation by way of merger, consolidation and/or sale or disposition of all or substantially all of the shares of the Corporation.

17. Saving Clause. If this Agreement or any portion thereof shall be invalidated on any ground by any court of competent jurisdiction, the Corporation shall nevertheless indemnify the Indemnitee as to Expenses, judgments, fines, penalties and amounts paid in settlement with respect to any proceeding to the full extent permitted by any applicable portion of this Agreement that shall not have been invalidated or by any other applicable law.

18. Counterparts. This Agreement may be executed in fully or partially executed counterparts each of which shall be deemed an original binding the signer thereof against the other signing parties, but all counterparts together shall constitute one and the same instrument. Executed signature pages may be removed from counterpart agreements and attached to one or more fully executed copies of this Agreement.

19. Governing Law. This Agreement shall be governed by and construed and enforced in accordance with, the laws of the State of Delaware. The Indemnitee may elect to have the right to indemnification or reimbursement or advancement of Expenses interpreted on the basis of the applicable law in effect at the time of the occurrence of the event or events giving rise to the applicable Proceeding, to the extent permitted by law, or on the basis of the applicable law in effect at the time such indemnification or reimbursement or advancement of Expenses is sought. Such election shall be made, by a notice in writing to the Corporation, at the time indemnification or reimbursement or advancement of Expenses is sought; provided, however, that if no such notice is given, and if the General Corporation Law of Delaware is amended, or other Delaware law is enacted, to permit further indemnification of the directors and officers, then the Indemnitee shall be indemnified to the fullest extent permitted under the General Corporation Law, as so amended, or by such other Delaware law, as so enacted.

20. Notices. Any and all notices or elections permitted or required to be made under this Agreement shall be in writing, signed by the parties giving such notice or election and shall be delivered personally, or sent by registered or certified mail, return receipt requested, to the Company and the Indemnitee at their respective addresses shown below.

21. Entire Agreement. This Agreement constitutes the entire agreement of the parties hereto with respect to the subject matter contained herein and supersedes all prior agreements whether oral or written by any officer, employee or representative of any party hereto in respect of the subject matter contained herein; and any prior agreement of the parties hereto in respect of the subject matter contained herein is hereby terminated. For avoidance of doubt, the parties confirm that the foregoing does not apply to or limit the Indemnitee's rights under Delaware law or the Corporation's Certificate of Incorporation or By-Laws.

22. Modification and Waiver. This Agreement may be amended from time to time to reflect changes in Delaware law or for other reasons. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof nor shall any such waiver constitute a continuing waiver.

23. Enforcement. The Corporation expressly confirms and agrees that it has entered into this Agreement in order to induce the Indemnitee to continue to serve as an officer or director of the Corporation, and acknowledges that the Indemnitee is relying upon this Agreement in continuing in such capacity.

24. Pronouns and Nouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular forms of nouns and pronouns shall include the pronouns shall include the plural and vice-versa.

25. Captions. Captions of paragraphs have been added for convenience only and shall not be deemed to be a part of this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereby have caused this Agreement to be duly executed and signed effective as of the day and year first above written.

RIBBON COMMUNICATIONS INC.

By:__
Name:
Title:

____
[**Indemnitee**]

Exhibit 10.7

Ribbon Communications Inc.
Senior Management Cash Incentive Plan

Section 1. Purpose

The purpose of the Plan is to provide incentives for certain management employees of the Company to achieve a sustained, high level of financial and other measures of success for the Company.

Section 2. Definitions

Each of the following terms when used in the Plan shall have the meaning set forth below opposite such term:

2.1. "Administrator": The Committee and its delegates to the extent of such delegation.

2.2 "Award Opportunity": An opportunity awarded by the Administrator to a Participant to earn a benefit under the Plan for a specified Plan Year.

2.3 "Award Payment Amount": The amount, if any, determined by the Administrator to be payable by the Company to a Participant in respect of the Participant's Award Opportunity for a specified Plan Year.

2.4. "Base Salary": For any Participant for any Plan Year or portion thereof, the Participant's base contract salary from the Company for such period.

2.5. "Board": The Board of Directors of the Company.

2.6. "Code": The Internal Revenue Code of 1986, as amended and in effect from time to time.

2.7. "Committee": The Compensation Committee of the Board.

2.8. "Company": Ribbon Communications Inc. and its successors and assigns.

2.9. "Eligible Employee": A management employee of the Employer who is determined to be eligible pursuant to Section 3 below.

2.10. "Employer": The Company and its subsidiaries.

2.11. "Participant": For any Plan Year, an Eligible Employee who is selected by the Administrator to be given an Award Opportunity for the Plan Year.

2.12. "Performance Goals": The goals established in writing by the Administrator for a Plan Year for each Participant.
2.13. "Plan": The Ribbon Communications Inc. Senior Management Cash Incentive Plan set forth herein, as it may be amended and in effect from time to time.

2.14."Plan Year": The Company's fiscal year.

2.15. "Subsidiary": Any subsidiary of the Company.

Section 3. Eligibility; Participants

The Administrator shall determine which management employees of the Employer are eligible to participate in the Plan for any Plan Year or portion thereof. Except as the Administrator otherwise determines, however, all employees of the Employer with a management title of "Director" or higher, and only such employees, shall be eligible to participate. Participation in the Plan for any Plan Year shall not, in and of itself, entitle an individual to continued participation in the Plan for future Plan Years.

Section 4. Awards

4.1. Grant of Award Opportunities. For each Plan Year, the Administrator shall grant an Award Opportunity to each Participant for such Plan Year. Each Award Opportunity shall be communicated to the Participant in writing, in such form as the Administrator may determine, and shall give the Participant a conditional right to earn an Award Payment Amount if (i) the Performance Goals specified by the Administrator are determined by the Administrator to have been achieved at levels sufficient to justify a payment (as determined by the Administrator), and (ii) the Participant remains employed by the Employer through the date the Award Payment Amount is paid.

4.2. Establishment of Performance Goals. The Performance Goals with respect to any Award Opportunity for any Plan Year shall be determined by the Administrator, may vary among Participants, may include a range of performance objectives, may specify minimum levels of performance below which no Award Payment Amount will be made, and may contain such other terms and conditions as the Administrator may specify. Except as the Administrator otherwise determines in any case, each Award Opportunity shall include a measure based on Company performance and a measure based on individual performance, which shall be given such weights as the Administrator determines. Individual performance may be determined based on, among other things, personal contributions to the business. Any of the following criteria, or any combination thereof, may be

used to measure the performance of the Company or any Subsidiary, as a whole, or any business unit of the Company, or any Subsidiary, as the Committee deems appropriate:

(i) revenue (recognized or invoiced);

(ii) gross profit or margin;

(iii) operating profit or margin;

(iv) earnings or earnings growth before or after taxes, interest, depreciation, and/or amortization;

(v) net earnings or net income (before or after taxes);

(vi) earnings per share;

(vii) share price (including, but not limited to, growth measures and total stockholder return);

(viii) cost reduction or savings;

(ix) return measures (including, but not limited to, return on assets, capital, invested capital, equity, sales or revenue);

(x) cash flow (including, but not limited to, operating cash flow, free cash flow, cash flow return on equity and cash flow return on investment);

(xi) productivity ratios or other metrics (including but not limited to sales and sales growth);

(xii) performance against budget;

(xiii) market share;

(xiv) customer satisfaction;

(xv) working capital targets;

(xvi) economic value added (net operating profit after tax minus the sum of capital multiplied by the cost of capital);

(xvii) exit rate operating income margin (derived by annualizing the cost of sales and operating expense structure in place at fiscal year-end compared to the actual revenues generated in that fiscal year);

(xviii) financial ratio metrics;

(xix) improvement of financial ratings;

(xx) organizational/transformation metrics; and

(xxi) and such other financial, operation or stock-based criteria as the Administrator may determine.

The Performance Goals utilized may differ from Participant to Participant and from Award Opportunity to Award Opportunity. In determining any Performance Goals, the Administrator shall take into account but shall not be bound by management recommendations.

4.3. Adjustments. The Administrator may, without regard to the limitations of Section 7.2, adjust Performance Goals or the weighting of such Performance Goals to reflect acquisitions, dispositions, stock dividends or combinations or other events affecting the Company’s capital stock, changes in accounting principles or practices, one-time charges or non-recurring items, extraordinary items, the writedown of any asset, charges for restructuring and rationalization programs or any other factor or factors which in the Administrator’s determination require an adjustment to avoid distortion in the operation of, or to carry out the intent of, the Plan.

4.4. Determination of Award Payment Amounts. As soon as practical after the close of the relevant Plan Year, the Administrator shall determine the extent, if any, to which the Performance Goals applicable to each Award Opportunity have been achieved and the resulting Award Amounts, if any, to be paid. The Administrator may provide for a prorated Award Payment Amount to reflect participation for less than a full Plan Year or for such other reasons as the Administrator may specify. Except as the Board otherwise provides, the determination of the Administrator shall be final and binding on all parties.

4.5. Board Authority. The Board may, with or without prior notice, override or modify any determination of the Administrator, including, without limitation, with respect to the achievement of Performance Goals or the amount of any Award Payment Amount, but except as so overridden or modified the determinations of the Administrator shall be binding on all parties.

4.6. Delegation. The Committee delegates the role of Administrator to the Chief Executive Officer for all Eligible Employees other than the Chief Executive Officer and his/her direct reports.

Section 5. Payment of Awards

5.1. Requirement of Continued Employment. Except as otherwise provided under a separate employment agreement, a Participant shall be entitled to receive an Award Payment Amount, if any, with respect to an Award Opportunity only if the Participant remains continuously employed by the Employer through and including the date of payment of the Award Payment Amount.

5.2. Time of Payment. Each Award Payment Amount shall be made as soon as practicable after the close of the relevant Plan Year.

5.3. Form of Payment. All Award Payment Amounts shall be in cash. Notwithstanding the foregoing, the Board or the Committee may authorize the issuance of equity under the Company's 2007 Stock Incentive Plan, as amended, or any successor plan, in lieu of any Award Payment Amount under the Plan.

Section 6. Administration

Subject to the Board's authority under Section 4.6, the Administrator shall have complete discretion and authority to interpret the Plan and any Award Opportunity established under the Plan, to determine eligibility for participation, to determine Performance Goals and the extent, if any, to which any Performance Goal has been achieved, to establish forms and procedures for use under the Plan, and generally to all things necessary or appropriate to administer the Plan.

Section 7. Miscellaneous

7.1. Tax Withholding. The Administrator shall cause to be deducted from all Award Payment Amounts such taxes and other required withholdings as it determines to be appropriate.

7.2. Amendment or Termination. The Board or, to the extent it so determines, the Committee may, with prospective or retroactive effect, amend, suspend, or terminate the Plan or portion thereof, or amend any Award Opportunity, at any time; provided, that no amendment, suspension, or termination of the Plan and no amendment of any Award Opportunity shall materially and adversely affect the rights of any Participant under any Award Opportunity that has already been granted without the consent of the affected Participant.

7.3. Other Payments or Awards. Nothing contained in the Plan will be deemed in any way to limit, restrict or require the Employer from making any award or payment to any person under any other plan, arrangement or understanding, whether now existing or hereafter in effect.

7.4. Unfunded Plan. Nothing in this Plan shall be construed to require the Company, the Administrator or any other person to establish a trust or otherwise to set aside assets to meet the Employer's obligations hereunder. The rights, if any, of a Participant hereunder shall be no greater than those of an unsecured general creditor of the Employer.

7.5. No liability. No member of the Board, the Committee, or any director, officer or employee of the Employer will be liable, responsible or accountable in damages or otherwise for any determination made or other action taken or any failure to act by such person in connection with the administration of the Plan, so long as such person is not determined by a final adjudication to be guilty of willful misconduct with respect to such determination, action or failure to act.

7.6. No Right of Employment. Neither the Plan nor the grant of any Award Opportunity under the Plan shall be construed as creating any contract of employment or conferring upon any employee or Participant any right to continue in the employ or other service of the Employer, or as limiting in any way the right of the Employer to change such person's compensation or other benefits or to terminate the employment or other service of such person with or without cause.

7.7 Section Headings. The section headings contained herein are for convenience only, and in the event of any conflict, the text of the Plan, rather than the section headings, will control.

7.8. Exemption from Section 409A. Awards under the Plan are intended to be exempt from the rules of Section 409A of the Code as short-term deferrals and will be construed accordingly.

7.9. Severability. If any provision will be held by a court of competent jurisdiction to be invalid and unenforceable, the remaining provisions of the Plan will continue in effect.

7.10. Governing Law. The Plan shall be construed and governed in accordance with the laws of Massachusetts.

7.11. Erroneously Awarded Compensation. All Awards (and any payments made thereunder) shall be subject to any recoupment or clawback policy established from time to time by the Company to comply with the Dodd-Frank Wall Street Reform and Consumer Protection Act or otherwise.

7.12. Effective Date. The Plan will be effective as of October 27, 2017.

GENBAND HOLDINGS COMPANY

Restricted Share Unit Award Grant Notice

GENBAND Holdings Company, a Cayman Islands exempted company (the "Company"), hereby grants to the individual set forth below (the "Participant"), an award of Restricted Share Units ("RSUs"). Each Restricted Share Unit represents the right to receive one (1) Class C Share of the Company (a "Class C Share"). This award of RSUs is subject to all of the terms and conditions set forth in this Grant Notice and in the Restricted Share Unit Award Agreement attached hereto as Appendix A (the Grant Notice and the Restricted Share Unit Agreement together, the "Agreement"), which is incorporated herein by reference. Reference is made to that certain Agreement and Plan of Merger, dated as of May 23, 2017 (the "Merger Agreement"), by and among the Company, Sonus Networks, Inc., Solstice Sapphire Investments, Inc. ("Solstice"), Solstice Sapphire, Inc., Green Sapphire Investments LLC, Green Sapphire LLC, GENBAND Inc., and GENBAND II, Inc.

Participant:	
Grant Date:	(the "Grant Date")
Total Number of RSUs:	Class C Share Amount (as defined below)
Solstice Share Amount	shares of Solstice (the "Solstice Share Amount")
Vesting:	Each of the RSUs is vested and nonforfeitable on the Grant Date.

By his or her signature and the Company's signature below, the Participant agrees to be bound by the terms and conditions of this Agreement. The Participant has reviewed this Agreement in its entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement if he or she so chooses, and fully understands all provisions of this Agreement. This Grant Notice may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

GENBAND HOLDINGS COMPANY HOLDER:		**PARTICIPANT:**	
By:	______	By:	______
Print Name:	______	Print Name:	______
Title:	______		
Address:	______	Address:	______
	______		______

APPENDIX A
TO RESTRICTED SHARE UNIT AWARD GRANT NOTICE

GENBAND HOLDINGS COMPANY
RESTRICTED SHARE UNIT AWARD AGREEMENT

1. Grant. Pursuant to this Agreement, in consideration of the Participant's past and/or continued status as a service provider and for other good and valuable consideration, the Company hereby grants to the Participant an award of a number of RSUs equal to the Class C Share Amount (as defined below) as of the Grant Date, upon the terms and conditions set forth in this Agreement. Notwithstanding anything in this Agreement or any other agreement to the contrary, in the event that the Mergers are not consummated prior to December 31, 2017 or the Merger Agreement is terminated at any time, this Agreement shall be *void ab initio*.

2. RSUs. Each RSU represents the right to receive payment, in accordance with Section 4 below, of one (1) Class C Share.

3. Vesting. The RSUs shall be vested and nonforfeitable on the Grant Date.

4. Payment of RSUs.

(a) The Class C Shares subject to the RSUs shall be issued to the Participant (or, in the event of the Participant's death, to his or her estate) immediately prior to the Effective Time (as defined in the Merger Agreement). Subject to Sections 4(b) and 5, the total number of Class C shares issued to the Participant in respect of the RSUs shall be equal to the number necessary so that, immediately following the conversion of Class C Shares pursuant to the Mergers (as defined in the Merger Agreement), the Participant will hold a number of shares of Solstice in respect of such Class C Shares equal to the Solstice Share Amount (such number of Class C Shares, the "Class C Share Amount" and such shares of Solstice, the "Solstice Shares"). For the avoidance of doubt, (i) the foregoing calculation shall be conducted assuming all recipients of restricted stock units granted on the Grant Date pay applicable Withholding Taxes (as defined below) in cash or check and not by reduction in any Class C Shares issued thereunder, and (ii) the actual number of Solstice Shares the Participant receives may be reduced in accordance with Sections 4(b) and 5.

(b) The Class C Shares issued hereunder shall be converted into Solstice Shares in accordance with the terms of the Merger Agreement based on the outstanding number of shares of common stock of Sonus Networks, Inc. immediately before the Mergers; provided that, notwithstanding anything to the contrary in that certain Amended and Restated Memorandum and Articles of Association of GENBAND Holdings Company, dated as of July 30, 2013, as amended from time to time (the "Charter"), the Merger Agreement, this Agreement or otherwise, unless otherwise determined by the Company, (i) the Participant shall not be entitled to receive any portion of the Promissory Note (as defined in the Merger Agreement) upon the consummation of the Mergers, (ii) the sole proceeds the Participant shall receive in the Mergers in respect of the Class C Shares issued hereunder will be the Solstice Shares and the number of the Solstice Shares shall not exceed the Solstice Share Amount (regardless of the treatment of Withholding Taxes with respect to the Participant or any other person receiving restricted share units or other actions or circumstances occurring prior to the Closing), and (iii) any portion of the Promissory Note that the Participant would receive under the Merger Agreement, but for this Section 4(b), shall be distributed pro rata to the other holders of Class C Shares in accordance with the terms of the Merger Agreement.

5. Withholding; Settlement. The Company shall have the authority and the right to deduct or withhold, or to require the Participant to remit to the Company, in such form of consideration as the Company may deem acceptable, an amount sufficient to satisfy all applicable federal, state, local and other income- and employment-related taxes (including the Participant's employment tax obligations, if any) and social security contributions wherever in the world arising (collectively, "Withholding Taxes") that are required by law to be withheld with respect to any taxable event arising in connection with the RSUs and/or settlement thereof. The Participant may elect to satisfy any such Withholding Taxes by payment in cash or check to the Company on or prior to the Effective Time. To the extent the Participant does not so timely elect and pay Withholding Taxes, any such Withholding Taxes shall, unless otherwise determined by the Company, be satisfied by reducing the number of Class C Shares issued to the Participant hereunder by a number of Class C Shares with a fair market value (as determined by the Company in its discretion) equal to the aggregate amount of any such Withholding Taxes based on the applicable statutory withholding rates in the Participant's applicable jurisdiction for federal, state, local and foreign income tax and payroll tax purposes that are applicable to such taxable income (not to exceed the maximum statutory withholding rates). The Company shall not be obligated to deliver any new certificate representing the Class C Shares to the Participant or the Participant's legal representative or enter such Class C Shares in book entry form unless and until the Participant or the Participant's legal representative shall have paid or otherwise satisfied in full the amount of all Withholding Taxes applicable to the taxable income of the Participant arising in connection with the RSUs and/or settlement thereof.

6. Rights as Shareholder. Neither the Participant nor any person claiming under or through the Participant will have any of the rights or privileges of a shareholder of the Company in respect of any Class C Shares that may become deliverable hereunder unless and until such Class C Shares have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered in certificate or book entry form to the Participant or any person claiming under or through the Participant.

7. Mergers; Further Assurances. The Participant acknowledges and agrees that (a) the Class C Shares granted hereunder will be subject to terms and conditions of the Merger Agreement, (b) he or she hereby votes for, consents to, and agrees to raise no objections to, the Mergers, (c) he or she shall be deemed to have granted Heritage PE (OEP) III, L.P. a proxy to vote the Participant's Class C Shares in favor of the Mergers, if necessary, (d) he or she hereby waives any dissenter's rights, appraisal rights or similar rights in connection with the Mergers, and (e) he or she shall take all actions reasonably requested by the Company in connection with or otherwise in furtherance of the consummation of the Mergers.

8. Transferability. The RSUs, and the rights and privileges conferred thereby, including without limitation the Class C Shares issuable in respect of the RSUs, shall not be transferred, assigned, pledged, hypothecated or otherwise encumbered in any way (whether by operation of law or otherwise) and shall not be subject to sale under execution, attachment or any similar process, unless and until the Class C Shares have been issued and all restrictions applicable to such Class C Shares have lapsed, and any attempt to transfer, assign, pledge, hypothecate or otherwise encumber or dispose of the RSUs or any right or privilege conferred thereby, and any attempted sale under any execution, attachment or similar process, shall immediately become null and void; provided, however, that this Section 8 shall not prevent transfers by will or the applicable laws of descent and distribution and this Section 8 shall not apply following the consummation of the Mergers.

9. Securities Law; Additional Conditions to Issuance of Shares. This Agreement shall be interpreted in a manner to comply with all applicable securities laws and, to the extent permitted by applicable law, this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations. If the Company determines, in its discretion, that the listing, registration or qualification of the Class C Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority, is necessary or desirable as a condition to the issuance of Class C Shares to the Participant (or his or her estate, as applicable), such issuance will not occur unless and until such listing, registration, qualification, consent or approval has been effected or obtained free of any conditions not acceptable to the Company.

10. Tax Consultation; Section 409A. The Participant understands that the Participant may suffer adverse tax consequences in connection with the RSUs granted pursuant to this Agreement and the Class C Shares granted thereunder. The Participant represents that the Participant has been provided the opportunity to consult with any tax advisor(s) that the Participant deems advisable in connection with the RSUs and the Class C Shares granted hereunder and that the Participant is not relying on the Company or any of its affiliates, agents or representatives for tax advice. The parties hereto acknowledge and agree that, to the extent applicable, this Agreement shall be interpreted in accordance with, and incorporate the terms and conditions required by, Section 409A of the Internal Revenue Code of 1986, as amended ("Section 409A"). No provision of this Agreement shall be interpreted or construed to transfer any liability for failure to comply with the requirements of Section 409A from the Participant or any other individual to the Company or any of its affiliates, employees or agents.

11. Choice of Law; Forum. This Agreement and all claims and controversies hereunder shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to the choice of law provisions thereof or of any other jurisdiction. The parties hereto hereby agree and consent to be subject to the jurisdiction of any federal court of the District of Delaware or the Delaware Court of Chancery over any action, suit or proceeding (a "Legal Action") arising out of or in connection with this Agreement. The parties hereto irrevocably waive the defense of an inconvenient forum to the maintenance of any such Legal Action. This provision may be filed with any court as written evidence of the knowing and voluntary irrevocable agreement between the parties to waive any objections to venue or to convenience of forum.

12. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

13. Class C Shares Subject to the Charter. By entering into this Agreement, the Participant agrees and acknowledges that (a) the Participant has received and read a copy of the Charter and (b) any Class C Shares received hereunder are subject to the Charter, the terms and provisions of which are hereby incorporated herein by reference. In the event of a conflict between any term or provision contained herein and a term or provision of the Charter, the applicable terms and provisions of the Charter will govern and prevail. The grant of the RSUs and any Class C Shares pursuant to this Agreement shall not restrict in any way the adoption of any amendment to the Charter in accordance with the terms of such agreement.

14. No Right to Continued Service. This Agreement shall not be construed as giving the Participant the right to be retained in the employ of, or in any other continuing relationship with, the Company or any of its Affiliates.

15. Interpretation; Amendment. The Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Company upon any questions arising under the Agreement. This Agreement may be amended in any respect to the extent determined necessary or desirable by the Company in its sole discretion. Notwithstanding the foregoing, no such amendment shall materially and adversely impair the rights of the Participant hereunder without the Participant's prior consent.

16. Entire Agreement; Assignment. This Agreement, together with the Charter, constitute the entire agreement and understanding of the parties hereto with respect to the subject matter contained herein and therein and supersedes all prior communications, representations and negotiations in respect thereto. The Company may assign any of its rights and obligations under this Agreement to single or multiple assignees. Subject to the limitations on the transferability of the RSUs contained herein, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

Exhibit 10.29

RETENTION BONUS AGREEMENT

GENBAND Management Services Corp. ("GENBAND" or the "Company") and (the "Executive") are entering into this Retention Bonus Agreement (this "Agreement") effective as of the day of .

A. Purpose.

The purpose of this Agreement is to provide the Executive with an incentive to remain employed with GENBAND or another GENBAND Entity through the close of a Transaction and for at least six months following the close of a Transaction.

For purposes of this Agreement, "Transaction" means the consummation of any transaction or series of related transactions involving one or more GENBAND Entities and/or their Affiliates either (1) pursuant to which any Person or group (within the meaning of the Securities Exchange Act of 1934, as amended) other than OEP and/or JPMC Heritage Parent LLC and its affiliates, acquires, directly or indirectly (a) more than 50% of the voting stock or other equity interests of GENBAND Holdings Company entitled to vote (whether such transaction is effected by merger, consolidation, recapitalization, sale or transfer of GENBAND Holdings Company's equity or otherwise), or (b) all or substantially all of the assets of GENBAND Holdings Company and its subsidiaries, the occurrence of which shall be determined by the Board; or (2) resulting in any merger, sale or similar transaction with either Sonus Networks, Inc. or or their respective affiliates, or a substantially similar transaction the occurrence of which shall be determined by the Board.

B. Defined Terms

Capitalized terms that are used herein and not otherwise defined in this Agreement shall have the respective meanings ascribed to such terms in Exhibit A attached hereto.

C. Retention Bonus

1. Subject to the conditions contained herein, the Executive shall be eligible to receive a one-time retention bonus (the "Retention Bonus" or the "Bonus") in the amount of USD $, such Bonus being payable in two equal installments as follows:

   a. First Installment: 50% of the Retention Bonus shall be payable to the Executive in the first regularly scheduled payroll cycle immediately following the close of a Transaction (the "Transaction Closing Date"). The payment of the first installment of the Bonus is contingent on the Executive being employed by GENBAND or any other GENBAND Entity between the date of this Agreement and the Transaction Closing Date, without any break in service; provided that if the Executive resigns for Good Reason or is terminated by GENBAND or another GENBAND Entity without Cause before the Transaction Closing Date, s/he will be entitled to payment of the first installment of the Bonus ; and

   b. Second Installment: 50% the Retention Bonus shall be payable to the Executive *on the earlier* of:

      i. the six month anniversary of the Transaction Closing Date. Except as provided for in Section C.1.b.(ii), the payment of the second installment of the Bonus is contingent on the Executive being employed by GENBAND or another GENBAND Entity with no break in service between the date of this Agreement and the six month anniversary of the Transaction Closing Date; or

      ii. the effective date of the Executive's termination of employment with GENBAND or another GENBAND Entity, provided that his or her termination is without Cause or his or her resignation is for Good Reason and his or her termination is effective during the six month period following the Transaction Closing Date.

   The payment of the second installment of the Retention Bonus is contingent on the Executive not having resigned for Good Reason or been terminated by GENBAND or another GENBAND Entity for Cause during the six month period following the Transaction Closing Date. For the avoidance of doubt, if the Executive resigns his or her employment without Good Reason or is terminated by GENBAND or another GENBAND Entity for Cause between the Transaction Closing Date and the six month anniversary thereof, the Executive will not be eligible to receive any portion of the second installment of the Bonus, including a pro-rata portion thereof.

2. Notwithstanding anything in this Agreement to the contrary, GENBAND or another GENBAND Entity shall withhold from any payment to be made under this Agreement such amount or amounts as may be required for purposes of complying with the tax withholding provisions of the Code or any applicable federal, state, local or foreign laws.

D. General

1. This Retention Agreement is in addition to, and does not supersede or replace, the Severance Agreement between Executive and GENBAND Management Services Corp., GENBAND Holdings Company, GENBAND Inc., GENBAND US LLC, and GENBAND LLC dated .

2. This Agreement, any modification or amendment hereof, or the payment of any amount hereunder shall not be construed as giving Executive or other person or entity any legal or equitable right against any GENBAND Entity or any Affiliate or Successor. This Agreement is not a contract of employment and does not modify or affect the terms of Executive's employment agreement. Accordingly, neither this Agreement nor the payment of any amount hereunder shall be held or construed to give Employee a right to be retained in the employ of a GENBAND Entity or any Affiliate or Successor. For the avoidance of doubt, this Agreement does not prevent a GENBAND Entity from terminating Executive's employment at any time for any reason, in accordance with the terms of Employee's employment agreement and any applicable law.

3. Confidentiality. The Executive acknowledges that the existence and the terms of this Agreement are highly sensitive, confidential and proprietary information of GENBAND, and thus the Executive agrees to maintain both the existence and terms of this Agreement in the strictest of confidence, both within GENBAND, any GENBAND Entity, and externally. The only exception to such confidentiality obligation shall be the ability of the Executive to disclose the terms of this Agreement to his or her spouse, tax and legal advisors, who shall be advised of the highly sensitive and confidential nature of this Agreement and agree to maintain such confidentiality. In the event of any actual or anticipated breach of this Section D.3 by the Executive, GENBAND shall have all remedies available to it at law or in equity, including, but not limited to, the ability to pursue injunctive relief without the necessity of posting a bond or other security.

4. Amend/Terminate. GENBAND reserves the right to amend or terminate this Agreement, in whole or in part, at any time; provided, however, that except as agreed to in writing by the Executive, no amendment or termination of this Agreement shall adversely affect the right of the Executive to receive the Retention Bonus, in whole or in part, hereunder.

5. Section 409A. GENBAND and the Executive agree that, to the extent applicable, this Agreement shall be interpreted in accordance with Section 409A of the Code and any guidance issued thereunder (collectively, "Section 409A"), including without limitation any such regulations or other guidance that may be issued after the date hereof. Notwithstanding any provision of this Agreement to the contrary, in the event that GENBAND and the Executive determine that any compensation or benefits payable or provided hereunder may be in violation of Section 409A, the parties agree to cooperate in taking all reasonable measures to amend or modify this Agreement, including amendments with retroactive effect, that GENBAND and the Executive reasonably determine are necessary or appropriate to minimize or avoid any adverse tax treatment under Section 409A without materially impairing the Executive's economic rights; *provided, however*, that the GENBAND Entities shall in no event be obligated to provide the Executive with any payment in connection with (or otherwise indemnify the Executive for) any taxes imposed on the Executive pursuant to Section 409A.

6. Choice of Law; Forum. Except to the extent preempted by Federal law, this Agreement and all claims and controversies hereunder shall be governed by and construed in accordance with the laws of the State of Texas, without regard to the choice of law provisions thereof or of any other jurisdiction. The parties hereto hereby agree and consent to be subject to the jurisdiction of any state or federal court situated in Collin County, Texas over any action, suit or proceeding (a "Legal Action") arising out of or in connection with this Agreement. The parties hereto irrevocably waive the defense of an inconvenient forum to the maintenance of any such Legal Action. Each of the parties hereto further irrevocably consents to the service of process out of any of the aforementioned courts in any such Legal Action by the mailing of copies thereof by registered mail, postage prepaid, to the attention of the GENBAND Head of Legal, 3605 E. Plano Parkway, Plano, Texas 75074 USA. Nothing in this Section D.6 shall affect the right of any party hereto to serve legal process in any other manner permitted by law. This Agreement may be filed with any court as written evidence of the knowing and voluntary irrevocable agreement between the parties to waive any objections to venue or to convenience of forum.

7. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE MATTERS HEREIN CONTEMPLATED (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

8. Withholding Rights. Notwithstanding anything to the contrary in this Agreement, GENBAND shall have the absolute right to withhold payment of the Bonus (including any installment thereof) if and to the extent that the Executive is and remains in material breach of a material contractual obligation to any GENBAND Entity. Without limiting the generality of the foregoing, to the extent the Executive should be in material breach of any confidentiality, nondisparagement, noncompetition or nonsolicitation covenant of which any GENBAND entity is a beneficiary, the Executive shall be deemed to be in material breach of a "material contractual obligation" for purposes of this Section D.8.

9. Successor to GENBAND. This Agreement may be assigned or transferred without consent of the Executive to, and shall be binding upon and inure to the benefit of, any Successor to GENBAND and any such Successor shall be deemed substituted for all purposes for "GENBAND" under the terms of this Agreement.

[Remainder of page intentionally left blank -- signature page follows.]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

GENBAND

By:

Name:
Title:

EXECUTIVE

____

Signature of Executive

____

Printed Name of Executive

EXHIBIT A

DEFINED TERMS

(a) “Affiliate” means any corporation, partnership, limited liability company or partnership, association, trust or other organization which, directly or indirectly, controls, is controlled by, or is under common control with, a GENBAND Entity. For purposes of the preceding sentence, “control” (including, with correlative meanings, the terms “controlled by” and “under common control with”), as used with respect to any entity or organization, means the possession, directly or indirectly, of the power (i) to vote more than 50% of the securities having ordinary voting power for the election of directors of the controlled entity or organization, or (ii) to direct or cause the direction of management and policies of the controlled entity or organization, whether through the ownership voting securities or by contract or otherwise.

(b) “Board” means the Board of Directors (or other similar governing body) of GENBAND Holdings Company.

(c) “Cause” means the following: (a) the failure by the Executive to reasonably perform his or her primary duties as an employee or service provider of a GENBAND Entity (other than any such failure resulting from the Executive’s death or Disability), after written demand for such performance is communicated by a GENBAND Entity directly to the Executive identifying the specific manner in which the GENBAND Entity believes the Executive shall not have reasonably performed such duties and the Executive has failed to cure such alleged breach within thirty (30) days following such notice thereof; (b) the engaging by the Executive in misconduct that is materially injurious to a GENBAND Entity or a material breach by the Executive of the terms of his or her employment or services or of his or her duty not to engage in any material transaction that represents, directly or indirectly, self-dealing with a GENBAND Entity or any of its Affiliates which has not been approved by GENBAND; (c) the failure by the Executive to follow any lawful directive of GENBAND after receiving notice thereof and a ten (10) day period to cure such failure; (d) the admission to, conviction of, or entering of a plea of nolo contendere to any felony or any lesser crime involving moral turpitude, fraud, embezzlement or theft by the Executive or the repeated non-prescription abuse by the Executive of any controlled substance or the repeated abuse by the Executive of alcohol or any other non-controlled substance that, in any case described in this clause (d), GENBAND reasonably determines renders the Executive unable to serve in his or her capacity as an officer, employee or service provider of a GENBAND Entity or any of its Affiliates, as applicable; (e) any act by the Executive of fraud, embezzlement or theft in connection with the Executive’s duties or in the course of the Executive’s services with a GENBAND Entity; or (f) the material breach by the Executive of any provision of the Executive’s employment or similar agreement, if any, with a GENBAND Entity or any of its Affiliates, subject to any applicable notice provisions and cure periods. Notwithstanding the foregoing, if the Executive is a party to a written employment, consulting, severance or other similar agreement with a GENBAND Entity or any of its Affiliates which defines cause, then “Cause” shall have such meaning as such term is defined in the applicable written employment, consulting, severance or other similar agreement, and such definition of Cause shall control for all purposes, including, without limitation, in the event of any conflict between such agreement and this Agreement.

(d) “Code” means the Internal Revenue Code of 1986, as amended.

(e) “Disability” means the Executive’s inability to perform, with or without reasonable accommodation, the essential functions of his or her position with a GENBAND Entity for a total of three months during any six month period as a result of incapacity due to mental or physical illness which is expected to result in death or can be expected to last for a continuous period of not less than 12 months, as determined by GENBAND, in its sole discretion, or a physician selected by GENBAND.

(f) “Good Reason” means (a) a material diminution in the nature or scope of the authorities, powers, functions, responsibilities or duties attached to the position(s) held by the Executive (including without limitation, a change in offices, titles, scope of the business or other activities for which the Executive is responsible for Holdings or any other GENBAND Entity); or (b) a material reduction in the Executive’s base pay, except in cases where any such reduction is applicable to substantially all executive officers of GENBAND or another GENBAND Entity in substantially the same manner and to substantially the same degree; or (c) the termination, elimination or denial of the Executive’s rights to material employee benefits or any material reduction in the scope or value thereof (in the case of any such reduction, with scope and value considered in the aggregate), except in cases where any such termination, elimination, denial or reduction is applicable to substantially all executive officers of GENBAND or another GENBAND Entity in substantially the same manner and to substantially the same degree. A termination of the Executive’s employment for Good Reason shall not be deemed to occur unless the Executive (i) provides written notice to the Board of the existence of the occurrence of an event or condition described above not later than sixty (60) days after the initial existence of the event or condition, which notice shall provide the Board a period of at least thirty (30) days to remedy the event or condition before a Good Reason basis for termination shall exist hereunder and (ii) terminates his employment for Good Reason based on the event or condition described above prior to the first anniversary following the initial existence of such event or condition.

(g) “GENBAND Entity” means GENBAND Management Services Corp., a Delaware corporation, GENBAND Holdings Company, a Cayman Islands exempted company limited by shares, GENBAND US LLC, a Delaware limited liability company, GENBAND Canada ULC, a

Canadian limited liability company incorporated in the province of Nova Scotia, and the respective direct and indirect wholly-owned subsidiaries of the foregoing.

(h) "OEP" means (a) One Equity Partners III, L.P., OEP III Co-Investors L.P. and OEP II Partners Co-Invest L.P. (together, the "OEP Holders"), and (b) any corporation, partnership, limited liability company or other entity that is an Affiliate of any OEP Holder (including without limitation any applicable co-invest vehicle).

(i) "Person" means an individual, a corporation, a company, a voluntary association, a partnership, a joint venture, a limited liability company, a trust, an estate, an unincorporated organization, a governmental authority or other entity.

(j) "Successor" means any person, firm, corporation, or business entity which at any time, whether by merger, purchase, or otherwise, acquires all or substantially all of the assets, stock or business of a GENBAND Entity.

AMENDED AND RESTATED

EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "***Agreement***") shall be effective as of December 24, 2010, by and between GENBAND Management Services Corp., a Delaware corporation (the "***Company***"), GENBAND Holdings Company, a Cayman Islands exempted company limited by shares ("***Cayman Holdings***"), GENBAND US LLC, a Delaware limited liability company ("***GENBAND LLC***"), GENBAND Inc., a Delaware corporation ("***Holdco***", and together with the Company, Cayman Holdings and GENBAND LLC the "***GENBAND Parties***"), and Daryl Raiford (the "***Executive***").

WHEREAS, the Executive was employed by GENBAND LLC (formerly known as GENBAND Inc.), and, in connection with such employment, the Executive and GENBAND LLC entered into an Employment Agreement, dated March 12, 2010, (the "***LLC Employment Agreement***"*)* pursuant to which the terms and conditions of the Executive's employment with GENBAND LLC were memorialized;

WHEREAS, in connection with certain equity refinancings and reorganizations impacting Cayman Holdings and its affiliates, GENBAND LLC transferred the Executive's employment to the Company, effective November 1, 2010 (the "***Transfer***");

WHEREAS, in connection with, and as a condition of, such Transfer, the Company agreed to assume the LLC Employment Agreement, and all obligations of GENBAND LLC thereunder;

WHEREAS, the Executive accepted such transfer of employment to the Company and the Company's assumption of the LLC Employment Agreement;

WHEREAS, certain amendments were necessary to the LLC Employment Agreement to reflect the Transfer and assumption of the LLC Employment Agreement by the Company, which amendments required the mutual agreement of the GENBAND Parties and the Executive;

WHEREAS, in the interest of time, the GENBAND Parties desired to complete the Transfer prior to agreeing to the amendment to the LLC Employment Agreement and in connection therewith the Executive and the GENBAND Parties entered into that certain Assignment and Transfer Agreement, dated November 1, 2010, (the "***Transfer Agreement***"*)* pursuant to which the Transfer was effected and other temporary measures were taken to provide for the Transfer while the amendments to the LLC Employment Agreement was being negotiated between the Executive and the GENBAND Parties; and

WHEREAS, the Executive and the GENBAND Parties have agreed to the amendments to the LLC Employment Agreement to reflect the Transfer and desire to memorialize such amendments into this Agreement, which shall be an amendment and restatement of the LLC Employment Agreement and shall set forth the terms and conditions of the Executive's employment relationship with the GENBAND Parties following the Transfer;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein and for other good and valuable consideration, the parties agree as follows:

1. Certain Defined Terms. In addition to terms defined elsewhere herein, the following capitalized terms have the following meanings when used in this Agreement:

(a) "***Base Pay***" means the Executive's annual fixed or base compensation, as determined from time to time by Cayman Holdings whether acting through its Board of Directors (the "***Cayman Board***") or a committee thereof, regardless of whether all or any portion thereof may be deferred under any deferred compensation plan or program of the GENBAND Entities.

(b) "***Change in Control***" shall mean:

(i) The acquisition in a transaction, or series of related transactions, by any Person, other than OEP, of beneficial ownership of Outstanding Company Voting Securities (including any such acquisition of beneficial ownership deemed to have occurred pursuant to Rule 13d-5 under the Exchange Act) if, immediately after such transaction, or series of related transactions, such Person is the beneficial owner of 50% or more of the then Outstanding Company Voting Securities, unless such acquisition is made (A) directly from Cayman Holdings and/or Holdco in a transaction approved by a majority of the members of the incumbent Cayman Board, (B) by any employee benefit plan (or related trust) sponsored or maintained by Cayman Holdings or any subsidiary of Cayman Holdings, or (C) by a parent corporation resulting from a Business Combination if, following such Business Combination, the conditions specified in clauses (A), (B) and (C) of subsection (ii) of this Section 1(b) are satisfied;

(ii) A Business Combination unless, immediately following such Business Combination, (A) more than 50% of the then outstanding voting securities of the entity resulting from such Business Combination will be (or is) then beneficially owned, directly or indirectly, by all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Voting Securities immediately prior to such Business Combination in substantially the same proportions as their ownership immediately prior to such Business Combination of the Outstanding Company Voting Securities, (B) no Person (other than OEP or any employee benefit plan (or related trust) of Cayman Holdings or any subsidiary of Cayman Holdings) beneficially owns, directly or indirectly, 40% or more, respectively, of the then outstanding equity securities of the parent corporation resulting from such Business Combination or the combined voting power of the then outstanding voting securities of such corporation entitled to vote generally in the election of directors and (C) at least a majority of the members of the board of directors of the parent corporation resulting from such Business Combination were members of the incumbent Cayman Board at the time of the execution of the initial agreement providing for, or action of the Cayman Board authorizing, such Business Combination; or

(iii) (A) A complete liquidation or dissolution of a GENBAND Principal Entity or (B) a Major Asset Disposition unless, immediately following such Major Asset Disposition, (1) all or substantially all of the individuals and entities that were beneficial owners of the Outstanding Company Voting Securities immediately prior to such Major Asset Disposition beneficially own immediately after the transaction, directly or indirectly, more than 50% of the Outstanding Company Voting Securities or total value of all the then outstanding stock of the GENBAND Principal Entity (if it continues to exist) and of the Acquiring Entity in substantially the same proportions as their ownership immediately prior to such Major Asset Disposition; (2) no Person, other than OEP or any employee benefit plan (or related trust) of Cayman Holdings or any subsidiary of Cayman Holdings, beneficially owns, directly or indirectly, 40% or more of, respectively, the then outstanding shares of stock and the combined voting power of the then outstanding stock of the GENBAND Principal Entity (if it continues to exist) and of the Acquiring Entity and (3) at least a majority of the members of the Cayman Board (if it continues to exist) and of the Acquiring Entity were members of the incumbent Cayman Board at the time of the execution of the initial agreement providing for, or action of the Cayman Board authorizing, such Major Asset Disposition.

(iv) For the purposes of this Section 1(b):

(A) "*Acquiring Entity*" means the entity that acquires the largest portion of the assets sold or otherwise disposed of in a Major Asset Disposition (or the entity, if any, that owns a majority of the outstanding voting stock of such acquiring entity entitled to vote generally in the election of directors or members of a comparable governing body);

(B) the terms "*beneficial owner*", "*beneficially ownership*" and "*beneficially own*" are used as defined for purposes of Rule 13d-3 under the Exchange Act;

(C) the term "*Business Combination*" means a merger or consolidation involving any GENBAND Principal Entity or its equity;

(D) the term "*GENBAND Principal Entity*" means Holdco, Cayman Holdings or GENBAND LLC.

(E) the term "*group*" is used as it is defined for purposes of Section 13 of the Exchange Act and Rule 13d-5 thereunder;

(F) the term "*Major Asset Disposition*" means the sale or other disposition in one transaction or a series of related transactions during a 12-month period (other than to an entity, 50% or more of the total voting power of which is owned, directly or indirectly, by Cayman Holdings) of 50% or more of all of the assets of Cayman Holdings and its subsidiaries on a consolidated basis; and any specified percentage or portion of the assets of Cayman Holdings shall be based on the total gross fair market value, as determined by a majority of the members of the incumbent Cayman Board, without regard to any associated liabilities;

(G) the term "*Outstanding Company Voting Securities*" means outstanding voting securities of a GENBAND Principal Entity entitled to vote generally in the election of directors; and any specified percentage or portion of the Outstanding Company Voting Securities (or of other voting stock or voting securities) shall be determined based on the total combined voting power of such securities; *provided*, that for the purposes of determining such securities of Cayman Holdings, outstanding voting securities shall be deemed to refer to the fully diluted beneficial ownership of the outstanding voting securities of Cayman Holdings taking into account the outstanding equity ownership of Cayman Holdings and Holdco. By way of example, if Holdco holds 25% of the outstanding voting securities of Cayman Holdings, and if Person X holds 20% of the outstanding voting securities of Holdco on a fully diluted basis, then Person X shall be deemed to hold 5% of the outstanding Cayman Holdings voting securities;

(H) the term "*parent corporation resulting from a Business Combination*" means Cayman Holdings if its stock is not acquired or converted in the Business Combination and otherwise means the entity which as a result of such Business Combination owns Cayman Holdings or all or substantially all of Cayman Holdings' assets, either directly or through one or more subsidiaries; and

(I) the term "*Person*" means an individual, entity or group.

(c) "***Code***" means the Internal Revenue Code of 1986, as amended

(d) "***Disability***" means (i) the Executive's inability to regularly perform the essential functions of the Executive's position, with or without accommodation, due to physical or mental incapacity or illness, for a period of ninety (90) days in the aggregate in any consecutive twelve (12) month period, unless otherwise prohibited by federal, state, or local law or ordinance, (ii) for a reason specified in clause (i), the Executive is receiving income replacement benefits for a period of not less than three months under a GENBAND Entity accident or health plan, (iii) a determination by the Social Security Administration that the Executive is totally disabled or (iv) a determination that the Executive is eligible for disability benefits under a long-term disability plan of a GENBAND Entity, but only if such plan bases disability eligibility on criteria that comply with clauses (i), (ii) or (iii) above.

(e) "***Equity Award***" means a stock option, share option, share award, restricted stock award, restricted stock unit award, partnership unit award, profits interest award, deferred stock award, stock appreciation right or other equity-based compensation award related to the equity securities of any GENBAND Entity.

(f) "***For Cause***" means, termination of the employment of the Executive by the Company if the Executive is guilty of (i) engaging in acts in the course of his employment with any GENBAND Party that constitute theft, fraud or embezzlement, (ii) intentional or negligent misconduct which materially and adversely affects any GENBAND Entity, and which is not cured within thirty (30) days following receipt of written notice of such misconduct, (iii) unauthorized disclosure of proprietary information of a material and confidential nature relating to any GENBAND Entity, which unauthorized disclosure has a material adverse effect on any GENBAND Entity, (iv) material violation of any GENBAND Party policy, agreement or procedure which is not cured within thirty (30) days following receipt of written notice of same, (v)

excessive absenteeism, (vi) material neglect of duty, (vii) failure to perform the duties of the Executive's position to the satisfaction of the Cayman Board which is not cured within thirty (30) days following receipt of written notice of same, (viii) insubordination or failure to perform and carry out any directive of the Cayman Board, (ix) alcohol or substance abuse, (x) being convicted of a felony or pleading "no contest" to a felony charge, or (xi) failing to cooperate with the GENBAND Entities and/or their professional advisors in any investigation (whether internal or external) or any formal legal or investigative proceeding. The determination of whether a termination of the Executive is For Cause shall be made by the Cayman Board or a committee thereof and written notice specifying the reason(s) therefore shall be delivered to the Executive as promptly as practicable following such determination. Notwithstanding any provision hereof to the contrary for purposes of this Agreement, no act or failure to act on the part of the Executive (other than any act or failure to act which violates any law) shall be considered to be reason for termination For Cause if done, or omitted to be done, by the Executive in good faith and with the reasonable belief that the action or omission was in the best interests of the GENBAND Entities.

(g) "***GENBAND Entity***" means the Company, Holdco, Cayman Holdings, and, as the context may require, their direct and indirect wholly owned subsidiaries.

(h) "***OEP***" means (i) One Equity Partners III, L.P., OEP III Co-Investors L.P., OEP II Partners Co-Invest L.P. and OEP GB Holdings (together, the "***OEP Holders***"), and (ii) any funds that are managed by any entity who currently manages any OEP Holder.

(i) "***Section 409A***" means Section 409A of the Code, as amended, and the Department of Treasury Regulations and other interpretive guidance issued thereunder.

(j) "***Separation from Service Date***" means the date of termination of the Executive's employment (within the meaning of the Department of Treasury Regulation 1.409A-1(h)(1)(ii)).

(k) "***Specified Employee***" means a key employee of a GENBAND Entity, within the meaning of the Department of Treasury Regulations 1.409A-1(i) on the individual's Separation from Service Date. The determination of whether the Executive is a Specified Employee shall be made by the Cayman Board (or its designee) in accordance with the terms of Section 409A and applicable guidance thereunder (including, without limitation, the Department of Treasury Regulation 1.409A-1(i) and any successor provision thereto).

(l) "***Termination Date***" means the date of the termination of the Executive's employment.

2. Employment. Effective as of November 1, 2010, the Company hereby agrees to employ the Executive as an employee and an executive officer of the Company, and the Executive hereby agrees to remain in the employ of the Company as an employee and an executive officer, for the Employment Term (as defined in Section 3) on the terms and conditions set forth in this Agreement. The Executive shall serve as Executive Vice President and Chief Financial Officer of the Company, and shall also serve as Executive Vice President and Chief Financial Officer for each of the other GENBAND Parties. The Executive shall have such authority and responsibilities as are consistent with the offices from time to time held by him. During the term of this Agreement, the Executive shall serve each GENBAND Party faithfully and to the best of his ability, and devote his full time, attention and efforts to the business and affairs of the collective GENBAND Parties during normal business hours (and outside normal business hours as reasonably required).

3. Term. Subject to the provisions of Section 9 of this Agreement, Executive shall be employed by the Company and hold the executive officer positions with the Company and the other GENBAND Parties for a period (the "***Employment Term***") commencing on November 1, 2010 and ending on March 25, 2013 on the terms and subject to the conditions set forth in this Agreement; *provided*, *however*, that commencing with March 25, 2013 and on each March 25 thereafter (each, an "***Extension Date***"), the Employment Term shall be automatically extended for an additional one-year period, unless the Company or Executive provides the other party hereto 90 days prior written notice before the next Extension Date that the Employment Term shall not be so extended. For the avoidance of doubt, the Employment Term shall include any extensions of the term of Executive's employment pursuant to this Section 3.

4. Location. The Executive shall be based in, and shall perform his duties in the Dallas, Texas metropolitan area. The Executive shall, however, travel to other locations as may be reasonably required for the performance of his duties under this Agreement

5. Compensation and Benefits. During the Employment Term, the Company shall provide the following compensation and benefits to the Executive:

(a) Base Salary. The Company shall pay to the Executive a base salary at the rate of not less than $350,000.00 per annum ("***Base Salary***"). Such Base Salary shall be paid in equal installments on the Company's regular payroll dates during the Employment Term. The Executive's Base Salary shall be reviewed annually.

(b) Bonuses and Incentive Compensation.

(i) In connection with the Executive's execution of the LLC Employment Agreement, the Executive was paid a signing bonus equal to $150,000.00 (the "***Signing Bonus***"). If the Executive terminates his employment with the Company prior to March 25, 2011, then, within 30 days following the date of such termination of employment, Executive shall repay to the Company the Signing Bonus.

(ii) With respect to each full fiscal year during the Employment Term, Executive shall be eligible to earn an annual bonus award (an "***Annual Bonus***") based upon the achievement of an annual targets established by the Cayman Board. Executive's target-level Annual Bonus shall be equal to 75% of his Base Salary; *provided* that, because the Annual Bonus award is subject to the attainment of performance criteria, it may be paid, to the extent earned or not earned, at below target levels, or above target levels. The Annual Bonus, if any, shall be paid to Executive within two and one-half (2.5) months after the end of the calendar year following the calendar year in which the applicable fiscal year ends. Notwithstanding the foregoing, Executive's Annual Bonus for fiscal year 2010, if any, shall not be prorated during the first year of the Executive's employment.

(iii) The Executive shall be eligible to participate in bonus or performance based incentive compensation plans that are established by the GENBAND Parties for their similarly-situated senior executives.

(c) Benefits. The Executive shall be entitled to participate in all employee benefit plans or programs established by the GENBAND Entities or management from time to time that are generally provided to other similarly-situated senior executives of the Company or the other GENBAND Parties to the extent that he is eligible to participate. The Executive's participation in any such plan or program shall be subject to the provisions, rules and regulations applicable to such plan or program. Without limiting the generality of the foregoing, the Executive shall be provided with coverage for medical, disability, and term life insurance to the extent it is available at a reasonable cost from reputable providers. The Executive shall also be entitled to an annual reimbursement of up to $4,800 for financial planning services in accordance with the GENBAND Parties' applicable policies and procedures. Until such time as the Executive obtains permanent housing in the Dallas, Texas metropolitan area and his family relocates to the area, the Company shall (i) provide an allowance for living quarters in Plano, Texas as necessary for the Executive, for an amount not to exceed $ l,000.00 per month, and (ii) pay all reasonable commuting expenses to and from the Executive's principal residence in Austin, Texas and Plano, Texas. The Executive's temporary living quarters shall consist of a house, condominium, or similar residence. In the event that any of the perquisites provided by the Company to the Executive subject the Executive to any tax liability, the Company agrees to pay the Executive an amount of cash equal to such tax liability and an additional amount of cash equal to the tax liability that the Executive will be subject to as a result of the total cash payment described in this sentence.

6. Vacation. During the Employment Period, the Executive shall be entitled to at least twenty (20) days of paid time off annually, scheduled in a manner reasonably acceptable to the Company.

7. Expenses. The Company shall pay or reimburse the Executive for all reasonable and necessary out-of-pocket expenses incurred by him in the performance of his duties under this Agreement, subject to the presentment of appropriate vouchers in accordance with the Company's normal policies for expense verification.

8. GENBAND Holdings Equity. On November 3, 2010 (the "***Date of Grant***"), the Cayman Board granted to the Executive profits interests under the GENBAND Holdings Company Equity Incentive Plan (the "***Plan***") equivalent to (i) 0.5297% of the outstanding US Shares (as defined in the Plan) as of the Date of Grant (the "***Series 1 Percentage Interest***") in the form of US Class B Shares (as defined in the Plan), which number of US Class B Shares, as a percentage of the total outstanding US Shares, is equal to the Series 1 Percentage Interest and is 9,311,768 US Class B Shares, subject to adjustment as set forth in the Class B Share Agreement, effective as of November 3, 2010, (the "***Share Agreement***"), and (ii) 0.2203% of the outstanding Cayman Shares (as defined in the Plan) as of the Date of Grant (the "***Series 2 Percentage Interest***") in the form of Cayman Class B Shares (as defined in the Plan), which number of Cayman Class B Shares, as a percentage of the total outstanding Cayman Shares, is equal to the Series 2 Percentage Interest and is 3,872,103 Cayman Class B Shares, subject to adjustment as set forth in the Share Agreement. So long as the Executive continues in service with the GENBAND Entities, the US Class B Shares and Cayman Class B Shares (collectively, the "***Class B Shares***") will be automatically released from the Automatic Repurchase Right (as defined in the Share Agreement) with respect to twenty-five percent (25%) of the Class B Shares on March 25, 2011 and with respect to the balance in 36 equal successive monthly installments upon completion of each additional month of service thereafter. Except as otherwise provided in this Agreement, the terms of this grant are set forth in the Share Agreement and the Plan.

9. Termination.

(a) The Executive's employment may be terminated by the Company at any time and for any reason. If the Executive's employment is terminated by the Company other than For Cause, or as a result of the Executive's death or Disability, the Executive will be entitled to the compensation and benefits provided under Section 10 hereof.

(b) The Executive may terminate his employment with the Company at any time and for any reason. Upon the occurrence of one or more of the following events (hereinafter, a "***Good Reason***") (regardless of whether any other reason for such termination exists or has occurred, including without limitation, other employment), the Executive may terminate his employment with the Company and receive the compensation and benefits provided under Section 10 hereof:

(i) %4. A material diminution in the nature or scope of the authorities, powers, functions, responsibilities or duties attached to the position(s) held by the Executive (including without limitation, a change in offices, titles, scope of the business or other activities for which the Executive is responsible for the Company or any other GENBAND Party); or (B) a material reduction in the Executive's Base Pay, except in cases where any such reduction is applicable to substantially all executive officers of the Company in substantially the same manner and to substantially the same degree; or (C) the termination, elimination or denial of the Executive's rights to material employee benefits or any material reduction in the scope or value thereof (in the case of any such reduction, with scope and value considered in the aggregate), except in cases where any such termination, elimination, denial or reduction is applicable to substantially all executive officers of the Company in substantially the same manner and to substantially the same degree; or

(ii) Without limiting the generality or effect of the foregoing, any material breach of this Agreement by the Company or any other GENBAND Party or any successors thereto.

(c) A termination of the Executive's employment for Good Reason shall not be deemed to occur unless the Executive (i) provides written notice to the Company, or any successor, of the existence of the occurrence of an event or condition described in Section 9(b) not later than 60 days after the initial existence of the event or condition, which notice shall provide the Company, or any successor, a period of at least 30 days to remedy the event or condition before a Good Reason basis for termination shall exist hereunder and (ii) terminates his employment for Good Reason based on the event or condition described in Section 9(b) prior to the second anniversary following the initial existence of such event or condition.

(d) A termination by the Company pursuant to Section 9(a) or by the Executive for Good Reason pursuant to Section 9(b) will not affect any rights the Executive may have pursuant to any agreement, policy, plan, program or arrangement of any GENBAND Entity providing employee benefits, which rights shall be governed by the terms thereof.

10. Severance.

(a) Subject to Section 11, if the Company terminates the Executive's employment (other than For Cause or as a result of the Executive's death or Disability) pursuant to Section 9(a), or the Executive terminates his employment for Good Reason pursuant to Section 9(b):

(i) The Company shall (subject to Subsection 10(b) below):

(A) pay or cause to be paid to the Executive a lump-sum payment, within ten (10) calendar days of the Termination Date, in an amount equal to the sum of (1) any unpaid Base Pay through the Termination Date and (2) payment in respect of any accrued but unused paid time off or sick pay, and payment in respect of any business expenses incurred but not reimbursed prior to the Termination Date:

(B) pay or cause to be paid to the Executive an amount equal to the amount of the Annual Bonus that the Executive would have received for the fiscal year in which the Termination Date occurs based upon actual performance with respect to such fiscal year, prorated based on the number of days the Executive is employed by the Company during such fiscal year (such pro-rata Annual Bonus to be payable at such time as the Annual Bonus would otherwise have been paid pursuant to Section 5(b)(ii) absent Executive's termination of employment);

(C) pay or cause to be paid to the Executive (1) an amount equal to 100% of the Executive's Base Pay in effect on the Termination Date (or in effect immediately prior to any reduction contemplated by Section 9(b)(i)(B) hereof whichever is higher), payable in twelve (12) monthly installments on the Company's last payroll date of each of the first twelve calendar months commencing immediately following the 30th day following the Termination Date; (2) an amount equal to 100% of the Executive's target Annual Bonus (which is equal to 75% of the Executive's Base Pay), payable in twelve (12) monthly installments on the Company's last payroll date of each of the first twelve calendar months commencing immediately following the 30th day following the Termination Date; and (3) under all circumstances, any other compensation or benefits which may be owed or provided to or in respect of the Executive in accordance with the terms and provisions of any plans or programs of the GENBAND Entities (the payments under this Section 10(a) collectively, the "***Severance Payment***");

provided, however, that if the Executive is a Specified Employee, except to the extent that any amounts payable to the Executive as a Severance Payment are not treated as deferred compensation under Section 409A, such as, for example, certain payments pursuant to a separation pay plan, the Severance Payment shall not be provided to the Executive until the earlier of (x) the expiration of the six-month period measured from the Separation from Service Date and (y) the date of the Executive's death. All payments delayed pursuant to this paragraph shall be paid, with interest thereon calculated at the "prime rate," as quoted from time to time during the relevant period in the Southwest Edition of The Wall Street Journal on the first day of the seventh month following the Executive's Separation from Service Date (or the date of the Executive's death, if earlier), and all remaining payments due pursuant to this Agreement shall be paid as otherwise provided herein;

(ii) For twelve (12) months following the Termination Date (the "***Continuation Period***"), the Executive shall be entitled to reimbursement for, or payment by or on behalf of the GENBAND Entities or any successor entities of, the premium cost for such group health plan coverage for which the Executive is entitled under the Consolidated Omnibus Budget Reconciliation Act of 1985 as amended ("***COBRA***") (and which the Executive properly and timely elects to receive with respect to the Executive or any Qualified Beneficiary (as defined in COBRA) whose continued coverage under such GENBAND Entity group health plan is continued and whose coverage derives from being the spouse or a dependent of the Executive) for so long as the Executive or, as appropriate, such Qualified Beneficiary, remains eligible for continuation coverage as contemplated pursuant to COBRA and the relevant group health plan of the GENBAND Entities, but in no event longer than twelve (12) months. If and to the extent that any health or welfare benefit described in this Section 10(a)(ii) cannot be paid or provided under any applicable law or regulation, or under the terms of any policy, plan, program or arrangement of the GENBAND Entities, then the GENBAND Parties will take all action necessary to ensure that such benefit is provided through other means to the Executive and his Qualified Beneficiaries, as applicable, including the reimbursement to the Executive of the costs incurred by the Executive to purchase such benefits personally. The GENBAND Parties shall at the same time as any such action (including payment of any reimbursement) make any payment that may be necessary to ensure that the Executive's after-tax position with respect to any health and welfare benefits received pursuant to this Section 10(a)(ii) is not worse than the Executive's after-tax position in the event such benefits had been provided to the Executive while he was employed by the Company. Any such reimbursement or in-kind benefits provided under this Agreement shall be made or provided by the GENBAND Parties on or before the last day of the Executive's taxable year following the taxable year in which the expenses are incurred, and shall also satisfy all other requirements of the regulations under Section 409A with respect to any such reimbursements. The amount of any such expenses reimbursed or in-kind benefits provided in one year shall not affect the expenses or in-kind benefits eligible for reimbursement or payment in any subsequent year, and the Executive's right to such reimbursement or payment of any such expenses will not be subject to liquidation or exchange for any other benefit; and

(iii) If such termination of the Executive's employment occurs within twelve (12) months after a Change in Control, notwithstanding anything to the contrary in any applicable equity award agreement or equity plan, each Equity Award (including, but not limited to, any Equity Awards of Cayman Holdings, including the Class B Shares) granted to the Executive that is outstanding as of the Termination Date shall, without further action, become immediately fully vested, any automatic repurchase rights will fully lapse and all restrictions with respect thereto shall lapse to the extent such Equity Awards have not otherwise vested, automatic repurchase rights have not lapsed, or any other restrictions with respect thereto have not otherwise lapsed on the Termination Date.

(b) The GENBAND Parties' obligations pursuant to this Section 10 shall be conditioned upon (i) the Executive's termination of employment constituting a "separation from service" within the meaning of Section 1.409A-1(h) of the Department of Treasury Regulations and (ii) the Executive's execution and delivery of a release in substantially the form attached hereto as **Exhibit A**, on or prior to the 30th day following the Termination Date, which has not been revoked by the Executive prior to such 30th day. Further, for purposes of Section 409A, the Executive's right to receive installment payments pursuant to this Section 10 shall be treated as a right to receive a series of separate and distinct payments.

(c) Notwithstanding any other provision of this Agreement to the contrary, the parties' respective rights and obligations under this Section 10 and under Sections 11 through 28 will survive the expiration of this Agreement, any expiration of the Employment Term and the termination of the Executive's employment for any reason whatsoever.

11. Certain Additional Benefits and Payments by the GENBAND Parties.

(a) To the extent permitted under applicable law, the GENBAND Parties shall use their commercially reasonable efforts to obtain shareholder approval in a manner consistent with Section 280G of the Code upon a change in ownership or control (within the meaning of Section 280G) of any GENBAND Entity that results in the Executive receiving payments that would result in an excess parachute payment (within the meaning of Section 280G) as a result of such change in ownership or control, and the Executive shall reasonably cooperate with the GENBAND Parties in connection therewith.

(b) Immediately prior to the occurrence of a Change in Control (and subject to the consummation of such Change in Control), notwithstanding anything to the contrary in any applicable equity award agreement or equity plan, each Equity Award granted to the Executive that is outstanding as of the date of such Change in Control (including, but not limited to, any Equity Awards of Cayman Holdings, including the Class B Shares), shall, without further action, become immediately vested and/or any automatic repurchase rights will lapse, as to fifty percent (50%) of the equity or equity-based interests of each such Equity Award that have not otherwise vested and/or for which automatic repurchase rights have not lapsed as of such date, and all equity or equity-based interests underlying the Equity Awards that remain unvested and/or for which automatic repurchase rights have not lapsed shall continue to vest and/or lapse according to the terms of the applicable Equity Award.

12. Confidentiality.

(a) Confidential Information. The Executive acknowledges and agrees that during his employment with the Company, he will have access to and acquire Confidential Information regarding the business of the GENBAND Entities that is not generally available to the public. In order to assist the Executive with his duties, the GENBAND Parties promise to provide the Executive with Confidential Information regarding the business of the GENBAND Entities that is not generally available to the public and that, if disclosed, could put the Company at an unfair competitive disadvantage. For purposes of this Agreement, "***Confidential Information***" means any information or material (i) generated, collected, or used by any GENBAND Entity that relates to its actual or anticipated business or research and development, or (ii) suggested by or resulting from work assigned to and/or performed by the Executive for or on behalf of any GENBAND Entity, including without limitation information and materials relating to their financial performance, financial statements and reports, financial projections, accounting methods and information, business plans, strategic plans, plans regarding their future growth, development and projects, marketing plans, sales methods and strategies, products, pricing strategies, price lists, customer contacts, customer lists, customer information (including, without limitation, customer methods of operation, requirements, preferences and history of dealings with the GENBAND Entities), vendor lists, vendor information (including, without limitation, their history of dealings with the GENBAND Entities), employee files, employee compensation, skills, performance and qualifications of personnel of the GENBAND Entities, trade secrets, inventions (whether patented or unpatented), copyrights, service marks, know-how, algorithms, computer programs, computer code and related documentation, processes, methods, formulas, research, development, licenses, permits, and compilations of any of the foregoing information relating to the actual or anticipated business of the GENBAND Entities. The Executive agrees and acknowledges that substantial time, labor, skill and money have been and will be invested in developing the Confidential Information and that the protection and maintenance of this Confidential Information constitute legitimate interests to be protected by the GENBAND Entities and by the covenants set forth in this Section 12 and in Section 13.

(b) Non-Disclosure. As a material inducement to the GENBAND Parties to enter into this Agreement, and to pay to the Executive the compensation set forth herein, the Executive agrees that, both during the Executive's employment with the Company and at any time thereafter, the Executive shall preserve in strictest confidence and shall not disclose, copy or take away, either directly or indirectly, or use for the Executive's own benefit or the benefit of any third party, any Confidential Information of the GENBAND Entities, or any confidential or proprietary information or material received by the GENBAND Entities, except as required in the ordinary course of the Executive's employment for the benefit of the GENBAND Entities. All documents, records, files, computer programs, electronic data, and tangible items and materials containing or embodying any Confidential Information, including all copies thereof, whether prepared by the Executive or by others, are the property of the applicable GENBAND Entity and shall immediately be returned to such GENBAND Entity upon termination of the Executive's employment with the Company (voluntary or otherwise), or at any time upon a GENBAND Entity's request, and no copies thereof shall be kept by the Executive.

(c) Non-Disclosure of Confidential Information of Third Parties. The Executive shall not use or disclose to other employees of any GENBAND Entity, during or following his employment with the Company, confidential information belonging to any third parties unless written permission has been given by such third parties to the applicable GENBAND Entity, and been accepted by such GENBAND Entity, to allow the GENBAND Entity to use and/or disclose such information. The Executive shall indemnify any GENBAND Entity for any losses, costs or damages that result from any breach of the covenant contained in the preceding sentence.

(d) Executive Acknowledgement. The Executive acknowledges and agrees that (i) he has entered into that certain Confidentiality, Assignment and Non-Compete Agreement, dated as of May 20, 2010, by and between the GENBAND LLC and the Executive (the "***Confidentiality Agreement***"), and (ii) the Confidentiality Agreement shall remain in full force and effect on and following the date hereof in accordance with its terms.

13. Non-Competition and Non-Solicitation. The Executive agrees as follows:

(a) Non-Competition. For purposes of this Section 13, a "***Competitive Business***" shall mean any business engaged in the supply of IP gateways, switching products, session border controllers or FMC security solutions or similar products, and any other business that is substantially similar to any business that any GENBAND Entity is engaged in on, or has taken active steps to engage in by, the Termination Date. The Executive acknowledges that the services the Executive is to render are of a special and unusual character with a unique value to the GENBAND Parties, the loss of which cannot adequately be compensated by damages in action at law. In view of the unique value to the GENBAND Parties of the services of the Executive, in consideration of the GENBAND Parties agreement to provide the Executive with Confidential Information and other consideration specified herein, and as a material inducement for the GENBAND Parties to enter into this

Agreement, the Executive agrees that, during the term of the Executive's employment with a GENBAND Party, and for a period of twelve (12) months after the termination of such employment, for whatever reason, the Executive shall not, within North America, Europe or the area commonly called the "Asia-Pacific" region, directly or indirectly:

(i) provide personal services, as an officer, director, executive, manager, employee, consultant, advisor, independent contractor or otherwise, to a Competitive Business;

(ii) develop, acquire or maintain an ownership interest in a Competitive Business; *provided*, *however*, that ownership interest of less than five percent (5%) of the outstanding capital stock of a publicly traded Competitive Business shall not be a violation of this Section 13; or

(iii) offer, develop, or provide any products or services that would constitute a Competitive Business.

(b) Non-Solicitation. For purposes of this Section 13, the term "***Customer***" shall mean any person, firm, corporation, partnership, association or other entity to which any GENBAND Entity provided, or took active steps to attempt to provide, products or services during the twelve (12) months prior to the Termination Date with respect to which the Executive possesses information that is proprietary or confidential to any GENBAND Entity. During the term of the Executive's employment with a GENBAND Party and for a period of twelve (12) months following the termination, for whatever reason, of such employment, the Executive shall not, on behalf of any Competitive Business, directly or indirectly:

(i) take any action to, or do anything reasonably intended to, divert business from any GENBAND Entity or any of their subsidiaries, solicit any Customer or prospective Customer of any GENBAND Entity, or influence or attempt to influence any existing or prospective Customers of any GENBAND Entity to cease doing business with a GENBAND Entity; or

(ii) hire, employ, solicit for employment, or attempt to hire, employ, or solicit for employment any employee of any GENBAND Entity or any of its subsidiaries.

(c) Judicial Amendment. The GENBAND Parties and the Executive acknowledge the reasonableness of the agreements set forth in subsections (a) and (b) of this Section 13, including the reasonableness of the geographic area, duration of time and scope of activity restrained that are specified in this Section 13. The Executive further acknowledges that his skills are such that he can be gainfully employed in noncompetitive employment and that the agreement not to compete will in no way prevent him from earning a living. Notwithstanding the foregoing, if it is judicially determined that any of the limitations contained in subsections (a) or (b) of this Section 13 are unreasonable, illegal or offensive under applicable law(s) (statute, common law or otherwise) and may not be enforced as herein agreed, the Executive and the GENBAND Parties agree that the unreasonable, illegal, or offensive portions of subsections (a) and (b) of this Section 13 shall be and hereby are redrafted to conform with those applicable laws, while leaving the remaining portions of subsections (a) and (b) of this Section 13 intact. By agreeing to this contractual modification prospectively at this time, the Executive and the GENBAND Parties intend to make the agreements contained in subsections (a) and (b) of this Section 13, including but not limited to the covenant not to compete contained in subsection (a) of this Section 13, legal under the law(s) of all applicable jurisdictions so that the entire agreement not to compete and/or this entire Section 13 as prospectively modified shall remain in full force and effect and shall not be rendered void or illegal. Such modifications shall not affect any payments made to the Executive under this Agreement.

(d) Notice to Prospective or Subsequent Employers. The Executive shall notify any person or entity employing the Executive after the Termination Date, or evidencing an intention of employing the Executive after the Termination Date, of the existence and provisions of subsections (a) and (b) of this Section 13 of this Agreement. In addition, the Executive agrees that the GENBAND Parties may notify any person or entity employing the Executive or evidencing an intention of employing the Executive of the existence and provisions of this Agreement.

14. Representations of the Executive and the Company. The Executive represents that his execution of this Agreement, and performance of the Executive's obligations hereunder, will not conflict with, or result in a violation of or breach of, any other agreement to which the Executive is a party or any judgment, order or decree to which the Executive is subject. The Executive certifies that he has no outstanding agreement or obligation that is in conflict with any of the provisions of this Agreement, or that would preclude the Executive from complying with the provisions hereof, and further certifies that he will not enter into any such conflicting agreement while employed by the Company.

15. Remedies. The Executive acknowledges that his abilities and the services he will provide to the GENBAND Parties are unique and that his failure to perform his obligations under Sections 12 and 13 of this Agreement would cause the GENBAND Parties irreparable harm and injury. The Executive further acknowledges that damages at law will not be an adequate remedy for breach of the covenants contained in Sections 12 and 13, and that the only adequate remedy is one that would prevent him from breaching the terms of Sections 12 and 13. As a result, the Executive and the GENBAND Parties agree that the GENBAND Parties' remedies may include specific performance, a temporary restraining order, preliminary and permanent injunctive relief, or other equitable relief against any threatened or actual breach of Sections 12 or 13 by the Executive. The termination of the Executive for any reason shall not be deemed a waiver by the GENBAND Parties of any breach by the Executive of this Agreement or any other obligation owed to the GENBAND Parties, and notwithstanding such a termination, the Executive shall be liable for all damages attributable to such a breach. Nothing contained in this Section 15 shall prohibit the GENBAND Parties from seeking and obtaining any other remedy, including monetary damages, to which it may be entitled.

16. Non-Disparagement. The Executive agrees not to, directly or indirectly, either orally or in writing, disparage either party or any of their respective equity holders, affiliates, directors, managers, officers, employees, agents or representatives, or any of their respective financial conditions or operations, or any of their respective products, services or practices. The GENBAND Parties agree to instruct their officers and directors not to, directly or indirectly, either orally in writing, disparage the Executive.

17. No Mitigation Obligation. The GENBAND Parties hereby acknowledge that it will be difficult and may be impossible for the Executive to find reasonably comparable employment within a reasonable time period following the Termination Date. In addition, the GENBAND Parties acknowledge that the GENBAND Entities' severance pay plans and policies applicable in general to their respective salaried employees typically do not provide for mitigation, offset or reduction of any severance payments received thereunder. Accordingly, the payment of the severance compensation by or on behalf of the GENBAND Parties to the Executive in accordance with the terms of this Agreement is hereby

acknowledged by the GENBAND Parties to be reasonable, and the Executive will not be required to mitigate the amount of any payment provided for in this Agreement by seeking other employment or otherwise, nor will any profits, income, earnings or other benefits from any source whatsoever create any mitigation, offset, reduction or any other obligation on the part of the Executive hereunder or otherwise.

18. Employment Rights. Nothing expressed or implied in this Agreement will create any right or duty on the part of the GENBAND Parties or the Executive to have the Executive remain in the employment of any GENBAND Entity at any time, including, without limitation, prior to or following any Change in Control. Any event or occurrence described in Section 9(b)(i) or (ii) hereof following the commencement of a discussion with a third person that ultimately results in a Change in Control shall be deemed to have occurred after a Change in Control for the purposes of Section 10(a)(iii) of this Agreement.

19. Withholding of Taxes. The Company shall be entitled to withhold from any amounts payable under this Agreement all federal, state, city or other taxes that the Company is required to withhold pursuant to any law or government regulation or ruling.

20. Successors and Binding Agreement.

(a) The GENBAND Parties will require any successor (whether direct or indirect, by purchase, merger, consolidation, reorganization or otherwise) to all or substantially all of the business or assets of the respective GENBAND Parties, expressly to assume and agree to perform this Agreement in the same manner and to the same extent the GENBAND Parties would be required to perform if no such succession had taken place. This Agreement will be binding upon and inure to the benefit of the GENBAND Parties and any successor to the respective GENBAND Parties, including without limitation any persons acquiring directly or indirectly all or substantially all of the business or assets of a GENBAND Party whether by purchase, merger, consolidation, reorganization or otherwise (and such successor shall thereafter be deemed a *"GENBAND Party"* for the purposes of this Agreement), but will not otherwise be assignable, transferable or delegable by a GENBAND Party other than to a subsidiary or affiliate of the such GENBAND Party.

(b) This Agreement will inure to the benefit of and be enforceable by the Executive and the Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees and legatees.

(c) This Agreement is personal in nature and none of the parties hereto shall, without the consent of the other, assign, transfer or delegate this Agreement or any rights or obligations hereunder except as expressly provided in Sections 20(a) and 20(b). Without limiting the generality or effect of the foregoing, the Executive's right to receive payments hereunder will not be assignable, transferable or delegable, whether by pledge, creation of a security interest, or otherwise, other than by a transfer by the Executive's will or by the laws of descent and distribution and, in the event of any attempted assignment or transfer contrary to this Section 20(c), the GENBAND Entities shall have no liability to pay any amount so attempted to be assigned, transferred or delegated.

21. Notices. For all purposes of this Agreement (except as otherwise expressly provided in this Agreement with respect to notice periods), all communications, including without limitation, notices, consents, requests or approvals, required or permitted to be given hereunder will be in writing, and will be deemed to have been duly given when hand delivered or dispatched by electronic facsimile transmission (with receipt thereof orally confirmed), or ten business days after having been mailed by United States registered or certified mail, return receipt requested, postage prepaid, or five business days after having been sent by a nationally recognized overnight courier service such as Federal Express or UPS, addressed to the Company (for the GENBAND Parties) at 3605 East Plano Parkway, Plano, Texas 75074 (to the attention of the President of the Company) and to the Executive at the Company's address, with a copy to the Executive at his principal residence or to such other address as any party may have furnished to the other in writing and in accordance herewith, except that notices of changes of address shall be effective only upon receipt.

22. Governing Law. The validity, interpretation, construction and performance of this Agreement will be governed by and construed in accordance with the substantive laws of the State of Texas, without giving effect to the principles of conflict of laws of such State or any other jurisdiction.

23. Validity. If any provision of this Agreement or the application of any provision hereof to any person or circumstances is held invalid, unenforceable or otherwise illegal, the remainder of this Agreement and the application of such provision to any other person or circumstances will not be affected, and the provision so held to be invalid, unenforceable or otherwise illegal will be reformed to the extent (and only to the extent) necessary to make it enforceable, valid or legal.

24. Miscellaneous. No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing signed by the Executive and the GENBAND Parties. No waiver by either party hereto at any time of any breach by the other party hereto or compliance with any condition or provision of this Agreement to be performed by such other party will be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, expressed or implied with respect to the subject matter hereof have been made by either party which are not set forth expressly in this Agreement. References to Sections are to references to Sections of this Agreement. For the avoidance of doubt, the parties acknowledge and agree that the Company shall be the legal employer of the Executive and this Agreement shall be interpreted accordingly.

25. Arbitration. Any dispute, controversy or claim arising out of or in connection with or relating to this Agreement or any breach or alleged breach thereof shall be submitted to and settled by binding arbitration in Dallas, Texas, in accordance with the Commercial Arbitration Rules of the American Arbitration Association (or at any other place or under any other form of arbitration mutually acceptable to the parties so involved). Any dispute, controversy or claim submitted for resolution shall be submitted to one neutral arbitrator agreed to by the parties, who shall have the authority to render a decision in terms of findings of fact and conclusions of law. No arbitration shall be commenced after the date when institution of legal or equitable proceedings based upon such subject matter would be barred by the applicable statute of limitations. Any party may bring an action in any court of competent jurisdiction to compel arbitration under this Agreement, to enforce an arbitration award, and to vacate an arbitration award. However, in actions seeking to vacate an award, the standard of review to be applied to the arbitrator's findings of fact and conclusions of law will be the same as that applied by an appellate court reviewing a decision of a trial court sitting without a jury. The parties agree that in any arbitration commenced pursuant to this Agreement, the parties shall be entitled to such discovery (including depositions, requests for the production of documents and interrogatories) as is allowed by the arbitrator after the arbitrator hears arguments for and against limits which shall be imposed on discovery by each party in arbitration. The arbitrator shall have full power and authority to limit discovery. In the

event that either party fails to comply with its discovery obligations hereunder, the arbitrator shall have full power and authority to compel disclosure or impose sanctions to the full extent of Rule 37, Federal Rules of Civil Procedure. Unless the parties agree otherwise, the parties, the arbitrator, and the American Arbitration Association shall treat the arbitration proceedings, any related discovery, and the decision of the Arbitrator, as confidential, except in connection with judicial proceedings ancillary to the arbitration, such as a judicial challenge to, or enforcement of, an award, and unless otherwise required by law to protect a legal right of a party. To the extent possible, any specific issues of confidentiality should be raised with and resolved by the neutral arbitrator. The arbitrator(s) shall, in their award, allocate between the parties the costs of arbitration, which shall include reasonable attorneys' fees of the parties, in such proportions as the arbitrator deems just. The GENBAND Parties shall pay the arbitrator's fees and expenses.

26. Section 409A. The GENBAND Parties and the Executive acknowledge and agree that, to the extent applicable, this Agreement shall be interpreted in accordance with Section 409A, including without limitation any such regulations or other guidance that may be issued after the date hereof. Notwithstanding any provision of this Agreement to the contrary, in the event that the GENBAND Parties and the Executive determine that any compensation or benefits payable or provided hereunder may be subject to Section 409A, the GENBAND Parties and the Executive agree to cooperate in taking all reasonable measures to amend or modify this Agreement, including amendments with retroactive effect, that the GENBAND Parties and the Executive reasonably determine are necessary or appropriate to minimize or avoid any adverse tax treatment under Section 409A without materially impairing the Executive's economic rights; *provided*, *however*, that the GENBAND Entities shall in no event be obligated to provide the Executive with any payment in connection with (or otherwise indemnify the Executive for) any taxes imposed on the Executive pursuant to Section 409A.

27. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

28. Entire Agreement. This Agreement and the Confidentiality Agreement set forth the entire agreement of the parties concerning the subject matter hereof and supersede all prior agreements, arrangements and understandings with respect to such subject matter (including, without limitation, the LLC Employment Agreement and the Transfer Agreement).

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed and delivered as of the date first above written.

GENBAND MANAGEMENT SERVICES CORP.

/s/ Shauna Martin
Name: Shauna Martin
Title: EVP And General Counsel

GENBAND US LLC

/s/ Shauna Martin
Name: Shauna Martin
Title: EVP and General Counsel

GENBAND HOLDINGS COMPANY

/s/ Shauna Martin
Name: Shauna Martin
Title: EVP and General Counsel

GENBAND INC.

/s/ Shauna Martin
Name: Shauna Martin
Title: EVP and General Counsel

/s/ Daryl Raiford
Daryl Raiford

EXHIBIT A

Release

This RELEASE, executed as of ________________, 20_ (this "Release"), is made by the undersigned (the "Executive") in favor of GENBAND Management Services Corp., a Delaware corporation (the "Company"), GENBAND Inc., a Delaware corporation ("Holdco"), GENBAND US LLC, a Delaware limited liability company ("GENBAND LLC"), GENBAND Holdings Company, a Cayman Islands exempted company limited by shares ("Cayman Holdings" and together with Holdco, GENBAND LLC and the Company, the "GENBAND Parties"), and the other "Releasees" (as hereinafter defined). For purposes of this Release, "GENBAND Entities" shall mean the GENBAND Parties and their direct and indirect wholly owned subsidiaries.

WHEREAS, the Executive and the GENBAND Parties have entered into that certain Amended and Restated Employment Agreement, dated as of March 4, 2011 (the "Agreement"), pursuant to which, among other things, the Executive is entitled to certain severance, compensation and benefits, subject to the Executive's execution and delivery of this Release;

NOW, THEREFORE, in consideration of the terms and provisions contained herein and in the Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Executive hereby agrees as follows:

1. Release.

(a) The Executive agrees for himself, the Executive's spouse and child or children (if any), and the Executive's heirs, beneficiaries, devisees, executors, administrators, attorneys, personal representatives, successors and assigns, to hereby knowingly and voluntarily release and forever discharge the GENBAND Parties and their subsidiaries and affiliates (within the meaning of Rule 12b-2 promulgated pursuant to the Securities Exchange Act of 1934, as amended), together with all of their respective future, current and former officers, directors, principals, owners, equity holders, members, general or limited partners, trustees, consultants, agents, attorneys, representatives, employees and representatives of such persons, and each of their predecessors, successors and assigns, and employee benefit plans in which the Executive is or has been a participant by virtue of his employment with the GENBAND Parties (collectively, the "Releasees"), from any and all debts, demands, actions, causes of actions, accounts, covenants, contracts, agreements, claims, damages, omissions, promises, judgments, rights, equitable relief, penalties, fees, costs, charges, complaints, obligations, promises, controversies, suits, expenses, compensation, responsibility and any and all claims, liabilities and obligations whatsoever, of every name, nature, kind, character and description, known or unknown, asserted or unasserted, direct or indirect, absolute or contingent, suspected or unsuspected, both in law and equity, which the Executive has ever had, now has, or may hereafter claim to have against the Releasees by reason of any matter, cause or thing whatsoever arising out of the Executive's employment with the Company or the other GENBAND Parties (or any subsidiaries thereof), the termination of the Executive's employment with the Company or the other GENBAND Parties (or subsidiary thereof) or the Executive's status at any time as a holder of any securities of the GENBAND Parties (individually, a "Claim" and collectively, "Claims"). This Release shall apply to any Claim of any type, including, without limitation, any and all Claims of any type that the Executive may have arising under the common law, Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Americans With Disabilities Act, the Family and Medical Leave Act, the Employee Retirement Income Security Act, the Equal Pay Act of 1963, the Age Discrimination in Employment Act of 1967, the Older Workers' Benefit Protection Act, the Sarbanes-Oxley Act of 2002, the Texas Commission on Human Rights Act, or the Texas Pay Day Law, each as amended, and any other Federal, state or local statutes, regulations, ordinances or common law, or under any policy, agreement, contract, understanding or promise, written or oral, formal or informal, between any of the Releasees and the Executive; *provided*, *however*, that this Release shall not apply to or affect or impair (i) Claims for vested benefits pursuant to any GENBAND Entity employee benefit plan and equity plan in which the Executive was a participant before the Termination Date; (ii) any Claims for unemployment insurance benefits or workers' compensation benefits applicable to the period through the Termination Date; (iii) any Claims that may arise for indemnification of the Executive under any directors and officers or similar insurance, or under the GENBAND Entities' Bylaws, Certificate of Incorporation, Memorandum and Articles of Association, Limited Liability Company Agreement and/or other applicable governing documents; or (iv) any and all Claims to payments, rights and benefits arising under the Agreement (collectively with the Claims specified in clauses (i), (ii) and (iii), the "Excluded Claims").

(b) For the purpose of implementing a full and complete release, the Executive understands and agrees that this Release is intended to include all Claims (other than Excluded Claims), if any, which the Executive may have, including Claims (other than Excluded Claims) that the Executive does not know or suspect to exist in the Executive's favor against the GENBAND Parties or any of the Releasees and that this Release extinguishes those Claims.

(c) The Executive represents and warrants that he has not filed any complaints or charges with any court or administrative agency against the Company or any of the Releasees, which have not been dismissed, closed, withdrawn or otherwise terminated on or before the date of this Release. The Executive further represents and agrees that he has not assigned nor transferred or attempted to assign or transfer, nor will the Executive attempt to assign or transfer, to any person or entity not a party to this Release, any of the Claims the Executive is releasing in this Release. Furthermore, by signing this Release, the Executive (i) represents and agrees that he will not be entitled to any personal recovery in any action or proceeding that may be commenced on the Executive's behalf arising out of the matters released herein and (ii) covenants and agrees to refrain from directly or indirectly asserting any Claim, or commencing, instituting or causing to be commenced, any proceeding of any kind against any of the Releasees, based upon any Claim released or purported to be released hereby.

(d) The Executive (i) acknowledges that he fully comprehends and understands all the terms of this Release and their legal effects and (ii) expressly represents and warrants that (A) he is competent to effect the release made herein knowingly and voluntarily and without reliance on any statement or representation of the GENBAND Entities or their directors, members, officers, employees, accountants, advisors, attorneys, consultants or other agents and (B) he had the opportunity to consult with an attorney regarding this Release.

2. Entire Agreement. This Release constitutes the entire agreement and understanding between the Executive and the GENBAND Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements and understandings, whether written or oral, between the Executive and the GENBAND Parties relating to the subject matter hereof (which shall not be deemed to include the Agreement), and there are no representations, understandings or agreements relating to the subject matter hereof that are not fully expressed in this Release.

3. Amendments. This Release may not be modified, amended, supplemented or canceled, except by written instrument executed by the person(s), entity or entities against whose interest any of the foregoing shall operate.

4. Governing Law. This Release shall be governed by and construed in accordance with the laws of the State of Texas for contracts made and to be fully performed in such state, without giving effect to any choice of law rules that may require the application of the laws of another jurisdiction.

5. Defined Terms; Third Party Beneficiaries. Capitalized terms used and not otherwise defined in this Release shall have the respective meanings ascribed to such terms in the Agreement. Each Releasee is expressly intended to be a third party beneficiary of this Release and each may enforce the terms and provisions of this Release.

6. Executive Acknowledgments and Representations. The Executive hereby acknowledges and represents that:

(a) The Executive has been advised in writing to seek the advice of an attorney of his choice prior to signing this Release, has had an adequate opportunity to seek legal counsel of his own choosing and has done so or made a knowing decision not to do so. The GENBAND Parties and the Executive agree that the parties have relied upon the advice of their respective attorneys, who are attorneys of their own choice, or they have knowingly and willingly not sought the advice of such attorneys. The Executive hereby understands and acknowledges the significance and consequence of this Release and represents that the terms of this Release are fully understood and voluntarily accepted by the Executive.

(b) The Executive has read this Release and understands all of the terms of this Release, and enters into this Release freely and voluntarily.

(c) This Release is intended to include in its effect and does include, without limitation, all claims which the Executive does not know or suspect to exist in his favor at the time of execution of this Release, and that the terms agreed upon contemplate and extinguish any and all such claims.

(d) The Executive has been given at least twenty-one (21) days to consider and to accept or reject the terms of this Release. The Executive represents and acknowledges that he has considered this Release for twenty-one (21) days or waived his right to do so.

(e) The Executive shall have a period of seven (7) days following the execution of this Release within which to revoke this Release, and that this Release will not become effective or enforceable until this seven (7) day period has expired. A cancellation or revocation must be accomplished by hand-delivery of a written notification actually delivered to the Company at the address indicated in Section 21 of the Agreement before the expiration of the seven (7) day period. In the event that this Release is canceled or revoked, the GENBAND Parties shall have no obligation to furnish any of the payments and benefits described or provided for in the Agreement. In the event that the Executive receives any consideration pursuant to the Agreement before the GENBAND Parties had notice of the Executive's cancellation or revocation of this Release and/or an adequate opportunity to stop disbursement, the Executive agrees to promptly return such consideration to the GENBAND Parties.

[Remainder of page intentionally left blank - signature page follows.]

BY SIGNING BELOW, THE EXECUTIVE ACKNOWLEDGES THAT HE HAS READ THIS RELEASE, HAS HAD THE OPPORTUNITY TO CONSULT WITH AN ATTORNEY OF HIS CHOICE, UNDERSTANDS THIS RELEASE, AND IS VOLUNTARILY ENTERING INTO THIS RELEASE. READ THIS RELEASE CAREFULLY. IT CONTAINS A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS.

IN WITNESS WHEREOF, the Executive has executed this Release to be effective as of the date first above written.

Signature of Executive

Printed Name of Executive

AMENDMENT 1 TO THE AMENDED AND RESTATED EMPLOYMENT AGREEMENT

GENBAND Management Services Corp., a Delaware Corporation ("the "***Company***"), GENBAND Holdings Company, a Cayman Islands exempted company limited by shares ("***Cayman Holdings***"), GENBAND US LLC, a Delaware limited liability company ("***GENBAND LLC***"), GENBAND Inc., a Delaware Corporation ("***Holdco***", and together with the Company, Cayman Holdings and GENBAND LLC the "***GENBAND Parties***"), and Daryl Raiford (the "*Executive*") are entering into this Amendment 1 to the Amended Agreement and Restated Employment Agreement (this "Amendment") effective as of the 13th day of December, 2016. Capitalized terms that are used and not otherwise defined in this Amendment shall have the respective meanings ascribed to such terms in the Agreement (as defined below).

WHEREAS, effective December 24, 2010, the GENBAND Parties and the Executive entered into that certain Amended and Restated Employment Agreement (the "Agreement"); and

WHEREAS, the GENBAND Parties and the Executive desire to amend the Agreement on the terms and subject to the conditions set forth herein and pursuant to Section 24 of the Agreement.

NOW, THEREFORE, in consideration of the premises set forth above and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1.1. Amendment of Section 5(a). Section 5(a) of the Agreement is hereby amended by replacing the amount of "$350,000.00" with the amount of "$500,000.00."

1.2. Amendment of Section 10(a)(i)(C)(1). Section 10(a)(i)(C)(1) of the Agreement is hereby amended by adding the following proviso to the end of the last sentence of Section 10(a)(i)(c)(1):

> ";*provided, however,* that, if the Company terminates the Executive's employment within twelve (12) months following the occurrence of a Change in Control where any Person **other than OEP and/or JPMC Heritage Parent LLC and its affiliates** is the beneficial owner of 50% or more of: the then Outstanding Company Voting Securities; or, of the then outstanding voting securities of the entity resulting from a Business Combination, the Company shall pay or cause to be paid to the Executive an amount equal to 200% of the Executive's Base Pay in effect on the Termination Date (or in effect immediately prior to any reduction contemplated by Section 9(b)(i)(B) hereof whichever is higher) payable in twelve (12) monthly installments on the Company's last payroll date of each of the first twelve calendar months commencing immediately following the 30th day following the Termination Date, it being understood that in no event shall Executive be paid more than 200% of his Base Pay in effect on the Termination Date (or in effect immediately prior to any reduction contemplated by Section 9(b)(i)(B) hereof whichever is higher) under this Section 10(a)(i)(C)(1) if the Company terminates his employment;..."

1.3. Amendment of Section 10(a)(i)(C)(2). Section 10(a)(i)(C)(2) of the Agreement is hereby amended by adding the following proviso to the end of the last sentence of Section 10(a)(i)(C)(2):

> "; *provided, however,* that, if the Company terminates the Executive's employment within twelve (12) months following the occurrence of a Change in Control where any Person **other than OEP and/or JPMC Heritage Parent LLC and its affiliates** is the beneficial owner of 50% or more of: the then Outstanding Company Voting Securities; or, of the then outstanding voting securities of the entity resulting from a Business Combination, the Company shall pay or cause to be paid to the Executive an amount equal to 200% of the Executive's target Annual Bonus (which is equal to 75% of the Executive's Base Pay), payable in twelve (12) monthly installments on the Company's last payroll date of each of the first twelve calendar months commencing immediately following the Termination Date, it being understood that in no event shall Executive be paid more than 200% of his target Annual Bonus under this Section 10(a)(i)(C)(2) if the Company terminates his employment; ..."

1.4. Limited Effect. Except as expressly provided hereby, all of the terms and provisions of the Agreement shall remain in full force and effect including, without limitation, Section 10 (Severance). The amendments contained herein shall not be construed as a waiver or amendment of any other provision of the Agreement or for any purpose except as expressly set forth herein.

1.5. Governing Law. Except to the extent preempted by Federal law, this Amendment and all claims and controversies hereunder shall be governed by and construed in accordance with the internal laws of the State of Texas, without regard to the choice of law provisions thereof or of any other jurisdiction.

1.6. Counterparts. This Amendment may be executed in any number of counterparts, all of which shall constitute one and the same agreement, and any party hereto may execute this Amendment by signing and delivering one or more counterparts. Delivery of an executed counterpart of this Amendment electronically or by facsimile shall be effective as delivery of an original executed counterpart of this Amendment.

[Remainder of page intentionally left blank — signature page follows.]

IN WITNESS WHEREOF, the parties have executed this Amendment effective as of the date first set forth above.

GENBAND MANAGEMENT SERVICES CORP.

By: /s/ David Walsh
Name: David Walsh
Title: Chief Executive Officer

GENBAND HOLDINGS COMPANY

By: /s/ David Walsh
Name: David Walsh
Title: Chief Executive Officer

GENBAND US LLC

By: /s/ David Walsh
Name: David Walsh
Title: Chief Executive Officer

GENBAND INC.

By: /s/ David Walsh
Name: David Walsh
Title: Chief Executive Officer

EXECUTIVE

/s/ Daryl E. Raiford
Signature of Executive

Daryl E. Raiford
Printed Name of Executive

12/24/16
Date

Exhibit 10.31

December 12, 2016

Daryl Raiford
[Home Address]

Dear Daryl,

I am so gratified that you have agreed to remain as GENBAND's CFO despite the attractive opportunity that has recently been offered to you. As I noted during our discussions over the last few days, I, the Board and the rest of the management team have tremendous appreciation of your value to the Company and believe it is imperative, particularly given the transactions being currently contemplated by the Company, to have you firmly in your seat managing our financial operations. As you know, we have faced a difficult road at GENBAND over your tenure with the Company, but your judgment, leadership and acumen have been at the core of our resilience and have continued to position us for ultimate success.

As agreed between us and approved by the Compensation Committee of the Board, we are making the following modifications to your compensation and severance packages: (i) effective immediately, your base salary will be increased to $500,000/year; (ii) in the event there is a change of control at GENBAND such that a party other than OEP/JP Morgan take a controlling interest in the Company, and your employment is terminated by the Company without cause thereafter, your severance will be increased to 2X your current severance. These modifications will be reflected in an amendment to your Amended and Restated Employment Agreement ("Employment Agreement") that will be provided to you today.

Additionally, as you are aware, the Compensation Committee is in the process of reviewing a proposed Transaction Bonus Plan (the "Plan") for the benefit of the senior executives of the Company. That Plan has yet to be approved and finalized so, notwithstanding the Plan, the Compensation Committee has agreed that, on March 2, 2017, whether or not the Company has successfully signed or closed any of the contemplated transactions, you will be paid a bonus in the amount of $1,060,000, provided you remain employed by the Company through such date or are terminated by the Company without Cause (as such term is defined in your Employment Agreement). This amount is in lieu of any other transaction bonus you would have received in connection with the closing of the first material transaction (as defined below) the Company ultimately consummates (A "Material Transaction" will be defined as set forth in the Plan if and when approved by the Board or, if the Plan is not approved by the

Board, shall be defined for purposes herein as (1) any transaction or series of related transactions that qualifies as a change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company, each in accordance with the Internal Revenue Code of 1986, as amended, and its applicable Treasury Regulations (collectively, "Section 409A) including any such transaction in which any natural person, company, corporation, limited liability company, partnership, trust, joint venture, or other business organization or group or syndicate of any such persons or entities (each, a "Person") becomes the "beneficial owner" (as defined in Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of (i) the outstanding shares of capital stock of the Company or (ii) the combined voting power of the Company's then outstanding securities; (2) the Company is party to a merger, consolidation or other business reorganization which results in the voting securities of the Company outstanding immediately prior thereto failing to continue to represent (either by remaining outstanding or by being converted into voting securities of the surviving or another entity) at least twenty five percent (25%) of the combined voting power of the voting securities of the Company or such surviving or other entity outstanding immediately after such merger or consolidation; (3) the sale or disposition of more than twenty five percent (25%) of the Company's assets (or any transaction having similar effect); or (4) any merger, sale or similar transaction with either Sonus Networks, Inc. or Metaswitch Networks Ltd. or their respective affiliates.

Further, in the event that the Company consummates a second Material Transaction during your continued employment with the Company, then, on the date such transaction closes, you shall receive a second transaction bonus in the same amount and under the same terms as set forth in the foregoing paragraph (as may be modified solely to comply with Section 409A).

Finally, after speaking with OEP they were very enthusiastic about the idea of you sitting on the Board of one of their existing or future portfolio companies. They agreed to explore that opportunity with you and work with you to identify those companies where your background and skill set would be a good fit.

Again, we really appreciate your working with us to put together a package under which you are comfortable committing to maintain your critically important role at GENBAND. On a personal note, I can't imagine navigating the Company through the many initiatives and challenges in front of us without you firmly by my side.

Please let me know if I missed anything or if you have any further questions or concerns.

Sincerely,

/s/ David W. Walsh
David W. Walsh
CEO & Chairman

On Behalf of the Compensation Committee of the Board of Directors:

/s/ John Bayless
John Bayless
Director, Compensation Committee

EXHIBIT 21.1

RIBBON COMMUNICATIONS INC.
SUBSIDIARIES OF THE REGISTRANT

Name	Jurisdiction of Incorporation
GENBAND US LLC	Delaware
Kandy Communications LLC	Delaware
N.E.T. APLA, Inc.	Delaware
Network Equipment Technologies, Inc.	Delaware
Quintum Technologies, LLC	Delaware
Ribbon Communications International Inc.	Delaware
Ribbon Communications Federal Inc.	Delaware
Sonus Networks, Inc. (d/b/a/ Ribbon Communications Operating Company)	Delaware
Ribbon Communications Securities Corp.	Massachusetts
GENBAND SRL	Argentina
Sonus Networks Australia Pty Ltd.	Australia
GENBAND Telecommunications (Australia) Pty Ltd	Australia
GENBAND Belgium SPRL	Belgium
GENBAND Telecommunications do Brasil Ltda	Brazil
Ribbon Communications Canada ULC	Canada
GENBAND Holdings Company	Cayman Islands
GENBAND International Holding Company	Cayman Islands
GENBAND NS Company	Cayman Islands
Sonus Networks s.r.o.	Czech Republic
Sonus Networks EURL	France
GENBAND Télécommunications (France) Sarl	France
Sonus Networks GmbH	Germany
GENBAND Telecommunications (Germany) GmbH	Germany
Sonus Networks (HK) Limited	Hong Kong
GENBAND Telecommunications (Hong Kong) Ltd	Hong Kong
Sonus Networks India Private Limited	India
Sonus Networks Trading Private Limited	India
GENBAND Telecommunications Private Limited	India
GENBAND Ireland Limited (d/b/a/ Ribbon Communications Ireland)	Ireland
GENBAND Israel Limited	Israel
GENBAND Italy SRL	Italy
Nihon Sonus Networks K.K.	Japan
GENBAND Japan GK	Japan

Sonus Networks Korea LLC	Korea
GENBAND Korea Yuban Huesa	Korea
Sonus Networks Malaysia Sdn. Bhd.	Malaysia
Westford Networks Mexico, S. de R.L. de C.V.	Mexico
GENBAND Mexico, S. de R.L. de C.V.	Mexico
GENBAND Canada B.V.	Netherlands
GENBAND Coöperatie U.A.	Netherlands
GENBAND Holdings B.V.	Netherlands
GENBAND Netherlands B.V.	Netherlands
GENBAND NS B.V.	Netherlands
GENBAND New Zealand Company	New Zealand
GENBAND RUS LLC	Russia
GENBAND Saudi Arabia Limited	Saudi Arabia
GENBAND Telecommunication and Technology (Shanghai) Co., Ltd.	Shanghai, PRC
Sonus Networks (Shanghai) Limited	Shanghai, PRC
Sonus Networks Pte. Ltd.	Singapore
GENBAND (Singapore) Telecommunications Pte. Ltd.	Singapore
Sonus Networks España, S.R.L.	Spain
GENBAND Spain, S.L.	Spain
Sonus Networks Switzerland GmbH	Switzerland
GENBAND Switzerland GmbH	Switzerland
GENBAND Taiwan Ltd Co.	Taiwan
GENBAND Telecommunications (UK) Limited	United Kingdom
Sonus Networks Ltd.	United Kingdom
N.E.T. Europe Ltd.	United Kingdom

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-221240 on Form S-8 of our reports dated March 8, 2018, relating to the consolidated financial statements of Ribbon Communications Inc. and subsidiaries, and the effectiveness of Ribbon Communications Inc. and subsidiaries' internal control over financial reporting, appearing in this Annual Report on Form 10-K of Ribbon Communications Inc. for the year ended December 31, 2017.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 8, 2018

EXHIBIT 31.1

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

I, Franklin W. Hobbs, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: March 8, 2018

/s/ Franklin W. Hobbs

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

EXHIBIT 31.2

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

I, Daryl E. Raiford, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: March 8, 2018

/s/ Daryl E. Raiford

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

EXHIBIT 32.1

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

In connection with the Annual Report on Form 10-K of Ribbon Communications Inc. (the "Company") for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Franklin W. Hobbs, President and Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

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

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

Date: March 8, 2018

/s/ Franklin W. Hobbs

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

EXHIBIT 32.2

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

In connection with the Annual Report on Form 10-K of Ribbon Communications Inc. (the "Company") for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Daryl E. Raiford, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

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

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

Date: March 8, 2018

/s/ Daryl E. Raiford

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