

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021

or

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

For the transition period from _____ to _____

Commission file number 001-34501

JUNIPER NETWORKS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

77-0422528

(I.R.S. Employer Identification No.)

1133 Innovation Way

Sunnyvale, California

(Address of principal executive offices)

94089

(Zip code)

(408) 745-2000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.00001 per share	JNPR	New York Stock Exchange

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 No

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 No

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 filings requirements for the past 90 days. Yes No

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

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of voting common stock held by non-affiliates of the registrant was approximately \$8,749,000,000 as of June 30, 2021, the last business day of the registrant's most recently completed second fiscal quarter (based on the closing sales price for the common stock on the New York Stock Exchange on such date).

As of February 9, 2022, there were 322,758,505 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

As noted herein, the information called for by Part III is incorporated by reference to specified portions of the registrant's definitive proxy statement to be filed in conjunction with the registrant's 2022 Annual Meeting of Stockholders, which is expected to be filed not later than 120 days after the registrant's fiscal year ended December 31, 2021.

Juniper Networks, Inc.
Form 10-K

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Forward-Looking Statements

This Annual Report on Form 10-K, which we refer to as the Report, including "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding future events and the future results of Juniper Networks, Inc., which we refer to as "Juniper Networks," "Juniper," "we," "us," or the "Company," that are based on our current expectations, estimates, forecasts, and projections about our business, our results of operations, the industry in which we operate and the beliefs and assumptions of our management. All statements other than statement of historical facts are statements that could be deemed to be forward-looking statements. Words such as "expects," "anticipates," "targets," "goals," "projects," "will," "would," "could," "intends," "plans," "believes," "seeks," "estimates," variations of such words, and similar expressions are intended to identify such forward-looking statements. Forward-looking statements by their nature address matters that are, to different degrees, uncertain, and these forward-looking statements are only predictions and are subject to risks, uncertainties, and assumptions that are difficult to predict, including the duration, extent, and continuing impact of the COVID-19 pandemic and the global semiconductor shortage, and our ability to successfully manage the demand, supply, and operational challenges associated with the COVID-19 pandemic and the global semiconductor shortage. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in this Report under the section entitled "Risk Factors" in Item 1A of Part I and elsewhere, and in other reports we file with the U.S. Securities and Exchange Commission, or the SEC. In addition, many of the foregoing risks and uncertainties are, and could be, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result of the pandemic. While forward-looking statements are based on reasonable expectations of our management at the time that they are made, you should not rely on them. We undertake no obligation to revise or update publicly any forward-looking statements for any reason, except as required by applicable law.

PART I

ITEM 1. Business

Overview

Juniper Networks designs, develops, and sells products and services for high-performance networks to enable customers to build scalable, reliable, secure, and cost-effective networks for their businesses, while achieving agility and improved operating efficiency through automation. Our high-performance network and service offerings include routing, switching, Wi-Fi, network security, artificial intelligence ("AI") or AI-enabled enterprise networking operations ("AIOps"), and software-defined networking ("SDN") technologies. In addition to our products, we offer our customers a variety of services, including maintenance and support, professional services, Software-as-a-Service ("SaaS"), and education and training programs. We sell our solutions in more than 150 countries in three geographic regions: Americas; Europe, Middle East, and Africa, which we refer to as EMEA; and Asia Pacific, which we refer to as APAC.

Our products and services address high-performance network requirements for our customers within our verticals: Cloud, Service Provider, and Enterprise who view the network as critical to their success. We believe our silicon, systems, and software represent innovations that transform the economics and experience of networking, helping our customers achieve superior performance, greater choice, and flexibility, while reducing overall total cost of ownership.

Further, we have been expanding our software business by introducing new software solutions to our product and service portfolios that simplify the operation of networks, and allow our customers across our key verticals flexibility in consumption and deployment. Our acquisition of Mist Systems, Inc. ("Mist") in 2019 accelerated our ability to execute this belief in cloud-managed AI or AIOps through a combination of cloud-based intelligence, enterprise-grade access points, and EX series switches. Machine learning technology simplifies wireless and wired operations and delivers a more agile cloud services platform. In 2020, we acquired 128 Technology, Inc. ("128 Technology") and Netrounds. Our Session Smart Router ("SSR") portfolio acquired from 128 Technology extended the value of Mist's secure AI-engine and cloud management capabilities from client to cloud. Also, our acquisition of Netrounds enables service and cloud providers to rapidly deliver software-defined network services with end-to-end service quality. In 2021, we acquired Apstra, Inc. ("Apstra"), an intent-based networking solution that leverages closed-loop automation and assurance along with multivendor support to provide a complete fabric management solution. Additionally, in 2021, we announced an IP licensing arrangement with Netsia, Inc. ("Netsia"), giving us exclusive rights to their RAN Intelligent Controller ("RIC") source code and patents, and expanded our existing team of Open RAN ("O-RAN") and 5G with key subject matter experts from Netsia.

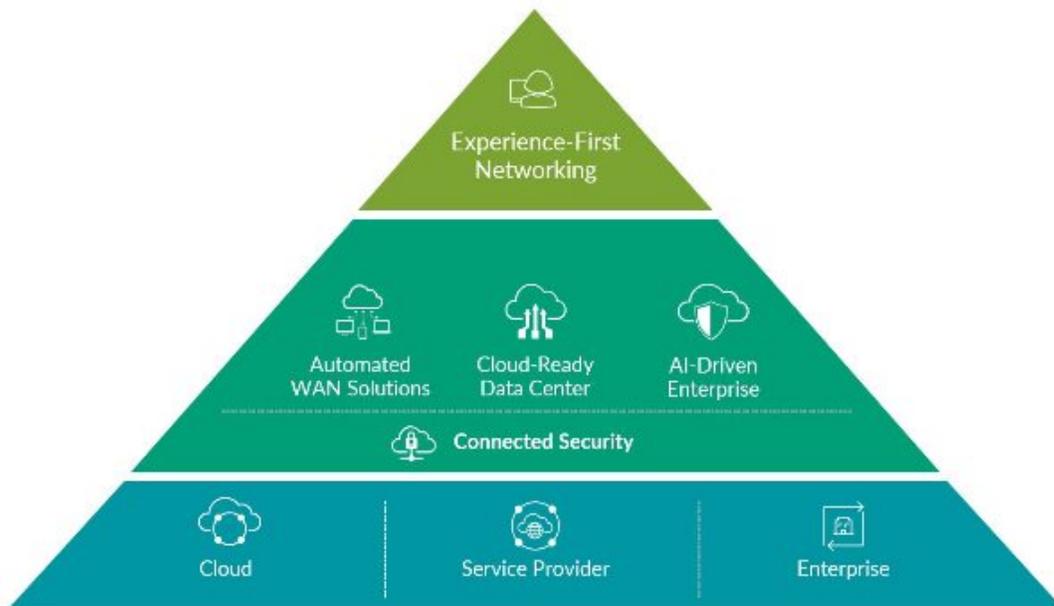
Our corporate headquarters are located in Sunnyvale, California. Our website address is www.juniper.net.

Strategy

We deliver highly scalable, reliable, secure, and cost-effective networks, while transforming the network's agility, efficiency, and value through automation. Our research and development efforts are focused on the following strategic priorities:

- Seize the cloud transition to gain share across our three customer verticals: Cloud, Service Provider, and Enterprise
- Differentiate with innovation in networking, security and software orchestration
- Leverage automation and AI to deliver simplicity of operations for our customers

We believe the networking needs for our customers in our Cloud, Service Provider, and Enterprise verticals are converging as these customers recognize the need for high-performance networks and are adopting cloud architectures for their infrastructure and service delivery, such as large public and private data centers and service provider edge data centers, for improved agility and greater levels of operating efficiency. We believe this industry trend presents an opportunity for us, and we have focused our strategy on maximizing user and IT experiences with secure client-to-cloud automation, insight, and AI-driven actions that we call Experience-First Networking. We have focused our strategy on providing customer solutions for the following use cases and verticals.



Cloud-Ready Data Center

We are focused on continuing to power public and private cloud data centers with high-performance infrastructure. These data centers are the core of cloud transformation by enabling service delivery in a hybrid cloud environment, which is a combination of public cloud, private cloud, and SaaS delivery. We are a recognized leader in data center networking innovation in both software and hardware solutions. Our Junos Operating System, or Junos OS, application-specific integrated circuits, or ASIC, technology, and management and automation software investments across routing, switching, and network security technologies will continue to be key elements to maintaining our technology leadership and transforming the economics and experience of our public and private cloud customers. In 2019, we introduced our next-generation operating system, Junos Evolved, which enables higher availability, accelerated deployment, greater innovation, and improved operational efficiencies. In 2020, we accelerated our investments in operations experience focused automation, to stay ahead of an industry-wide trend to address size and complexity of data centers driven by a rapidly increasing number of cloud-ready workloads. Our Apstra intent-based networking technology enables users to minimize the time and costs associated with deploying and managing complex data center networks.

Our Service Provider customers are investing in the build-out of high-performance networks and distributed cloud environments to enable high-speed and low-latency applications. We are committed to support them to rearchitect their infrastructure to enable next-generation mobile network build-outs, or 5G, Internet of Things, or IoT, and service delivery close to their end users.

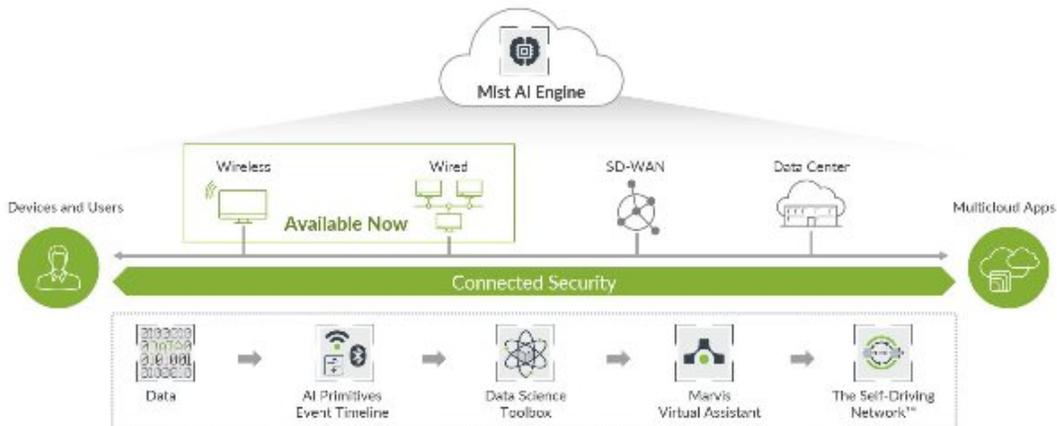
Automated Wide Area Networking Solutions

In developing our solutions, we strive to design and build best-in-class products and solutions for core, edge, and metro networking infrastructure for connecting users and devices securely to the cloud and to each other. Cloud providers, service providers and enterprises have deployed our product offerings in their wide area networks, or WAN, such as our highly efficient Internet Protocol, or IP, transport PTX product which can cost effectively manage incredible capacity from their end users to the data centers from which they deliver value to those users. We also offer a robust portfolio of SDN-enabled MX series routing platforms that provide system capacity, density, security, and performance with investment protection. MX series routers play at the heart of the digital transformation that service providers, cloud providers, and Enterprises are undergoing. Our SDN Controller for the WAN, Paragon Pathfinder (formerly NorthStar), enables granular visibility and control of IP/Multiprotocol Label Switching, or IP/MPLS, flows for large networks. Our acquisition of Netrounds enhanced our automated WAN solutions with innovative testing and service assurance capabilities for fixed and mobile networks. Netrounds' solutions (named Paragon Active Assurance) strengthened and complemented our existing capabilities, such as Paragon Insights (formerly Healthbot), Paragon Pathfinder, Paragon Planner, and our partnership with Anuta Networks International LLC to simplify network operations. Leveraging the Netrounds acquisition, we developed the Juniper Paragon Automation, which is a modular portfolio of cloud-native software applications that deliver closed-loop automation in the most demanding 5G and multicloud environments. We are committed to continued investment in cost effective and high-performance IP transport platforms and automation software, which form the basis of these high-performance networks.

AI-Driven Enterprise

Enterprises are consuming more value-as-a-service, where value is delivered in the form of cloud-based software and services driven by AI. We have introduced cloud management and security products, which enable enterprises to consume cloud infrastructure and services securely. We believe the transition to AIOps and SaaS presents an opportunity for us to come to market with innovative network and security solutions for our Enterprise customers, which facilitate their transition to cloud architecture and operational experience. Our Mist AI uses a combination of artificial intelligence, machine learning, and data science techniques to optimize user experiences and simplify operations across the wireless access, wired access, and SD-WAN domains. Machine learning technology simplifies wireless and wired operations and delivers a more agile cloud services platform. Also, our SSR portfolio acquired from 128 Technology extended the value of Mist's secure AI-engine and cloud management capabilities from client to cloud. Session Smart is the third generation of Software Defined-Wide Area Network ("SD-WAN"), which delivers unique technology that materially reduces WAN overhead, minimizes network latency, and replaces outdated and cumbersome network policies with flexible and real-time actions that are tied to real business and user needs. In recognition of our ability to execute and the completeness of our vision, Juniper was recognized as a Gartner Magic Quadrant Leader for Enterprise Wired and Wireless LAN Infrastructure in 2021, for the second year in a row.

We believe our understanding of high-performance networking technology, cloud architecture, and our strategy, positions us to capitalize on the industry transition to more automated, cost-efficient, scalable networks.



Customer Verticals

We sell our high-performance network products and service offerings through direct sales; distributors; value-added resellers, or VARs; and original equipment manufacturers, or OEMs, to end-users in the following verticals: Cloud, Service Provider, and Enterprise.

Further, we believe our solutions benefit our customers by:

- Reducing capital and operational costs by running multiple services over the same network using our secure, high density, highly automated, and highly reliable platforms;
- Creating new or additional revenue opportunities by enabling new services to be offered to new market segments, which includes existing customers and new customers, based on our product capabilities;
- Increasing customer satisfaction, while lowering costs, by optimizing the experience of network operators and their users via automation, AI-enabled troubleshooting and support, and cloud-management;
- Providing increased asset longevity and higher return on investment as our customers' networks can scale to higher throughput based on the capabilities of our platforms;
- Offering network security across every environment—from the data center to campus and branch environments to assist in the protection and recovery of services and applications; and
- Offering operational improvements that enable cost reductions, including lower administrative, training, customer care, and labor costs.

The following is an overview of the trends affecting the market in which we operate by each of our customer verticals. We believe the networking needs for each of our customers will eventually result in cloud-based network architectures for improved agility and greater levels of operating efficiency.

Cloud

Our Cloud vertical includes companies that are heavily reliant on the cloud for their business model's success. Customers in the Cloud vertical can include cloud service providers, such as the largest public cloud providers, which we refer to as hyperscalers, and Tier-2 cloud providers, as well as enterprises that provide SaaS; infrastructure-as-a-service; or platform-as-a-service.

Cloud providers continue to grow as more organizations take advantage of public infrastructure to run their business. As their businesses grow, we expect they will continue to invest in their networks, which dictates the quality and experience of the products and the services they deliver to their end-customers. Further, as cloud providers adopt new technologies, including the 400-gigabit Ethernet, or 400GbE, and in anticipation of the future adoption of 800-gigabit Ethernet, or 800GbE, and beyond, we believe this should present further opportunities for us across our portfolio as our cloud customers value high-performance, highly compact, power efficient infrastructures, which we support and continue to develop.

In addition, SaaS continues to be an important factor for cloud providers as their customers, such as enterprises, prefer to procure and consume product and service offerings via SaaS models. As a result, we believe that SaaS providers will invest in high performance infrastructure because the quality of experience has proven just as important competitively as software features and functions. Lastly, as a result of regulations and the need for lower latency and high-performance networking, cloud providers have been transitioning to regional network build-outs or distributed cloud environments to address the increasing demand for services, data privacy, data protection, and consumer rights.

As Cloud customers are pushing the envelope in networking, our focus on collaboration combined with networking innovation around automation has made us a strategic partner with these customers, helping them develop high-performance and lower total cost of ownership networking solutions to support their business.

Service Provider

Our Service Provider vertical includes wireline and wireless carriers and cable operators, and we support most of the major carrier and operator networks in the world with our high-performance network infrastructure offerings. In recent years, we have seen increased convergence of these different types of customers through acquisitions, mergers, and partnerships.

Service Provider customers recognize the need for high-performance networks and leveraging the cloud to reduce costs from their network operations. This is dictating a change in business models and their underlying infrastructure, which we believe requires investment in the build-out of high-performance networks and the transformation of existing legacy infrastructure to distributed cloud environments in order to satisfy the growth in mobile traffic and video as a result of the increase in mobile device usage including smartphones, tablets, and connected devices of various kinds.

We expect that Network Function Virtualization and SDN will be critical elements to enable our Service Provider customers the flexibility to support enhanced mobile video and dynamic new service deployments. We are engaging with these customers to transition their operations to next-generation cloud operations as the need for a highly efficient infrastructure to handle large amounts of data along with low latency, or minimal delay, plays into the need to have a high performance, scalable infrastructure in combination with the automation and flexibility required to drive down operational costs and rapid provision applications. We consistently deliver leading technologies that transform the economics and experience of networking while significantly improving customer economics by lowering the capital expenditures required to build networks and the operating expenses required to manage and maintain them.

In addition to reducing operating costs, service providers are seeking to create new or additional revenue opportunities to support their evolving business models. These customers are beginning to deploy 5G, which we expect will continue to roll out over the next few years, and IoT, which we believe will give rise to new services like connected cars, smart cities, robotic manufacturing, and agricultural transformation. 5G and IoT require a highly distributed cloud data center architecture from which services are delivered to the end users and will involve a great degree of analytics and embedded security. We expect this trend will present further opportunities for Juniper with our focus on delivering a strong portfolio of network virtualization and software-based orchestration solutions, which position us to deliver on the automation and agility requirements of service providers.

Enterprise

Our high-performance network infrastructure offerings are designed to meet the performance, reliability, and security requirements of the world's most demanding enterprises. We offer enterprise solutions and services for data centers as well as branch and campus applications. Our Enterprise vertical includes enterprises not included in the Cloud vertical. They are industries with high performance, high agility requirements, including retail companies, healthcare institutions, financial services; national, federal, state, and local governments; as well as research and educational institutions. We believe that our Enterprise customers are able to deploy our solutions as a powerful component in delivering the advanced network capabilities needed for their leading-edge applications.

We believe that as our Enterprise customers continue to transition their workloads to the cloud, they continue to seek greater flexibility in how they consume networking and security services, such as pay-per-use models. Additionally, Enterprises are deploying AI-driven architectures, which require end-to-end solutions for managing, orchestrating, and securing distributed cloud resources as a single pool of resources. Also, we are increasingly seeing a convergence of networking and security, such as Secure Access Service Edge ("SASE"), resulting in security becoming an embedded capability in every solution that we offer to our customers.

High-performance enterprises require IP networks that are global, distributed, and always available. We are innovating in key technology areas to meet the needs of our Enterprise customers whether they plan to move to a public cloud architecture or hybrid cloud architecture (which is a mix of public and private cloud, as well as a growing number of SaaS applications).

In 2021, 2020, and 2019, no single customer accounted for 10% or more of our net revenues.

Products, Services, and Technology

Early in our history, we developed, marketed, and sold the first commercially available purpose-built IP backbone router optimized for the specific high-performance requirements of telecom and cable operators. As the need for core bandwidth continued to increase, the need for service-rich platforms at the edge of the network was created.

We have expanded our portfolio to address multiple domains in the network: core; edge; access and aggregation; data centers; and campus and branch. We have systematically focused on how we innovate in silicon, systems, and software (including our Junos OS and virtual network functions, or VNF) such as firewall, network orchestration, and automation to provide a range of hardware and software solutions in high-performance, secure networking.

Further, our intent is to expand our software business by introducing new software solutions to our product and services portfolios that simplify the operation of networks, and provide flexibility in consumption and deployment to our customers across our key verticals. Our software offerings include subscriptions, SaaS, and term or time-based perpetual licenses. We believe our software and related services revenues as a percentage of total revenues will increase over time as we introduce new software solutions designed to better monetize the value of software functionality in our offerings.

Significant Product Development Projects and Solutions

In 2021, we continued to execute on our product and service solution strategy and announced several new innovations.

We announced our continuing investment in the SASE market with the introduction of Juniper Security Director Cloud, a cloud-based portal that distributes connectivity and security services to sites, users, and applications, as well as manages customers' SASE transformations. We also announced version 4.0 of Apstra software, Apstra 4.0, which builds on the unique multivendor capabilities of the Apstra solution to support VMware NSXC-T 3.0 and Enterprise SONiC, in addition to continuing to support data center switching from Juniper, Nvidia (Nvidia Cumulus), Arista Networks, and Cisco Systems. Further, we announced new features within the AI-driven enterprise portfolio that enable customers to scale and simplify the rollout of their campus wired and wireless networks while bringing greater insight and automation to network operators. The enhancements to the Juniper Mist cloud and AI engine, which include EVPN-VXLAN campus fabric management and Marvis Actions for proactive problem remediation, expand on Juniper's unique automation, AIOps, and cloud capabilities to streamline IT operations, lower costs and deliver agility and scale.

Moreover, we announced our collaboration with Intel to accelerate advancement in the O-RAN ecosystem. This joint initiative represents another milestone for us in our continuing efforts to bring openness and innovation to a traditionally closed-off part of the network, providing a faster route-to-market for service providers and enterprises to deliver 5G, edge computing and AI.

The following is an overview of our principal product families and service offerings in 2021:

Routing Products

- *ACX Series*: Our ACX Series Universal Access Routers cost-effectively address current operator challenges to rapidly deploy new high-bandwidth services. We believe that the ACX Series is well positioned to address the growing metro Ethernet and mobile backhaul needs of our customers, as we expect 5G mobile network build-outs to roll out over the next few years. The platforms deliver the necessary scale and performance needed to support multi-generation wireless technologies.
- *MX Series*: Our MX Series is a family of high-performance, SDN-ready, Ethernet routers that function as a Universal Edge platform with high system capacity, density, and performance. The MX Series platforms utilize our custom silicon and provide carrier-class performance, scale, and reliability to support large-scale Ethernet deployments. We also offer the vMX, a virtual version of the MX router, which is a fully featured MX Series 3D Universal Edge Router optimized to run as software on x86 servers.
- *PTX Series*: Our PTX Series Packet Transport Routers deliver high throughput at a low cost per bit, optimized for the service provider core as well as the scale-out architectures of cloud providers. The PTX Series is built on our custom silicon and utilizes a forwarding architecture that is focused on optimizing IP/MPLS, and Ethernet. This ensures high density and scalability, high availability, and network simplification.
- *Paragon Pathfinder*: Our wide-area network SDN controller automates the creation of traffic-engineering paths across the network, increasing network utilization and enabling a customized programmable networking experience.
- *Session Smart Routers*: Our SSR enables agile, secure, and resilient WAN connectivity with breakthrough economics and simplicity. SSR routers transcend inherent inefficiencies and cost constraints of conventional networking products and legacy SD-WAN solutions, delivering a flexible, application-aware network fabric that meets stringent enterprise performance, security, and availability requirements.

Switching Products

- *EX Series*: Our EX Series Ethernet switches address the access, aggregation, and core layer switching requirements of micro branch, branch office, and campus environments, providing a foundation for the fast, secure, and reliable delivery of applications able to support strategic business processes.
- *QFX Series*: Our QFX Series of core, spine, and top-of-rack data center switches offer a revolutionary approach to switching that are designed to deliver dramatic improvements in data center performance, operating costs, and business agility for enterprises, high-performance computing networks, and cloud providers.
- *Juniper Access Points*: Our access points provide Wi-Fi access and performance, which is automatically optimized through reinforcement learning algorithms. Our access points also have a dynamic virtual Bluetooth low energy element antenna array for accurate and scalable location services.

Security Products

- *SRX Series Services Gateways for the Data Center and Network Backbone*: Our mid-range, high-end and virtual SRX Series platforms provide high-performance, scalability, and service integration, which are ideally suited for medium to large enterprise, data centers and large campus environments, where scalability, high performance, and concurrent services, are essential. Our high-end SRX5800 platform is suited for service provider, large enterprise, and public sector networks. The upgrade to our high-end SRX firewall offering with our Services Process Card 3, or SPC3, with our Advanced Security Acceleration line card enhances the SRX5800 to deliver power for demanding use cases, including high-end data centers, IoT, and 5G.
- *Branch SRX, Security Policy and Management*: The Branch SRX family provides an integrated firewall and next-generation firewall, or NGFW, capabilities. Security Director is a network security management product that offers efficient, highly scalable, and comprehensive network security policy management. These solutions are designed to enable organizations to securely, reliably, and economically deliver powerful new services and applications to all locations and users with superior service quality.
- *Virtual Firewall*: Our vSRX Firewall delivers all of the features of our physical firewalls, including NGFW functionality, advanced security, and automated lifecycle management capabilities. The vSRX provides scalable, secure protection across private, public, and hybrid clouds. We also offer the cSRX, which has been designed and optimized for container and cloud environments.
- *Advanced Malware Protection*: Our Advanced Threat Prevention portfolio consists of Sky ATP, a cloud-based service and Juniper ATP, or JATP, a premises-based solution. These products are designed to use both static and dynamic analysis with machine learning to find unknown threat signatures (zero-day attacks).

Services

In addition to our products, we offer maintenance and support, professional, SaaS, and educational services, making it easier for service providers, enterprises, cloud providers, and partners to optimize the operation of their networks. We utilize a multi-tiered support model to deliver services that leverage the capabilities of our own direct resources, channel partners, and other third-party organizations with a focus on personalized, proactive, and predictive experience.

In 2021, we introduced the next phase of our service offerings called Juniper Support Insights. It is a new AI-Driven support offering that transforms the customer experience from reactive to proactive support.

We also train our channel partners in the delivery of support, professional, and educational services to ensure these services can be locally delivered.

As of December 31, 2021, we employed 2,004 people in our worldwide customer service and support organization. We believe that a broad range of services is essential to the successful customer deployment and ongoing support of our products, and we employ remote technical support engineers, on-site resident engineers, spare parts planning and logistics staff, professional services consultants, and educators with proven network experience to provide those services.

Platform Software

In addition to our major product families and services, our software portfolio has been a key technology element in our goal to be a leader in high-performance networking.

Our Junos Platform enables our customers to expand network software into the application space, deploy software clients to control delivery, and accelerate the pace of innovation with an ecosystem of developers. At the heart of the Junos Platform is Junos Evolved. We believe Junos Evolved is fundamentally differentiated from other network operating systems not only in its design, but also in its development capabilities. The advantages of Junos Evolved include:

- A modular operating system with common base of code and a single, consistent implementation for each control plane feature;
- A highly disciplined and firmly scheduled development process;
- A common modular software architecture that scales across all Junos-based platforms;
- A central database, which is used by not only Junos native applications but also external applications using application programming interfaces, or APIs; and
- A fully distributed general-purpose software infrastructure that leverages all the compute resources on the network element.

Junos Evolved is designed to improve the availability, performance, and security of business applications running across the network. Junos Evolved helps to automate network operations by providing a single consistent implementation of features across the network in a single release train that seeks to minimize the complexity, cost, and risk associated with implementing network features and upgrades.

Orchestration and Monitoring Software

As many of our customers continue moving to programmable and automated network operations, managing, orchestrating, and securing that complex journey can be a challenge. Network automation is the process of automating the configuration, management, testing, deployment, and operations of physical and virtual devices within a network. We believe the keys to achieving success with network and security automation include:

- Architecting networking systems with strong APIs, analytics, and autonomous control; and
- Automating operations to become more reliable in the context of IT systems, teams, processes, and network operation and security operation workflows.

We are committed to providing solutions to help our customers to optimize their programmable and automated networking operations with the following offerings:

- *Contrail Networking*: Our Contrail Networking offers an open-source, standards-based platform for SDN. This platform enables our customers to securely deploy workloads in any environment. It offers continuous overlay connectivity to any workload, and can run on any compute technologies from traditional bare-metal servers, virtual machines, to containers.
- *Wired, Wireless, and WAN Assurance driven by Mist AI*: We provide visibility all the way down to the individual client, application and session to optimize individual user experiences from client-to-cloud. With customizable service levels that span the LAN, WLAN, and WAN, our solutions enable our customers to set and measure key metrics and proactively assure optimal user experiences on an ongoing basis. In addition, automated workflows are combined with event correlation, predictive analytics, and proactive self-driving operations to simplify IT operations and minimize end-to-end network troubleshooting costs.

- *Marvis Virtual Network Assistant driven by Mist AI:* Our Marvis Virtual Network Assistant identifies the root cause of issues across the information technology, or IT, domains and automatically resolves many issues proactively. It recommends actions for those connected systems outside of the Mist domain, while offering a real-time network health dashboard that reports issues from configuration to troubleshooting. Marvis has unique Natural Language Processing ("NLP") capabilities with a conversational interface so that IT staff can get accurate answers to normal English language queries.
- *Juniper Paragon Automation:* Juniper Paragon Automation is a modular portfolio of cloud-native software applications that deliver closed-loop automation in the most demanding 5G and multicloud environments. These solutions translate business intent into real-world performance across the lifecycle of a network and services. They eliminate manual tasks and processes, empowering operations teams to work more quickly, efficiently, and accurately. Also, they protect customers and business by measuring real service quality on the data plane, assuring that users have a consistent, high-quality experience throughout the life of their service.
- *Juniper Apstra:* Juniper Apstra enables our customers to automate the entire network lifecycle in a single system, easing the adoption of network automation. Juniper Apstra ties the architect's design to everyday operations with a single source of truth, continuous validation, and powerful analytics and root cause identification. It raises efficiency and results by providing visibility and insights, incident management, change management, compliance and audit, and maintenance and updates.

Research and Development

We have assembled a team of skilled engineers with extensive experience in the fields of high-end computing, network system design, ASIC design, security, routing protocols, software applications and platforms, and embedded operating systems. As of December 31, 2021, we employed 4,019 people in our worldwide research and development, or R&D, organization.

We believe that strong product development capabilities are essential to our strategy of enhancing our core technology, developing additional applications, integrating that technology, and maintaining the competitiveness and innovation of our product and service offerings. In our products, we are leveraging our software, ASIC and systems technology, developing additional network interfaces targeted to our customers' applications, and continuing to develop technology to support the build-out of secure high-performance networks and cloud environments. We continue to expand the functionality of our products to improve performance, reliability and scalability, and provide an enhanced user interface.

Our R&D process is driven by our corporate strategy and the availability of new technology, market demand, and customer feedback. We have invested significant time and resources in creating a structured process for all product development projects. Following an assessment of market demand, our R&D team develops a full set of comprehensive functional product specifications based on inputs from the product management and sales organizations. This process is designed to provide a framework for defining and addressing the steps, tasks, and activities required to bring product concepts and development projects to market.

Sales and Marketing

As of December 31, 2021, we employed 3,025 people in our worldwide sales and marketing organization. These sales and marketing employees operate in different locations around the world in support of our customers.

Our sales organization, with its structure of sales professionals, business development teams, systems engineers, marketing teams, channel teams, and an operational infrastructure team, is based on both vertical markets and geographic regions.

Our sales teams operate in their respective regions and generally either engage customers directly or manage customer opportunities through our distribution and reseller relationships as described below.

We sell to a number of cloud and service provider customers directly. Otherwise, we sell to all of our key customer verticals primarily through distributors and resellers.

Direct Sales Structure

The terms and conditions of direct sales arrangements are governed either by customer purchase orders along with acknowledgment of our standard order terms, or by direct master purchase agreements. The direct master purchase agreements

with these customers set forth only general terms of sale and generally do not require customers to purchase specified quantities of our products. We directly receive and process customer purchase orders.

Channel Sales Structure

A critical part of our sales and marketing efforts are our channel partners through which we conduct the majority of our sales. We utilize various channel partners, including, but not limited to the following:

- A global network of strategic distributor relationships, as well as region-specific or country-specific distributors who in turn sell to local VARs who sell to end-user customers. Our distribution channel partners resell routing, switching, and security products, software and services, which are purchased by all of our key customer verticals. These distributors tend to focus on particular regions or countries. For example, we have substantial distribution relationships with Ingram Micro in the Americas and Hitachi in Japan. Our agreements with these distributors are generally non-exclusive, limited by region, and provide product and service discounts and other ordinary terms of sale. These agreements do not require our distributors to purchase specified quantities of our products or services. Further, most of our distributors sell our competitors' products and services, and some sell their own competing products and services.
- VARs and direct value-added resellers, including our strategic worldwide alliance partners referenced below, resell our products to end-users around the world. These channel partners either buy our products and services through distributors, or directly from us, and have expertise in designing, selling, implementing, and supporting complex networking solutions in their respective markets. Our agreements with these channel partners are generally non-exclusive, limited by region, and provide product and service discounts and other ordinary terms of sale. These agreements do not require these channel partners to purchase specified quantities of our products or services. Increasingly, our cloud and service provider customers also resell our products or services to their customers or purchase our products or services for the purpose of providing managed or cloud-based services to their customers.
- Strategic worldwide reseller relationships with established Juniper alliances, comprised of Nippon Telegraph and Telephone Corporation; Ericsson Telecom A.B.; International Business Machines, or IBM; NEC Corporation; Fujitsu Limited; and Atos SE. These companies each offer services and products that complement our own product and service offerings and act as a reseller, and in some instances as an integration partner for our products. Our arrangements with these partners allow them to resell our products and services on a non-exclusive and generally global basis, provide for product and service discounts, and specify other general terms of sale. These agreements do not require these partners to purchase specified quantities of our products or services.

Manufacturing and Operations

As of December 31, 2021, we employed 343 people in worldwide manufacturing and operations who manage our supply chain including relationships with our contract manufacturers, original design manufacturers, component suppliers, warehousing and logistics service providers.

Our manufacturing is primarily conducted through contract manufacturers and original design manufacturers in China, Malaysia, Mexico, and Taiwan. As of December 31, 2021, we utilized Celestica Incorporated, Flextronics International Ltd., Accton Technology Corporation, Foxconn Technology Group and Alpha Networks Inc. for the majority of our manufacturing activity. Our contract manufacturers and original design manufacturers are responsible for all phases of manufacturing from prototypes to full production including activities such as material procurement, surface mount assembly, final assembly, test, control, shipment to our customers, and repairs. Together with our contract manufacturers and original design manufacturers, we design, specify, and monitor the tests that are required to ensure that our products meet internal and external quality standards. We believe that these arrangements provide us with the following benefits:

- We can quickly ramp up and deliver products to customers with turnkey manufacturing;
- We operate with a minimum amount of dedicated space and employees for manufacturing operations; and
- We can reduce our costs by reducing what would normally be fixed overhead expenses.

Our contract manufacturers and original design manufacturers build our products based on our rolling product demand forecasts. Our contract manufacturing partners procure the majority of the components used in our products. To address supply-chain challenges, including increases in component and logistics costs related to the COVID-19 pandemic and global

component shortages, we take specific procurement action, including the exercise of strategic purchases of raw material in addition to our partners' normal procurement. Once the components necessary to assemble the products in our forecast are procured, our manufacturing partners assemble and test the products according to agreed-upon specifications. Products are then shipped to our distributors, resellers, or end-customers. However, we also purchase and hold inventory, consisting primarily of components for the production of finished goods, for strategic reasons and to mitigate the risk of shortages of certain critical components. As a result, we may incur additional holding costs and obsolescence charges, particularly resulting from uncertainties in future product demand. Title to the finished goods is generally transferred from the contract manufacturers to us when the products leave the contract manufacturer's or original design manufacturer's location. Customers take title to the products upon delivery at a specified destination. If the product or components remain unused or the products remain unsold for a specified period, we may incur carrying charges or charges for excess or obsolete materials.

Our contracts with our contract manufacturers and original design manufacturers set forth a framework within which the contract manufacturer and original design manufacturer, as applicable, may accept purchase orders from us. These contracts do not represent long-term commitments.

Some of our custom components, such as ASICs and communication integrated circuits, are manufactured primarily by sole or limited sources, each of which is responsible for all aspects of production using our proprietary designs. To ensure the security and integrity of Juniper products during manufacture, assembly and distribution, we have implemented a supply chain risk management framework as part of our overall Brand Integrity Management System. This framework encompasses all aspects of the supply chain as well as enhanced elements specific to security issues applicable to Juniper products and our customers.

By working collaboratively with our suppliers and as members of coalitions such as the Responsible Business Alliance, Responsible Minerals Initiative, and the CDP Supply Chain program, we endeavor to promote socially and environmentally responsible business practices beyond our company and throughout our worldwide supply chain. To this end, we have adopted a business partner code of conduct and promote compliance with such code of conduct to our suppliers. Our business partner code of conduct expresses support for and is aligned with the Ten Principles of the United Nations Global Compact and the Responsible Business Alliance Code of Conduct. The Responsible Business Alliance, a coalition of electronics, retail, auto and toy companies, provides guidelines and resources to drive performance and compliance with critical corporate social responsibility policies. Its goals are to promote ethical business practices, to ensure that working conditions in the electronic industry supply chain are safe, that workers are treated with respect and dignity, and that manufacturing processes are environmentally responsible. By using standard audit and assessment protocols and tools, we measure and monitor manufacturing partners' and select direct material suppliers' compliance to the codes of conduct and applicable environmental, health and safety, labor and ethics legal requirements, including but not limited to: onsite audits; risk assessments; CDP climate change and water requests; and conflict minerals surveys. Our Corporate Social Responsibility Report, which details our supply chain efforts, and Business Partner Code of Conduct are available on our website.

Backlog

Our sales are made primarily pursuant to purchase orders under master sales agreements either with our distributors, resellers, or end-customers. At any given time, we have a backlog of orders for products that have not shipped. Because certain orders are cancellable or delivery schedules may be changed, we believe that our backlog at any given date may not be a reliable indicator of future operating results. The COVID-19 pandemic resulted in unprecedented industry-wide supply constraints, and the pandemic continues to play a role with ongoing delays to the global logistics environment. As a result, we experienced a shortage of component parts and logistics timing issues in 2021, which resulted in significantly higher levels of our product backlog. We expect these challenging supply chain conditions to persist in the near term.

As of December 31, 2021 and December 31, 2020, our total product backlog was approximately \$1,833.0 million and \$419.6 million, respectively. Our product backlog consists of confirmed orders for products scheduled to be shipped to our distributors, resellers, or end-customers, generally within six months for 2020 and within twelve months for 2021, extended primarily for the ongoing impact of supply chain constraints. Backlog excludes certain future revenue adjustments for items such as product revenue deferrals, sales return reserves, service revenue allocations, and early payment discounts.

For further discussion on the risks, uncertainties and actions taken in response to the pandemic, see the section entitled "Risk Factors" in Item 1A of Part I of this Report.

Seasonality

We, as do many companies in our industry, experience seasonal fluctuations in customer spending patterns. Historically, we have experienced stronger customer demand in the fourth quarter and weaker demand in the first quarter of the fiscal year. This historical pattern should not be considered a reliable indicator of our future net revenues or financial performance.

Competition

We compete in the network infrastructure markets. These markets are characterized by rapid change, converging technologies, and a migration to solutions that combine high performance networking with cloud technologies. In the network infrastructure business, Cisco Systems, Inc., or Cisco, has historically been the dominant player. However, our principal competitors also include Arista Networks, Inc.; Dell Technologies; Hewlett Packard Enterprise Co., or HPE; Huawei Technologies Co., Ltd., or Huawei; and Nokia Corporation, or Nokia.

Many of our current and potential competitors, such as Cisco, Nokia, HPE, and Huawei, among others, have broader portfolios which enable them to bundle their networking products with other networking and information technology products in a manner that may discourage customers from purchasing our products. Many of our current and potential competitors have greater name recognition, marketing budgets, and more extensive customer bases that they may leverage to compete more effectively. Increased competition could result in price reductions, fewer customer orders, reduced gross margins, and loss of market share, negatively affecting our operating results.

In addition, there are a number of other competitors in the security network infrastructure space, including Cisco, Huawei, Nokia, A10 Networks, Inc.; Palo Alto Networks, Inc.; Check Point Software Technologies, Ltd.; Fortinet, Inc.; Zscaler, Inc.; Netskope, Inc.; and Forcepoint LLC; among others, who tend to be focused specifically on security solutions and, therefore, may be considered specialized compared to our broader product line.

We expect that over time, large companies with significant resources, technical expertise, market experience, customer relationships, and broad product lines, such as Cisco, Nokia, and Huawei, will introduce new products designed to compete more effectively in the market. There are also several other companies that aim to build products with greater capabilities to compete with our products. Further, there has been significant consolidation in the networking industry, with smaller companies being acquired by larger, established suppliers of network infrastructure products. We believe this trend is likely to continue, which may increase the competitive pressure faced by us due to their increased size and breadth of their product portfolios.

In addition to established competitors, a number of public and private companies have announced plans for new products to address the same needs that our products address. We believe that our ability to compete depends upon our ability to demonstrate that our products are superior and cost effective in meeting the needs of our current and potential customers.

As a result, we expect to face increased competition in the future from larger companies with significantly more resources than we have and also from emerging companies that are developing new technologies. Although we believe that our technology and the purpose-built features of our products make them unique and will enable us to compete effectively with these companies, there can be no assurance that new products, enhancements or business strategies will achieve widespread market acceptance.

Material Government Regulations

Our business activities are worldwide and subject us to various federal, state, local, and foreign laws in the countries in which we operate, and our products and services are subject to laws and regulations affecting the sale of our products. To date, costs and accruals incurred to comply with these governmental regulations have not been material to our capital expenditures, results of operations, and competitive position. Although there is no assurance that existing or future governmental laws and regulations applicable to our operations, products or services will not have a material adverse effect on our capital expenditures, results of operations, and competitive position, we do not currently anticipate material expenditures for government regulations. Nonetheless, as discussed below, we believe that environmental and global trade regulations could potentially have a material impact on our business.

Environment

We are committed to maintaining compliance with all environmental laws applicable to our operations, products, and services and to reducing our environmental impact across our business and supply chain. Our operations and many of our products are

subject to various federal, state, local, and foreign regulations that have been adopted with respect to the environment, such as the Waste Electrical and Electronic Equipment Directive; Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment; Registration, Evaluation, Authorization, and Restriction of Chemicals; and Substances of Concern In Products, regulations adopted by the European Union, or EU, and China.

Juniper's greatest impact on the environment is through our products and services. Our product sustainability approach prioritizes: (1) designing products with the environment in mind, (2) providing solutions for responsible end-of-life management and (3) empowering our customers to save energy and reduce their network-related carbon emissions. To help execute on this, Juniper has an environmental program, based on our new product introduction process, that supports a circular economy model for environmental sustainability and focuses on energy efficiency, materials innovation, and recyclability. We consider opportunities to minimize resource impacts and improve efficiencies over a product's life cycle, from the materials we use and a product's energy consumption, to packaging and end-of-life activities such as reuse, refurbishment, and recycling. For example, the Juniper Certified Pre-Owned program offers a broad range of refurbished high-performance network solutions from Juniper's current line and end-of-production hardware portfolios with available Juniper-backed warranty and support services.

We also voluntarily participate in the annual CDP climate change and water security disclosures and encourage our manufacturing partners and select direct material suppliers to do the same. Additionally, we are a signatory supporter of the United Nations Global Compact and a member of the Responsible Business Alliance, or RBA, and have adopted and promote the adoption by our suppliers of the RBA Code of Conduct, as discussed above in the section entitled *Manufacturing and Operations*. We continue to invest in the infrastructure and systems required to execute on, monitor and drive environmental improvements in our global operations and within our supply chain.

Global Trade

As a global company, the import and export of our products and services are subject to laws and regulations including international treaties, U.S. export controls and sanctions laws, customs regulations, and local trade rules around the world. The scope, nature, and severity of such controls varies widely across different countries and may change frequently over time. Such laws, rules, and regulations may delay the introduction of some of our products or impact our competitiveness through restricting our ability to do business in certain places or with certain entities and individuals, or by requiring us to comply with domestic preference programs, laws concerning transfer and disclosure of sensitive or controlled technology or source code, unique technical standards, localization mandates, and duplicative in-country testing and inspection requirements. In particular, the U.S. and other governments have imposed restrictions on the import and export of, among other things, certain telecommunications products and components, particularly those that contain or use encryption technology. Most of our products are telecommunications products and contain or use encryption technology and, consequently, are subject to restrictions. The consequences of any failure to comply with domestic and foreign trade regulations could limit our ability to conduct business globally. We continue to support open trade policies that recognize the importance of integrated cross-border supply chains that are expected to continue to contribute to the growth of the global economy and measures that standardize compliance for manufacturers to ensure that products comply with safety and security requirements.

For additional information concerning regulatory compliance and a discussion of the risks associated with governmental regulations that may materially impact us, see the section entitled "Risk Factors" in Item 1A of Part I of this Report.

Intellectual Property

Our success and ability to compete are substantially dependent upon our internally developed technology and expertise, as well as our ability to obtain and protect necessary intellectual property rights. While we rely on patent, copyright, trade secret, and trademark law, as well as confidentiality agreements, to protect our technology, we also believe that factors such as the technological and creative skills of our personnel, new product developments, frequent product enhancements, and reliable product maintenance are essential to establishing and maintaining a technology leadership position. There can be no assurance that others will not develop technologies that are similar or superior to our technology.

Patents

As of December 31, 2021, we had over 4,900 patents worldwide and numerous patent applications are pending. Patents generally have a term of twenty years from filing. As our patent portfolio has been built over time, the remaining terms on the individual patents vary. We cannot be certain that patents will be issued on the patent applications that we have filed, that we will be able to obtain the necessary intellectual property rights, or that other parties will not contest our intellectual property rights.

Licenses

In addition, we integrate licensed third-party technology into certain of our products and, from time to time, we need to renegotiate these licenses or license additional technology from third parties to develop new products or product enhancements or to facilitate new business models. There can be no assurance that third-party licenses will be available or continue to be available to us on commercially reasonable terms or at all. Our inability to maintain or re-license any third-party licenses required in our products or our inability to obtain third-party licenses necessary to develop new products and product enhancements could require us to obtain substitute technology of lower quality or performance standards or at a greater cost, any of which could harm our business, financial condition, and results of operations.

Trademarks

JUNIPER NETWORKS, JUNIPER, the Juniper Networks logo, JUNOS, RUNNING JUNOS, and other trademarks are registered trademarks of Juniper Networks, Inc. and/or its affiliates in the United States and other countries. Other names may be trademarks of their respective owners.

Human Capital Resources

We believe our success in delivering high-performance networks in the digital transformation era relies on our culture, values, and the creativity and commitment of our people. As of December 31, 2021, we had 10,191 full-time employees, of whom approximately 45%, 41% and 14% resided in the Americas, APAC, and EMEA, respectively. We invest in our people. We strive to maintain healthy, safe, and secure working conditions - a workplace where our employees are treated with respect and dignity. Our vision is to create an inclusive, diverse and authentic community that inspires collaboration, integrity, engagement, and innovation. We are striving to create a world-class employee experience, one that offers opportunity for personal and professional growth, and enables work-life balance that aligns with the core values embodied in the Juniper Way.

Our Values : The Juniper Way

Our mission is to power connections and empower change – to be a responsible global citizen and influence meaningful differences in the world around us. We believe that powering connections will bring us closer together while empowering us all to solve some of the world’s greatest challenges of health and well-being, sustainability, and equity.

To deliver our mission to power connections and empower change, we rely on a committed and consistent practice that we call the Juniper Way. More than a set of shared values, the Juniper Way reflects the company’s commitment to inspire every Juniper employee to do their best work. This foundation is embodied in three values – Be Bold, Build Trust, and Deliver Excellence - along with a set of refined behaviors for each.

Inclusion and Diversity

As a company, we are committed to innovation and representing diversity with employees of many backgrounds, experiences, and identities. We believe that inclusion and diversity are competitive assets that drive positive change to our company and communities. At our core, we believe excellence depends on seeking out diverse ideas and fostering a culture where all employees belong. We aim to lead with vision and empathy, promoting understanding and awareness across our workforce, and we are committed to improving inclusivity by being engaged and accountable at the highest level of leadership.



We monitor our progress against our inclusion and diversity strategy of diversifying our talent base, creating an environment where all employees feel included and valued, and driving accountability across the organization. In 2021, we continued to make progress in our inclusion and diversity efforts. Our global Women's Sponsorship Program, which aims to empower the next generation of women leaders, continued in 2021, providing our female employees with opportunities for development, visibility and growth. We also continued our global Inclusion and Diversity Ambassadors program to extend the reach of our inclusion and diversity efforts throughout Juniper, add new perspectives to the corporate team, uplift the voices of employees, and increase Juniper's access to diverse talent.

Employee Engagement and Development

We use a framework called Talent Matters to encourage an open and interactive culture between employees and their managers, where individual needs are recognized and met, and company goals are supported. Our professional development approach includes reviewing and assessing our management teams as well as facilitating personal employee development and growth. For employees, growth goals are tied to our corporate objectives and key results to ensure that employees are progressing and are supported by management teams. In early 2020, we launched a People Manager Network to create global consistency in how managers lead teams and support employees, including a specific focus on leading during the COVID-19 pandemic. With this program, managers are empowered and provided with the training and resources to scale employee career growth and provide their teams with the necessary tools to facilitate that growth. Managers are encouraged to schedule Conversation Days with their direct reports to identify opportunities for the company to better support employees and set goals for professional and personal growth. 86% of managers participated in a People Manager Network experience in 2021.

To ensure our employees' personal and professional growth, we continue to provide training courses focused on building personal capabilities as well as skill development. In response to employee feedback, we launched LinkedIn Learning for all employees, offering online courses on business, technology, and creative skills. Additionally, each year, Juniper employees receive role-specific trainings, which include topics such as human rights, environmental performance, compliance with the Juniper Worldwide Code of Business Conduct, engineering, information security, and other compliance and industry-specific subjects.

We consistently work to improve the employee experience by addressing feedback collected through the annual Juniper Voice Survey and topic-specific surveys, including employee benefits and total rewards packages and Juniper's response to the COVID-19 pandemic.

Employee Retention, Benefits, and Wellness

We continue to prioritize our commitment to retaining and attracting a diverse workforce with the skills needed to deliver Experience-First Networking. We aim to provide benefits and programs that are holistic, flexible, and inclusive. We are committed to pay equity and benefits innovation. From offering childcare and working mother support, to expanding medical coverage for infertility and gender-affirming procedures, to foster and adoptive parent assistance, we have provided benefit offerings that are intended to be as inclusive and diverse as our employees' needs.

Our community engagement program empowers employees to participate authentically, so they can make an impact where it matters most to them. We offer five paid working days per year for employees to give back to their communities and engage with causes of their choice. In 2021, Juniper expanded our employee matching gift program to all global employees and launched the “Empower Change” Challenge in celebration of our 25th anniversary. All employees were given \$25 of Juniper Foundation funds to donate to a charity or non-governmental organization of their choice to power connections and empower change.

The health, safety, and well-being of our employees are vital to Juniper's success. In 2021, we continued to offer global programs to support our employees working remotely during the ongoing COVID-19 pandemic, including COVID-19 crisis leave, Employee Assistance Program, remote ergonomic support, work reimbursement for office equipment, furniture and service essentials and TaskHuman. Employees have unlimited access to the TaskHuman platform, a virtual wellness coaching application, which covers hundreds of wellness topics from yoga and nutrition to financial guidance.

Information about our Executive Officers

The following sets forth certain information regarding our executive officers as of the filing of this Report:

Name	Age	Position
Rami Rahim	51	Chief Executive Officer and Director
Anand Athreya	58	Executive Vice President, Chief Development Officer
Manoj Leelanivas	52	Executive Vice President, Chief Product Officer
Robert Mobassaly	43	Senior Vice President, General Counsel and Secretary
Kenneth B. Miller	50	Executive Vice President, Chief Financial Officer
Thomas A. Austin	54	Vice President, Corporate Controller and Chief Accounting Officer
Marcus Jewell	49	Executive Vice President, Chief Revenue Officer

RAMI RAHIM joined Juniper in January 1997 and became Chief Executive Officer of Juniper, and a member of the Board of Directors, in November 2014. From March 2014 until he became Chief Executive Officer, Mr. Rahim served as Executive Vice President and General Manager of Juniper Development and Innovation. His responsibilities included driving strategy, development and business growth for routing, switching, security, silicon technology, and the Junos operating system. Previously, Mr. Rahim served Juniper in a number of roles, including Executive Vice President, Platform Systems Division, Senior Vice President and General Manager, Edge and Aggregation Business Unit, or EABU, and Vice President, Product Management for EABU. Prior to that, Mr. Rahim spent the majority of his time at Juniper in the development organization where he helped with the architecture, design and implementation of many Juniper core, edge, and carrier Ethernet products. Mr. Rahim holds a bachelor of science degree in Electrical Engineering from the University of Toronto and a master of science degree in Electrical Engineering from Stanford University.

ANAND ATHREYA joined Juniper in August 2004 and became Executive Vice President and Chief Development Officer in August 2017. In this role, he is responsible for Juniper's Engineering organization. Since joining Juniper, Mr. Athreya has held various leadership positions within Engineering, including most recently serving as Senior Vice President of Engineering from May 2014 through August 2017, and Corporate Vice President of Engineering from February 2011 through May 2014. Mr. Athreya joined Juniper from Procket Networks, a maker of routers and routing technology, where he served as Director of Software Engineering. Prior to that, he was Vice President of Engineering at Malibu Networks, a supplier of fixed wireless networking based broadband solutions, Assistant Vice President of Product Management and Strategy at Tiara Networks, a provider of broadband access systems, and held engineering roles at Novell, a software and services company. Mr. Athreya received his bachelor of science degree in Electrical Engineering from Bangalore University, a master of science degree in Computer Science and Engineering from Osmania University, and an MBA from National University. He is also a graduate of the Advanced Management Program at Harvard Business School.

MANOJ LEELANIVAS joined Juniper in March 2018 as Executive Vice President, Chief Product Officer. In this role, Mr. Leelanivas leads all aspects of product strategy and direction for Juniper and helps to align products with our go-to-market strategies and execution, including marketing operations. From June 2013 to September 2017, Mr. Leelanivas was President and Chief Executive Officer of Cyphort, an innovator in scale-out security analytics technology, that was acquired by Juniper in September 2017. From March 1999 to May 2013, he held several key product management positions at Juniper, including Executive Vice President of Advanced Technologies Sales for data center. Mr. Leelanivas holds a bachelor of technology in

Computer Engineering from the National Institute of Technology Karnataka, a master of science degree in Computer Science from the University of Kentucky, and is a graduate of the Stanford University Executive Business Program.

ROBERT MOBASSALY joined Juniper in February 2012 and has served as Senior Vice President, General Counsel since July 2021. From July 2016 to July 2021, he served as Vice President, Deputy General Counsel, where he was responsible for managing a team focused on legal functions, including those associated with Juniper's corporate securities, mergers and acquisitions, corporate governance, stockholder administration, and insurance matters. From May 2015 to July 2016, Mr. Mobassaly served as Associate General Counsel, Senior Director and previously served as Assistant General Counsel, Director. Prior to joining Juniper, Mr. Mobassaly was in private practice. He holds a bachelor's degree from the University of California, Berkeley, and a J.D. from the University of Pennsylvania Law School.

KENNETH B. MILLER joined Juniper in June 1999 and has served as our Executive Vice President, Chief Financial Officer since February 2016. Mr. Miller served as our interim Chief Accounting Officer while the Company continued to search for a full-time Chief Accounting Officer from February 2019 to September 2019. From April 2014 to February 2016, Mr. Miller served as our Senior Vice President, Finance, where he was responsible for the finance organization across the Company, as well as our treasury, tax and global business services functions. Previously, Mr. Miller served as our Vice President, Go-To-Market Finance, Vice President, Platform Systems Division, Vice President, SLT Business Group Controller and in other positions in our Finance and Accounting organizations. Mr. Miller holds a bachelor of science degree in Accounting from Santa Clara University.

THOMAS A. AUSTIN joined Juniper in September 2019 as our Vice President, Corporate Controller and Chief Accounting Officer. From September 2016 until July 2019, Mr. Austin served as the Vice President of Corporate Finance at Dell Technologies, Inc., a multinational information technology company. From September 2008 until its acquisition by Dell Technologies in September 2016, Mr. Austin served as the Vice President of Corporate Finance at EMC Corporation, a multinational information technology company. From January 2001 through July 2008, Mr. Austin served as the Chief Financial Officer and Treasurer at Arbor Networks, Inc., a network security company. Prior to joining Arbor Networks, Mr. Austin served as a controller for several companies. He began his career in public accounting at PricewaterhouseCoopers, a registered public accounting firm. Mr. Austin holds a bachelor of science degree in Public Accountancy from Providence College and an MBA from Babson College. Mr. Austin is also an adjunct professor of Finance at Providence College School of Business.

MARCUS JEWELL joined Juniper in June 2017 and has served as our Executive Vice President, Chief Revenue Officer since January 2019. From June 2017 to January 2019, Mr. Jewell was Senior Vice President of our EMEA business, where he was responsible for sales operations across the region, including its go-to-market and channel strategies. Mr. Jewell joined Juniper from Brocade Communications, where he ran the EMEA business from March 2011 to June 2017 and was also the global head of the company's software sales. Mr. Jewell has worked in the technology industry for more than 20 years and has held several senior global sales leadership positions in networking organizations. Mr. Jewell holds a bachelor of engineering (Hons) degree from the University of New South Wales.

Available Information

We file our annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K with the SEC electronically. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers, including Juniper Networks, that file electronically with the SEC. The address of that website is <https://www.sec.gov>.

You may obtain a free copy of our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports on our website at <http://www.juniper.net> or by sending an e-mail message to Juniper Networks Investor Relations at investorrelations@juniper.net. Such reports and other information are available on our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Our Corporate Governance Standards, the charters of our Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee, as well as our Worldwide Code of Business Conduct are also available on our website. Information on our website is not, and will not be deemed, a part of this Report or incorporated into any other filings the Company makes with the SEC.

Investors and others should note that we announce material financial and operational information to our investors using our Investor Relations website (<http://investor.juniper.net>), press releases, SEC filings and public conference calls and webcasts. We also use the Twitter account [@JuniperNetworks](#) and the Company's blogs as a means of disclosing information about the

Company and for complying with our disclosure obligations under Regulation FD. The social media channels that we use as a means of disclosing information described above may be updated from time to time as listed on our Investor Relations website.

ITEM 1A. Risk Factors

Factors That May Affect Future Results

We operate in rapidly changing economic and technological environments that present numerous risks, many of which are driven by factors that we cannot control or predict. Some of these risks are highlighted in the following discussion, and in Management's Discussion and Analysis of Financial Condition and Results of Operations and Quantitative and Qualitative Disclosures About Market Risk. Investors should carefully consider all relevant risks before investing in our securities. The occurrence of any of these risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition, operating results, and stock price.

RISKS RELATED TO OUR BUSINESS STRATEGY AND INDUSTRY

The COVID-19 pandemic has significantly affected how we and our customers are operating our businesses, and the duration and extent to which this will impact our future results of operations and financial performance remains uncertain. The COVID-19 pandemic has, and may continue to, negatively affect our operations, including as a result of external factors beyond our control such as restrictions on the physical movement of our employees, contract manufacturers, component suppliers, partners, and customers. The majority of our global workforce has been working remotely since March 2020, and we continue to follow the guidance of local and national governments for employees who have returned or will be returning to our offices. If the COVID-19 pandemic and corresponding governmental regulations and reopening process have a substantial impact on the health, attendance or productivity of our employees, partners, or customers, our results of operations and overall financial performance may be adversely impacted. Numerous ongoing and emerging regulations in the U.S. and other countries, including those regarding COVID-19 vaccination mandates and ongoing testing requirements, may also negatively impact our operations and increase the complexity of managing the pandemic.

Moreover, the conditions caused by the pandemic may affect the overall demand environment for our products and services and could adversely affect our customers' ability or willingness to purchase our products or services or to make payments on existing contracts with us, either delay or accelerate customers' purchasing decisions, delay the provisioning of our offerings, lengthen payment terms, lengthen delivery times, or affect attrition rates, all of which could adversely affect our future sales, operating results and overall financial performance. Further, the pandemic has and could continue to adversely affect our ability to provide or deliver products and on-site services to our customers. For example, the COVID-19 pandemic has caused us to experience supply constraints due to both constrained manufacturing capacity as well as shortages of component parts as our component vendors also faced manufacturing challenges. This has resulted in extended lead-times to our customers and increased logistics costs, which has negatively impacted our ability to recognize revenue and decreased our gross margins for these periods, and may impact our ability to convert backlog into revenue. Our backlog may not be a reliable indicator of future operating results because a customer may place orders early in an effort to secure supply when needed and then cancel an order without significant penalty. Challenges to our supply chain due to the impact of the pandemic remain dynamic, including ongoing shortages of component parts, and we continue to experience increased logistics costs due to air travel and transport restrictions that limit the availability of flights on which we are able to ship products. Additionally, cost increases and extended shipping times for ocean transit have increased our dependence on higher-cost air freight.

The impact from the COVID-19 pandemic on our business depends on future developments that cannot be accurately forecasted at this time, such as the transmission rate and geographic spread of the disease and its variants, the worldwide distribution and acceptance of vaccines, and the impact of these and other factors on our employees, customers, partners, and vendors. If we are not able to respond to and manage the impact of such events effectively and if the macroeconomic conditions of the general economy or the industries in which we operate do not improve, or worsen from present levels, our business, operating results, financial condition and cash flows could continue to be adversely affected.

Our quarterly results are unpredictable and subject to substantial fluctuations; as a result, we may fail to meet the expectations of securities analysts and investors. 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. If our quarterly financial results or our predictions of future financial results fail to meet the expectations of securities analysts and investors, the trading price of our securities could be negatively affected. Our operating results for prior periods may not be effective predictors of our future performance.

Factors associated with our industry, the operation of our business, and the markets for our products and services that may cause our quarterly results to fluctuate, include but are not limited to:

- unpredictable ordering patterns and limited visibility into our customers' spending plans and associated revenue;
- changes in our customer mix, the mix of products and services sold, and the geographies in which our products and services are sold;
- changes in the demand for our products and services, including seasonal fluctuations in customer spending;

- changing market and economic conditions, including rising interest rates and inflationary pressures, such as those pressures the market is currently experiencing, that could make our solutions more expensive or could increase our costs for materials, supplies, and services;
- ability to fulfill orders received in a timely manner due to disruptions and shortages in our global supply chain;
- increased advance ordering by customers of our products due to industry-wide supply chain concerns and our increased lead times;
- price and product competition;
- ineffective legal protection of our intellectual property rights in certain countries;
- how well we execute on our strategy and business model;
- financial stability of our customers, including the solvency of private sector customers, which may be impacted by the COVID-19 pandemic;
- statutory authority for government customers to purchase goods and services;
- executive orders, tariffs, changes in laws or regulations and accounting rules, or interpretations thereof;
- regional economic and political conditions which may be aggravated by unanticipated global events; and
- disruptions in our business operations or target markets caused by, among other things, terrorism or other intentional acts, outbreaks of disease, such as the COVID-19 pandemic, or earthquakes, floods, fires, or other natural disasters and other unanticipated extraordinary externalities, including extreme weather conditions due to climate change that increase both the frequency and severity of natural disasters.

We believe that quarter-to-quarter comparisons of operating results are not necessarily a good indication of what our future performance will be. In some prior periods, our operating results have been below our guidance, our long-term financial model or the expectations of securities analysts or investors. This may happen again, and the price of our common stock may decline. In addition, our failure to pay quarterly dividends to our stockholders or the failure to meet our commitments to return capital to our stockholders could have a material adverse effect on our stock price.

We expect our gross margins and operating margins to vary over time. Our product and service gross margins are expected to vary, and may be adversely affected in the future by numerous factors, including, but not limited to, customer, vertical, product and geographic mix shifts, an increase or decrease in our software sales or services we provide, increased price competition in one or more of the markets in which we compete, modifications to our pricing strategy to gain footprint in markets or with customers, currency fluctuations that impact our costs or the cost of our products and services to our customers, inflation, increases in material, labor, logistics, warranty costs, or inventory carrying costs, excess product component or obsolescence charges from our contract manufacturers, issues with manufacturing or component availability, issues relating to the distribution of our products and provision of our services, quality or efficiencies, increased costs due to changes in component pricing or charges incurred due to inaccurately forecasting product demand, warranty related issues, the impact of tariffs, or our introduction of new products and enhancements, or entry into new markets with different pricing and cost structures. Failure to sustain or improve our gross margins reduces our profitability and may have a material adverse effect on our business and stock price.

We derive a material portion of our revenues from a limited number of our customers, and our customers compete in industries that continue to experience consolidation. A material portion of our net revenues, across each customer vertical, depends on sales to a limited number of customers. If such customers change their business requirements or focus, vendor selection, project prioritization, or purchasing behavior, or are parties to consolidation transactions, they may delay, suspend, reduce or cancel their purchases of our products or services and our business, financial condition, and results of operations may be adversely affected.

If we are unable to compete effectively, our business and financial results could be harmed. The markets that we serve are rapidly evolving and highly competitive and include a number of well-established companies. We also compete with other public and private companies that are developing competing technologies to our products. In addition, actual or speculated consolidation among competitors, or the acquisition by, or of, our partners and/or resellers by competitors can increase the competitive pressures faced by us as customers may delay spending decisions or not purchase our products at all. Our partners and resellers generally sell or resell competing products on a non-exclusive basis and consolidation could delay spending or require us to increase discounts to compete, which could also adversely affect our business. Several of our competitors have substantially greater resources and can offer a wider range of products and services for the overall network equipment market than we do. Other competitors have become more integrated, including through consolidation and vertical integration, and offer a broader range of products and services, which could make their solutions more attractive to our customers. Many of our competitors also sell networking products as bundled solutions with other IT products. If we are unable to compete effectively against existing or future competitors, we could experience a loss in market share and a reduction in revenues and/or be required to reduce prices, which could reduce our gross margins and materially and adversely affect our business, financial condition, and results of operations.

Fluctuating economic conditions make it difficult to predict revenues and gross margin for a particular period and a shortfall in revenues or increase in costs of production may harm our operating results. Our revenues and gross margin depend significantly on general economic conditions and the demand for products in the markets in which we compete. Economic weakness or uncertainty, customer financial difficulties, and constrained spending on network expansion and enterprise infrastructure have in the past resulted in, and may in the future result in, decreased revenues and earnings. Such factors could make it difficult to accurately forecast revenues and operating results and could negatively affect our ability to provide accurate forecasts to our contract manufacturers, manage our contract manufacturer relationships and other expenses and to make decisions about future investments. In addition, economic instability or uncertainty, continued turmoil in the geopolitical environment in many parts of the world and other events beyond our control, such as the COVID-19 pandemic, have, and may continue to, put pressure on economic conditions, which has led and could lead, to reduced demand for our products, delays or reductions in network expansions or infrastructure projects, and/or higher costs of production. Future or continued economic weakness, failure of our customers and markets to recover from such weakness, customer financial difficulties, increases in costs of production, and reductions in spending on network maintenance and expansion could result in price concessions in certain markets or have a material adverse effect on demand for our products and consequently on our business, financial condition, and results of operations.

Our success depends upon our ability to effectively plan and manage our resources and restructure our business. Our ability to successfully offer our products and services in a rapidly evolving market requires an effective planning, forecasting, and management process to enable us to effectively scale and adjust our business and business models in response to fluctuating market opportunities and conditions. From time to time, we have increased investment in our business by increasing headcount, acquiring companies, and increasing our investment in research and development, sales and marketing, and other parts of our business. Conversely, in the last few years and in 2021, we have initiated restructuring plans to realign our workforce as a result of organizational and leadership changes, which resulted in restructuring charges. Our ability to achieve the anticipated cost savings and other benefits from these initiatives is subject to many estimates and assumptions, which are subject to uncertainties. If our estimates and assumptions are incorrect, if we are unsuccessful at implementing changes, or if other unforeseen events occur, our business and results of operations could be adversely affected.

Our acquisitions or divestitures of businesses could disrupt our business and harm our financial condition and stock price, and equity issued as consideration for acquisitions may dilute the ownership of our stockholders. We have made, and may continue to make, acquisitions in order to enhance our business and invest significant resources to integrate the businesses we acquire. The success of each acquisition depends in part on our ability to realize the business opportunities and manage numerous risks, including, but not limited to: problems combining the purchased operations, technologies or products, unanticipated costs, higher operating expenses, liabilities, litigation, diversion of management's time and attention, adverse effects on existing business relationships with suppliers and customers, risks associated with entering markets in which we have no or limited prior experience, and where competitors in such markets have stronger market positions, initial dependence on unfamiliar supply chains, failure of our due diligence processes to identify significant problems, liabilities or other challenges of an acquired company or technology, and the potential loss of key employees, customers, distributors, vendors, and other business partners of the companies we acquire.

Acquisitions of high-technology companies are inherently risky and subject to many factors outside of our control. There can be no assurance that our previous or future acquisitions will be successful or that we will be able to successfully integrate any businesses, products, technologies, or personnel that we might acquire or that the transaction will advance our business strategy. Further, we may not realize anticipated revenues or other benefits associated with our acquisitions. In addition, we have divested, and may in the future divest, businesses, product lines, or assets. These initiatives may also require significant separation activities that could result in the diversion of management's time and attention, loss of employees, substantial separation costs, and accounting charges for asset impairments. No assurance can be given that any acquisitions or divestitures will not materially adversely affect our business, operating results or financial condition.

In connection with certain acquisitions, we may agree to issue common stock, or assume equity awards, that dilute the ownership of our current stockholders, use a substantial portion of our cash resources, assume liabilities (both known and unknown), incur tax expenses, record goodwill and amortizable intangible assets as well as restructuring and other related expenses. We may incur additional acquisition-related debt, which could increase our leverage and potentially negatively affect our credit ratings resulting in more restrictive borrowing terms or increased borrowing costs, thereby limiting our ability to borrow. Any of the foregoing, and other factors, could harm our ability to achieve anticipated levels of profitability or other financial benefits from our acquired or divested businesses, product lines or assets or to realize other anticipated benefits of divestitures or acquisitions.

Long sales and implementation cycles for our products and customer urgency related to ship dates to fill large orders may cause our revenues and operating results to vary significantly from quarter-to-quarter. We experience lengthy sales cycles because our customers' decisions to purchase certain of our products, particularly new products, involve a significant commitment of their resources and a lengthy evaluation and product qualification process. Customers design and implement

large network deployments following lengthy procurement processes, which may impact expected future orders. Following a purchase, customers may also deploy our products slowly and deliberately. Customers with large networks often expand their networks in large increments on a periodic basis and place large orders on an irregular basis. These sales and implementation cycles, as well as our expectation that customers will place large orders with urgent ship dates, may cause our revenues and operating results to vary significantly from quarter-to-quarter.

Our ability to recognize revenue in a particular period is contingent on the timing of product orders and deliveries and/or our sales of certain software, subscriptions, and professional support and maintenance services. In some of our businesses, our quarterly sales have periodically reflected a pattern in which a disproportionate percentage of each quarter's total sales occurs towards the end of the quarter. Further, we build certain products only when orders are received. Since the volume of orders received late in any given fiscal quarter remains unpredictable, if orders for custom products are received late in any quarter, we may not be able to recognize revenue for these orders in the same period or meet our expected quarterly revenues. Similarly, if we were to take actions or events occur, which encourage customers to place orders or accept deliveries earlier than anticipated or our customers were to continue to accelerate ordering of our products in response to global supply constraints, extended lead times or other market pressures, our ability to meet our expected revenues in future quarters could be adversely affected. We also determine our operating expenses based on our anticipated revenues and technology roadmap and a high percentage of our expenses are fixed in the short and medium term. Any failure or delay in generating or recognizing revenue could cause significant variations in our operating results and operating margin from quarter-to-quarter.

In addition, services revenue accounts for a significant portion of our revenue, comprising 35%, 36%, and 35% of total revenue in 2021, 2020, and 2019, respectively. We expect our sales of new or renewal professional services, support, and maintenance contracts to fluctuate due to end-customers' level of satisfaction with our products and services, the prices of our products and services or those offered by our competitors, and reductions in our end-customers' spending levels. We recognize professional services when delivered, and we recognize support and maintenance and SaaS revenue periodically over the term of the relevant service period.

Further, we recognize certain software revenues periodically over the term of the relevant use or subscription periods and as a result, the related software and support and maintenance revenue we report each fiscal quarter is derived from the recognition of deferred revenue from contracts entered into during previous fiscal quarters. Any fluctuation in such new or renewed contracts in any one fiscal quarter may not be fully or immediately reflected in revenue and could negatively affect our revenue in future fiscal quarters.

RISKS RELATED TO OUR TECHNOLOGY AND BUSINESS OPERATIONS

If the demand for network and IP systems does not continue to grow, our business, financial condition, and results of operations could be adversely affected. A substantial portion of our business and revenues depends on the growth of secure IP infrastructure as well as customers that depend on the continued growth of IP services to deploy our products in their networks and IP infrastructures. As a result of changes in the economy, capital spending, or the building of network capacity in excess of demand (all of which have, in the past, particularly affected telecommunications service providers), spending on IP infrastructure can vary, which could have a material adverse effect on our business, financial condition, and results of operations. In addition, a number of our existing customers are evaluating the build-out of their next generation networks. During the decision-making period when our customers are determining the design of those networks and the selection of the software and equipment they will use in those networks, such customers may greatly reduce or suspend their spending on secure IP infrastructure. Any reduction or suspension of spending on IP infrastructure is difficult to predict, and may be due to events beyond our control, such as the COVID-19 pandemic. This, in turn, can make it more difficult to accurately predict revenues from customers, can cause fluctuations in the level of spending by customers and, even where our products are ultimately selected, can have a material adverse effect on our business, financial condition, and results of operations.

If we do not successfully anticipate technological shifts, market needs and opportunities, we may not be able to compete effectively and our ability to generate revenues will suffer. If we are unable to anticipate future technological shifts, market needs, requirements or opportunities, or fail to develop and introduce new products, product enhancements or business strategies to meet those requirements or opportunities in a timely manner or at all, it could cause us to lose customers, substantially decrease or delay market acceptance and sales of our present and future products and services, and significantly harm our business, financial condition, and results of operations. In addition, if we invest in developing products for a market that does not develop, it could significantly harm our business, financial condition, and results of operations. Even if we are able to anticipate, develop, and commercially introduce new products, enhancements or business strategies, there can be no assurance that any new products, enhancements or business strategies will achieve widespread market acceptance.

Our strategy to expand our software business could adversely affect our competitive position. The success of our strategy to expand our software business is subject to a number of risks and uncertainties, including but not limited to:

- the additional development efforts and costs required to create new software products and to make our products compatible with multiple technologies;
- the possibility that our current or new software products may not achieve widespread customer adoption;
- the possibility that our strategy could erode our revenue and gross margins;
- the impact on our financial results of longer periods of revenue recognition for certain types of software products and changes in tax treatment associated with software sales;
- the additional costs associated with both domestic and international regulatory compliance, data protection, privacy and security laws, industry data security standards, and changes we need to make to our distribution chain in connection with increased software sales;
- the ability of our disaggregated hardware and software products to operate independently and/or to integrate with current and future third-party products; and
- issues with third-party technologies used with our software products, which may be attributed to us.

If any of our current or new software products or business strategies do not gain market acceptance or meet our expectations for growth, our ability to meet future financial targets may be adversely affected and our competitive position and our business and financial results could be harmed.

If our products do not interoperate with our customers' networks, installations will be delayed or cancelled and could harm our business. Our products are designed to interface with our customers' existing networks, each of which have different specifications and utilize multiple protocol standards and products from other vendors. Many of our customers' networks contain multiple generations of products that have been added over time as these networks have grown and evolved. Our products must interoperate with many or all of the products within these networks as well as future products to meet our customers' requirements. If we find errors in the existing software or defects in the hardware used in our customers' networks, we may need to modify our software or hardware to fix or overcome these errors so that our products will interoperate and scale with the existing software and hardware, which could be costly and could negatively affect our business, financial condition, and results of operations. In addition, if our products do not interoperate with those of our customers' networks, demand for our products could be adversely affected or orders for our products could be cancelled. This could hurt our operating results, damage our reputation, and seriously harm our business and prospects.

Our products incorporate and rely upon licensed third-party technology. We integrate licensed third-party technology into certain of our products. From time to time, we may be required to renegotiate our current third-party licenses or license additional technology from third parties to develop new products or product enhancements or to facilitate new business models. Third-party licenses may not be available or continue to be available to us on commercially reasonable terms and some of our agreements with our licensors may be terminated for convenience by them. In addition, we cannot be certain that our licensors are not infringing on the intellectual property rights of third parties or that our licensors have sufficient rights to the licensed intellectual property in all jurisdictions in which we may sell our products. Third-party technology we incorporate into our products that is deemed to infringe on the intellectual property of others may result, and in some cases has resulted, in limitations on our ability to source technology from those third parties, restrictions on our ability to sell products that incorporate the infringing technology, increased exposure to liability that we will be held responsible for incorporating the infringing technology in our products, and increased costs involved in removing that technology from our products or developing substitute technology. Our inability to comply with, maintain or re-license any third-party licenses required in our products or our inability to obtain third-party licenses necessary to develop new products and product enhancements, could require us to develop substitute technology or obtain substitute technology of lower quality or performance standards or at a greater cost, any of which could delay or prevent product shipment and harm our business and results of operations.

We may face difficulties enforcing our proprietary rights, which could adversely affect our ability to compete. We rely on a combination of patents, copyrights, trademarks, trade secret laws and contractual restrictions on disclosure of confidential and proprietary information, to protect our proprietary rights. There can be no assurance that any of our patent applications will result in issued patents with the scope of the claims we seek or that any of our patents or other proprietary rights will not be challenged, invalidated, infringed or circumvented or that our rights will, in fact, provide competitive advantages to us or protect our technology. If we cannot protect our intellectual property rights, we could incur costly product redesign efforts, discontinue certain product offerings and experience other competitive harm.

Unauthorized parties may also attempt to copy aspects of our products or obtain and use our proprietary information. We generally enter into confidentiality or license agreements with our employees, consultants, vendors, and customers, and generally limit access to and distribution of our proprietary information. However, we cannot assure you that we have entered into such agreements with all parties who may have or have had access to our confidential information or that these agreements will not be breached. We cannot guarantee that any of the measures we have taken will prevent misappropriation of our technology. We are also vulnerable to third parties who illegally distribute or sell counterfeit, stolen or unfit versions of our

products, which has happened in the past and could happen in the future. Such sales could have a negative impact on our reputation and business.

In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the U.S. The outcome of any actions taken in these foreign countries may be different than if such actions were determined under the laws of the U.S. If we are unable to protect our proprietary rights, we may be at a competitive disadvantage to others who need not incur the substantial expense, time, and effort required to create innovative products that have enabled our success.

We depend on contract manufacturers and original design manufacturers as well as single-source and limited source suppliers, including for key components such as semiconductors. Our operations depend on our ability to anticipate our needs for components, products and services, as well as the ability of our manufacturers, original design manufacturers, and suppliers to deliver sufficient quantities of quality components, products and services at reasonable prices and in time for us to meet critical schedules for the delivery of our own products and services. Given the wide variety of solutions that we offer, the large and diverse distribution of our manufactures and suppliers, and the long lead times required to manufacture, assemble and deliver certain products, problems could arise in production, planning and inventory management that could seriously harm our business. For example, there is currently a worldwide shortage of key components, such as semiconductor products, that has caused us to experience increased prices and extended lead times for certain key components. The shortage of semiconductors has caused a significant disruption to our production schedule and may give rise to a substantial adverse effect on our financial condition or results of operations. Any delay in our ability to produce and deliver our products could cause our customers to purchase alternative products from our competitors. In addition, our ongoing efforts to optimize the efficiency of our supply chain could cause supply disruptions and be more expensive, time-consuming and resource-intensive than expected. Other manufacturing and supply problems that we could face are described below.

- ***Manufacturing Issues.*** We may experience supply shortfalls or delays in shipping products to our customers if our manufacturers experience delays, disruptions, or quality control problems in their manufacturing operations, or if we have to change or add manufacturers or contract manufacturing locations. Although we have contracts with our manufacturers that include terms to protect us in the event of an early termination, we may not have adequate time to transition all of our manufacturing needs to an alternative manufacturer under comparable commercial terms. We have experienced in the past and may experience in the future an increase in the expected time required to manufacture our products or ship products, including delays due to the manufacturing restrictions, travel restrictions and other restrictions to control the spread of COVID-19. Moreover, a significant portion of our manufacturing is performed in foreign countries and is therefore subject to risks associated with doing business outside of the U.S., including import restrictions, export restrictions, disruptions to our supply chain, cyberattacks, pandemics, regional climate-related events, or regional conflicts.
- ***Single-Source Suppliers.*** We rely on single or limited sources for many of our components due to technology, availability, price, quality, scale or customization needs. In addition, there has been consolidation among certain suppliers of our components. Consolidation among suppliers can result in the reduction of the number of independent suppliers of components available to us, which could negatively impact our ability to access certain component parts or the prices we have to pay for such parts and may impact our gross margins. Additionally, if certain components that we receive from our suppliers have defects or other quality issues, we may have to replace or repair such components, and we could be subject to claims based on warranty, product liability, epidemic or delivery failures that could lead to significant expenses.
- ***Supply-chain Disruption.*** Any disruptions to our supply chain, significant increase in component costs, or shortages of critical components, could decrease our sales, earnings, and liquidity or otherwise adversely affect our business and result in increased costs. Such a disruption could occur as a result of any number of events, including, but not limited to: an extended closure of or any slowdown at our suppliers' plants or shipping delays due to efforts to limit the spread of COVID-19, market shortages due to the surge in demand from other purchasers for critical components, increases in prices, the imposition of regulations, quotas or embargoes or tariffs on components or our products themselves, labor stoppages, transportation delays or failures affecting the supply chain and shipment of materials and finished goods, third-party interference in the integrity of the products sourced through the supply chain, cyberattacks, the unavailability of raw materials, severe weather conditions, adverse effects of climate change, natural disasters, geopolitical developments, war or terrorism and disruptions in utilities and other services. In addition, the development, licensing, or acquisition of new products in the future may increase the complexity of supply chain management. Failure to effectively manage the supply of components and products would adversely affect our business.
- ***Component Supply Forecast.*** We provide demand forecasts for our products to our manufacturers, who order components and plan capacity based on these forecasts. If we overestimate our requirements, our manufacturers may assess charges, or we may have liabilities for excess inventory or raw materials, each of which could negatively affect our gross margins. If we underestimate our requirements, our contract manufacturers may have inadequate time, materials, and/or components

required to produce our products. This could increase costs or delay or interrupt manufacturing of our products, resulting in delays in shipments and deferral or loss of revenues and could negatively impact customer satisfaction. Any future spike in growth in our business, in the use of certain components we share in common with other companies, in IT spending, or in the economy in general, is likely to create greater short-term pressure on us and our suppliers to accurately forecast overall component demand and to establish optimal component inventories. If shortages or delays persist, we may not be able to secure enough components at reasonable prices or of acceptable quality to build and deliver products in a timely manner, and our revenues, gross margins and customer relationships could suffer.

- *Alternative Sources of Supply.* The development of alternate sources for components is time-consuming, difficult, and costly. In addition, the lead times associated with certain components are lengthy. For example, there is currently a worldwide shortage of semiconductor products that has caused us to experience increased prices and extended lead times on some semiconductor products, and we expect these increased prices and extended lead times for semiconductor products to continue for the foreseeable future, which may impact our production and delivery schedules or affect the price of semiconductor products. Also, long-term supply and maintenance obligations to customers increase the duration for which specific components are required, which may further increase the risk of component shortages or increase the cost of carrying inventory. In the event of a component shortage, supply interruption or significant price increase from these suppliers, we may not be able to locate alternative sources in a timely manner. If we are unable to buy these components in quantities sufficient to meet our requirements on a timely basis, we will not be able to deliver products and services to our customers, which would seriously affect present and future sales, and would, in turn, adversely affect our business, financial condition, and results of operations.
- *COVID-19 Impact.* Delays in production or in product deliveries due to the COVID-19 pandemic have adversely affected and may continue to adversely affect our business, financial condition, and results of operations. For example, we have experienced supply constraints due to both constrained manufacturing capacity, as well as component parts shortages as our component vendors were also facing supply constraints, and increased logistics costs due to air travel and transport restrictions that limited the availability of flights on which we ship our products. Additionally, cost increases and extended shipping times for ocean transit have increased our dependence on higher-cost air freight. These challenges have resulted in extended lead-times to our customers and have had a negative impact on our ability to recognize associated revenue and has resulted in and may continue to result in an increase in accelerated ordering for certain of our products. We continue to work with government authorities and implement safety measures to ensure that we are able to continue manufacturing and distributing our products during the COVID-19 pandemic; however, we could still experience an unforeseen disruption to our supply chain that could impact our operations.

System security risks, data protection breaches, and cyberattacks could compromise our and our customers' proprietary information, disrupt our internal operations and harm public perception of our products. In the ordinary course of business, we store sensitive data, including intellectual property, personal data, our proprietary business information and that of our employees, contractors, customers, suppliers, vendors, and other business partners on our networks. In addition, we store sensitive data through cloud-based services that may be hosted by third parties and in data center infrastructure maintained by third parties. Secure maintenance of this information is critical to our operations and business strategy. On an ongoing and regular basis, we have been, and expect to be, subject to cyberattacks, and may be subject to ransomware and distributed denial-of-service attacks, spearfishing attacks and other attempted intrusions on our networks and systems by a wide range of actors, including, but not limited to, nation states, criminal enterprises, terrorist organizations, and other organizations or individuals, as well as errors, wrongful conduct or malfeasance by employees and third-party service providers (collectively, "malicious parties"). We expect our third-party vendors to be subject to similar cyberattacks, ransomware and distributed denial-of-service attacks, spearfishing attacks and other attempted intrusions. The increasing occurrence of high-profile data breaches and ransomware attacks provides evidence of an environment increasingly hostile to information security.

Despite our security measures, and those of our third-party vendors, our information systems, infrastructure, and data have experienced security incidents and breaches and may be subject to or vulnerable to breaches or attacks, including ransomware and distributed denial-of-service attacks, in the future. If any breach or attack compromises our networks or those of our vendors, creates system disruptions or slowdowns, or exploits security vulnerabilities or critical security defects of our products and services, the information stored on our networks or the networks of our customers, suppliers or business partners could be accessed and modified, publicly disclosed, lost, destroyed or stolen, and we may be subject to claims for contractual, tort or equitable liability and suffer reputational and financial harm. In addition, malicious parties may compromise our software, including the open-source software used in our products, or our manufacturing supply chain to embed malicious hardware, components, and software that are designed to defeat or circumvent encryption and other cybersecurity measures to interfere with the operation of our networks, expose us or our products to cyberattacks, or gain unauthorized access to our or our customers' systems and information. If such actions are successful, they could diminish customer trust in our products, harm our business reputation, and adversely affect our business and financial condition.

Because techniques used by malicious parties to access or sabotage networks are sophisticated, change frequently, and generally are not recognized until after they are used, we may be unable to anticipate or immediately detect these techniques or the vulnerabilities they have caused or other potential vulnerabilities or security defects. Further, when vulnerabilities are discovered, we evaluate the risk, prioritize our responses, apply patches or take other remediation actions and notify customers, business partners, and suppliers as appropriate. Exploitation of vulnerabilities and critical security defects, prioritization errors in remedying vulnerabilities or security defects, failure of third-party providers to remedy vulnerabilities or security defects, or customers not deploying security releases or deciding not to upgrade products, services or solutions, could, in each case, result in claims of liability against us, damage our reputation or otherwise harm our business.

All of this requires significant resources and attention from management and our employees, and the economic costs to us to eliminate or alleviate these issues could be significant and may be difficult to anticipate or measure. The market perception of the effectiveness of our products and our overall reputation could also be harmed as a result of any actual or perceived breach of security that occurs in our network or in the network of a customer of our products, regardless of whether the breach is attributable to our products, the systems of other vendors and/or to actions of malicious parties. This could impede our sales, manufacturing, distribution or other critical functions, which could have an adverse impact on our financial results.

Additionally, we could be subject to measures that regulate the security of the types of products we sell. Such regulations may result in increased costs and delays in product releases and changes in features to achieve compliance, which may impact customer demand for our products, and result in regulatory investigations, potential fines, and litigation in connection with a compliance concern, security breach or related issue, and potential liability to third parties arising from such breaches. Further, in response to actual or anticipated cybersecurity regulations or contractual security requirements negotiated with our customers, we may need to make changes to existing policies, processes and supplier relationships that could impact product offerings, release schedules and service response times, which could adversely affect the demand for and sales of our products and services. We maintain product liability insurance, but there is no guarantee that such insurance will be available or adequate to protect against all such claims. If our business liability insurance coverage is inadequate, or future coverage is unavailable on acceptable terms or at all, our financial condition and results of operations could be harmed.

Disruption in our distribution channels could seriously harm our future revenue and financial condition and increase our costs and expenses. The majority of our revenues are derived through value-added resellers and distributors, most of which also sell our competitors' products, and some of which sell their own competing products. The loss of or reduction in sales to our resellers or distributors could materially reduce our revenues. Our competitors may in some cases be effective in leveraging their market share positions or in providing incentives to current or potential resellers and distributors to favor their products or to prevent or reduce sales of our products. If we are unable to develop and maintain relationships with our partners, develop new relationships with value-added resellers and distributors in new markets, expand the number of distributors and resellers in existing markets, manage, train or motivate existing value-added resellers and distributors effectively, or if these partners are not successful in their sales efforts, sales of our products may decrease, and our business, financial condition, and results of operations would suffer. We recognize a portion of our revenues at the time we sell products to our distributors. If these sales are made based on inaccurate or untimely information, the amount or timing of our revenues could be adversely impacted. Further, our distributors may increase orders during periods of product shortages, cancel orders if their inventory is too high, or delay orders in anticipation of new products. They also may adjust their orders in response to the supply of our products and the products of our competitors that are available to them, and in response to seasonal fluctuations in end-user demand.

To develop and expand our distribution channel, we continue to offer attractive channel programs to potential partners and have previously entered into OEM agreements with partners to rebrand and resell our products as part of their product portfolios. These relationships require processes and procedures that may be costly or challenging to implement, maintain, and manage. Our failure to successfully manage and develop our distribution channel could adversely affect our ability to generate revenues from the sale of our products. We also depend on our global channel partners to comply with applicable legal and regulatory requirements. Any failure by our partners to comply with these requirements, could have a material adverse effect on our business, operating results, and financial condition.

We rely on the performance of our business systems and third-party systems and processes. Some of our business processes depend upon our IT systems, the IT systems and processes of third parties, and the interfaces between the two. For example, IBM currently provides us with a broad range of information technology services, such as applications, including support, development and maintenance; infrastructure management and support, including for server storage and network devices; and end user support including service desk. IBM provides services to us through cloud providers, third party providers, and off-site facilities that may be vulnerable to damage or interruption, including performance problems from earthquakes, hurricanes, floods, fires, power loss, telecommunications failures, equipment failure, adverse events caused by operator error, cybersecurity attacks, pandemics, and similar events. In addition, because we lease off-site data center facilities, we cannot be assured that we will be able to expand our data center infrastructure to meet user demand in a timely manner, or on favorable financial terms. If we have issues receiving and processing data, this may delay our ability to provide products and services to our customers and business partners and damage our business. We also rely upon the performance of the systems and processes of our contract

manufacturers to build and ship our products. If those systems and processes experience interruption or delay, the manufacture and shipment of our products in a timely manner may be impaired. Since IT is critical to our operations, in addition to the risks outlined above, problems with any of the third parties we rely on for our IT systems and services, could result in liabilities to our customers and business partners, lower revenue and unexecuted efficiencies, and impact our results of operations and our stock price. We could also face significant additional costs or business disruption if our arrangements with these third parties are terminated or impaired and we cannot find alternative services or support on commercially reasonable terms or on a timely basis or if we are unable to hire new employees in order to provide these services in-house.

Our ability to develop, market, and sell products could be harmed if we are unable to retain or hire key personnel or if our existing personnel were harmed by COVID-19. Our future success and ability to maintain a technology leadership position depends upon our ability to recruit and retain key management, engineering, technical, sales, marketing, and support personnel, which may be impacted by various COVID-19 vaccine and testing mandates, as well as our ability to maintain the health of our personnel, including during the COVID-19 pandemic. The supply of highly qualified individuals with technological and creative skills, in particular engineers, in specialized areas with the expertise to develop new products and enhancements for our current products, and provide reliable product maintenance, as well as the number of salespeople with industry expertise, is limited. Competition for people with the specialized technical skills we require is significant. None of our officers or key employees is bound by an employment agreement for any specific term. If we fail to attract new personnel or retain and motivate our current personnel, the development and introduction of new products could be delayed, our ability to market, sell, or support our products could be impaired, and our business, results of operations and future growth prospects could suffer. There can be no assurance that others will not develop technologies that are similar or superior to our technology.

A number of our team members are foreign nationals who rely on visas and entry permits in order to legally work in the U.S. and other countries. In recent years, the U.S. has increased the level of scrutiny in granting H-1B, L-1 and other business visas. Compliance with new and unexpected U.S. immigration and labor laws could also require us to incur additional unexpected labor costs and expenses or could restrain our ability to retain and attract skilled professionals. Additionally, pandemics, such as the COVID-19 pandemic, may interfere with our ability to hire or retain personnel. Any of these restrictions could have a material adverse effect on our business, results of operations and financial conditions.

Our business could be negatively impacted by corporate citizenship and ESG matters and/or our reporting of such matters.

There is an increasing focus from certain investors, customers, consumers, employees, and other stakeholders concerning corporate citizenship and environmental, social, governance (“ESG”) matters. From time to time, we may communicate certain initiatives, including goals, regarding environmental matters, diversity, responsible sourcing and social investments and other corporate citizenship and ESG matters, in our Corporate Social Responsibility Report, on our website, in our SEC filings, and elsewhere. These initiatives and goals could be difficult and expensive to implement. We could fail, or be perceived to fail, in our achievement of such initiatives or goals. In addition, we could be criticized for the scope or nature of such initiatives or goals. As our required and voluntary disclosures about corporate citizenship and other ESG matters increase, we could be criticized for the accuracy, adequacy, or completeness of such disclosures. Our reputation or other aspects of our business could be negatively impacted by all such matters, with potential material adverse effects.

LEGAL, REGULATORY, AND COMPLIANCE RISKS

We are a party to lawsuits, investigations, and other disputes. We have been named a party to litigation involving a broad range of matters, including employment matters, commercial transactions, patent infringement, copyrights, trademarks, and other rights to technologies and related standards that are relevant to our products, as well as governmental claims, and securities laws, and we may be named in additional litigation and/or governmental claims. For example, certain U.S. governmental agencies previously conducted investigations into possible violations by us of the U.S. Foreign Corrupt Practices Act, or the FCPA, which ultimately resulted in the Company entering into a settlement with the SEC that involved, among other things, the Company making a payment of \$11.8 million in August 2019. Future claims or initiated litigation may include claims against us or our manufacturers, suppliers, partners, or customers. Future claims asserted and/or litigation may be initiated by third parties, including whistleblowers, and may relate to infringement of proprietary rights, issues arising under the False Claims Act, compliance with securities laws, or other matters. The expense of initiating and defending, and in some cases settling, such litigation and investigations may be costly, and may cause us to suffer reputational harm, divert management’s attention from day-to-day operations of our business, and may require us to implement certain remedial measures that could disrupt our business, operations, results of operations, financial condition or cash flows. In addition, if we fail to comply with the terms of any settlement agreement, we could face more substantial penalties. An unfavorable resolution of one or more of these matters could have a material adverse effect on our business, results of operations, financial condition or cash flows.

Further, increased patent litigation brought by non-practicing entities may result, and in some cases has resulted, in our customers requesting or requiring us to absorb a portion of the costs of such litigation or providing broader indemnification for litigation, each of which could increase our expenses and negatively affect our business, financial condition, and results of operations. Regardless of the merit of these claims, they may require us to develop alternative technologies, enter into license

agreements, or cease engaging in certain activities or offering certain products or services. Furthermore, even arguably unmeritorious claims may be settled at significant costs to us because of the potential for high awards of damages or injunctive relief.

If any infringement or other intellectual property claim made against us or anyone we are required to indemnify is successful and we are required to pay significant monetary awards or damages to settle litigation, enter into royalty or licensing arrangements, or satisfy indemnification obligations that we have with some of our customers, or we fail to develop non-infringing technology and we incorporate infringing technology in our products, our business, financial condition, and results of operations could be materially and adversely affected.

Non-standard contract terms with telecommunications, cable and cloud service provider companies, and other large customers, including large enterprise customers, could have an adverse effect on our business or impact the amount of revenues to be recognized. Telecommunications, cable and cloud service provider companies, and other large companies, including large enterprise customers, generally have greater purchasing power than smaller entities and often request and receive more favorable terms from suppliers. We may be required to agree to such terms and conditions, which may include terms that affect the amount or timing of or our ability to recognize revenue, increase our costs, and have an adverse effect on our business, financial condition, and results of operations. Consolidation among such large customers can further increase their buying power and ability to require onerous terms from us.

In addition, other vendors may have promised but failed to deliver certain functionality to these types of customers and/or had products that caused problems or outages in their networks. For these or other reasons, these customers may request additional features from us and require substantial penalties for failure to deliver such features or for any network outages that may or may not have been caused by our products. If we are required to agree to these requests or incur penalties, the amount of revenue recognized from such sales may be negatively impacted and as a result, may negatively affect our business, financial condition and results of operations.

Regulations of our industry or of our customers could harm our operating results and future prospects. We are subject to laws, regulations, and policies affecting the sale of our products in a number of areas. For example, some governments have regulations prohibiting government entities from purchasing security products that do not meet country-specific safety, conformance or security certification criteria or in-country test requirements. Other regulations that may negatively impact our business include local content or local manufacturing requirements most commonly applicable for government, state-owned enterprise or regulated industry procurements. These types of regulations are in effect or under consideration in several jurisdictions where we do business.

The SEC requires us, as a public company who uses certain raw materials that are considered to be “conflict minerals” in our products, to report publicly on the extent to which “conflict minerals” are in our supply chain. As a provider of hardware end-products, we are several steps removed from the mining, smelting or refining of any conflict minerals. Accordingly, our ability to determine with certainty the origin and chain of custody of these raw materials is limited. Our relationships with customers and suppliers could suffer if we are unable to describe our products as “conflict-free.” We may also face increased costs in complying with conflict minerals disclosure requirements.

Environmental laws and regulations relevant to electronic equipment manufacturing or operations, including laws and regulations governing the hazardous material content of our products and the collection of and recycling of electrical and electronic equipment, may adversely impact our business and financial condition. In particular, we face increasing complexity in our product design and procurement operations as we adjust to new and future requirements relating to the chemical and material composition of our products, their safe use, the energy consumption associated with those products, climate change laws, and regulations and product take-back legislation, which could require us to cease selling non-compliant products and to reengineer our products to use compliant components, which could result in additional costs to us, disrupt our operations, and result in an adverse impact on our operating results. If we were to violate or become liable under environmental laws or if our products become non-compliant with environmental laws, our customers may refuse to purchase our products and we could incur substantial costs or face other sanctions, which may include restrictions on our products entering certain jurisdictions. The amount and timing of costs to comply with environmental laws are difficult to predict.

In addition, as a contractor and subcontractor to the U.S. government, we are subject to federal regulations pertaining to our IT systems that require compliance with certain security and privacy controls. Failure to comply with these requirements could result in a loss of federal government business, subject us to claims or other remedies for non-compliance, or negatively impact our business, financial condition, and results of operations.

Further, some governments and government agencies have implemented and could continue to implement procurement policies that impact our profitability. Procurement policies favoring more non-commercial purchases, different pricing, or evaluation criteria or government contract negotiation offers based upon the customer’s view of what our pricing should be, could affect

the margins on such contracts or make it more difficult to compete on certain types of programs. Moreover, the failure to comply with government contracting provisions could result in penalties or the ineligibility to compete for future contracts. Governments and government agencies are continually evaluating their contract pricing and financing practices, and we have no assurance regarding what changes will be proposed, if any, and their impact on our financial position, cash flows, or results of operations.

Moreover, our customers in the telecommunications industry may be subject to regulations and our business and financial condition could be adversely affected by changes in such regulations affecting our customers. Further, we could be affected by new laws or regulations on access to or commerce on IP networks in jurisdictions where we market our solutions. Regulations governing the range of services and business models that can be offered by service providers or cloud provider companies could adversely affect those customers' needs for products. Also, many jurisdictions have or are evaluating and implementing regulations relating to cybersecurity, supply chain integrity, privacy and data protection, any of which can affect the market and requirements for networking and security equipment. Additionally, certain countries where our customers operate may require that our products sold in that country be made locally or made in particular geographies, or satisfy local regulations for critical infrastructure projects, either of which could impact our ability to compete in those markets and may also negatively impact our margins due to the costs incurred to comply with these requirements.

The adoption and implementation of additional regulations could reduce demand for our products, increase the cost of building and selling our products, result in product inventory write-offs, impact our ability to ship products into affected areas and recognize revenue in a timely manner, require us to spend significant time and expense to comply with, and subject us to fines and civil or criminal sanctions or claims if we were to violate or become liable under such regulations. Any of these impacts could have a material adverse effect on our business, financial condition, and results of operations.

Governmental regulations, economic sanctions and other legal restrictions that affect international trade or affect movement and disposition of our products and component parts could negatively affect our revenues and operating results. The U.S. and other governments have imposed restrictions on the import and export of, among other things, certain telecommunications products and components, particularly those that contain or use encryption technology. Most of our products are telecommunications products that contain or use encryption technology and, consequently, are subject to restrictions. The scope, nature, and severity of such controls vary widely across different countries and may change frequently over time. In many cases, these government restrictions require a license prior to importing or exporting a good. Such licensing requirements can introduce delays into our operations as we or our channel partners must apply for the license and wait for government officials to process it or perform pre-shipment inspections; it is possible that lengthy delays will lead to the cancellation of orders by customers. Moreover, if we, our suppliers, or our channel partners fail to obtain necessary licenses prior to importing or exporting covered goods, we can be subject to government sanctions, including monetary penalties, conditions and restrictions. Such license requirements, and any fines or other sanctions imposed for their violation could negatively affect our revenues and operating results.

In addition, the U.S. and other governments have especially broad sanctions and embargoes prohibiting provision of goods or services to certain countries, territories, sanctioned governments, businesses, and individuals. We have implemented systems to detect and prevent sales into restricted countries or to prohibited entities or individuals, but there can be no assurance that our third party, downstream resellers and distributors will abide by these restrictions or have processes in place to ensure compliance.

Certain governments also impose special local content, certification, testing, source code review, escrow and governmental recovery of private encryption keys, or other cybersecurity feature requirements to protect network equipment and software procured by or for the government. Similar requirements also may be imposed in procurements by state owned entities or even private companies forming part of "critical network infrastructure" or supporting sensitive industries.

In recent years, U.S. government officials have had concerns with the security of products and services from certain telecommunications and video providers based in China, Russia, and other regions. As a result, Congress has enacted bans on the use of certain Chinese-origin components or systems either in items sold to the U.S. government or in the internal networks of government contractors and subcontractors (even if those networks are not used for government-related projects). U.S. regulations also permit the U.S. government to investigate and possibly mandate the unwinding of commercial transactions between U.S. companies and foreign suppliers. This introduces uncertainty into our supply chain, our imports of end products and our overall operational planning.

In May 2021, the U.S. President issued an executive order on cybersecurity that signals the U.S. government's interest in developing standards and guidelines pertaining to Information and Communication Technology supply chains, government network capabilities and requirements, and cyber threat and vulnerability remediation. Any or all of these standards and guidelines could impact how we develop hardware and software, what features our products have, and our role in helping the U.S. government respond to cyber threats and vulnerabilities.

Our actual or perceived failure to adequately protect personal data could adversely affect our business, financial condition, and results of operations. A wide variety of provincial, state, national, foreign, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer, and other processing of personal data. These privacy and data protection-related laws and regulations are evolving, extensive, and complex. Compliance with these laws and regulations can be costly and can delay or impede the development and offering of new products and services. In addition, the interpretation and application of privacy and data protection-related laws in some cases is uncertain, and our legal and regulatory obligations are subject to frequent changes, including the potential for various regulator or other governmental bodies to enact new or additional laws or regulations, to issue rulings that invalidate prior laws or regulations, or to increase penalties. Moreover, there are a number of other legislative proposals worldwide, including in the U.S. at both the federal and state level, that could impose additional and potentially conflicting obligations in areas affecting our business. Examples of recent and anticipated developments that have or could impact our business include the following:

- The General Data Protection Regulation imposes stringent data protection requirements and provides significant penalties for noncompliance. We have relied on the use of standard contractual clauses approved by the European Union (“EU”) Commission to legitimize the transfer of personal data outside of the EU to certain jurisdictions, including the U.S. The standard contractual clauses have been subject to legal challenge. In relation to the “Schrems II” decision by the Court of Justice of the EU on July 16, 2020, and its impact on our data transfer mechanism, we may experience additional costs associated with increased compliance burdens and new contract negotiations with third parties that aid in processing of data on our behalf. Further, in June 2021, the EU issued new standard contractual clauses that we will need to enter into with our customers, which will cause us to incur costs and allocate resources in order to manage the contract updating process. We may face reluctance or resistance by our current and prospective customers to use our products and services. We may also find it necessary to make further changes to our handling of personal data of residents of the European Economic Area (“EEA”). The regulatory environment applicable to the handling of EEA residents’ personal data, and our actions in addressing such environment, may cause us to assume additional liabilities or incur additional costs and could result in our business, operating results and financial condition being harmed. In addition, we and our customers may face a risk of enforcement actions by data protection authorities in the EEA relating to personal data transfers to us and by us from the EEA. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel, and negatively affect our business, operating results, and financial condition.
- Data protection legislation is also becoming increasingly common in the U.S. at both the federal and state level. The effects of the California Consumer Privacy Act (“CCPA”), which became effective and enforceable in 2020, and other similar laws may require us to modify our data processing practices and policies, adapt our goods and services, and incur substantial costs and expenses to comply. The CCPA also provides for civil penalties for violations and a private right of action for data breaches that may increase the frequency and cost associated with data breach litigation. Further, the new California Privacy Rights Act (“CPRA”) which was passed in November 2020 and will come into effect on January 1, 2023, with a “lookback” period to January 1, 2022, significantly modifies the CCPA. Likewise, both Virginia and Colorado provide similar rights in the Virginia Consumer Data Protection Act, which will take effect on January 1, 2023, and the Colorado Privacy Act which will take effect on July 1, 2023. These modifications and any new legislation may result in additional uncertainty and require us to incur additional costs and expenses in our effort to comply.
- The Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws to impose standards for the online collection, use, dissemination, and security of data. In addition, we may be or become subject to data localization laws mandating that data collected in a foreign country be processed and stored within that country.
- Both U.S. and non-U.S. governments are considering regulating artificial intelligence (“AI”) and machine learning, which may impact our products and services and cause us to incur costs and expenses in order to comply. Specifically, the EU recently published a draft AI regulation; if passed, the new law would cause us to incur costs and expenses in order to comply.

Our actual or perceived failure to comply with applicable laws and regulations or other obligations to which we may be subject relating to personal data, or to protect personal data from unauthorized access, use, or other processing, could result in enforcement actions and regulatory investigations against us, claims for damages by customers and other affected individuals, fines, damage to our reputation, and loss of goodwill, any of which could have a material adverse effect on our operations, financial performance, and business. Further, evolving and changing definitions of personal data and personal information, within the EU, the U.S., U.K., and elsewhere, including the classification of IP addresses, machine identification information, location data, and other information, may limit or inhibit our ability to operate or expand our business, including limiting business relationships and partnerships that may involve the sharing or uses of data, and may require significant costs, resources, and efforts in order to comply.

FINANCIAL RISKS

Our financial condition and results of operations could suffer if there is an impairment of goodwill or purchased intangible assets. As of December 31, 2021, our goodwill was \$3,762.1 million, and our purchased intangible assets were \$284.3 million. We are required to test intangible assets with indefinite lives, including goodwill, annually or, in certain instances, more frequently, and may be required to record impairment charges, which would reduce any earnings or increase any loss for the period in which the impairment was determined to have occurred. Our goodwill impairment analysis is sensitive to changes in key assumptions used in our analysis. If the assumptions used in our analysis are not realized, it is possible that an impairment charge may need to be recorded in the future. We cannot accurately predict the amount and timing of any impairment of goodwill or other intangible assets. However, any such impairment would have an adverse effect on our results of operations.

Changes in effective tax rates, the adoption of new U.S. or international tax legislation, or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our results. Our future effective tax rates and the amount of our taxable income could be subject to volatility or adversely affected by the following: earnings being lower than anticipated in countries where we have lower statutory rates and higher than anticipated earnings in countries where we have higher statutory rates; changes in the valuation of our deferred tax assets and liabilities; expiration of, or lapses in, the research and development (“R&D”) tax credit laws applicable to us; transfer pricing adjustments related to certain acquisitions, including the license of acquired intangibles under our intercompany R&D cost sharing arrangement; costs related to intercompany restructuring; tax effects of share-based compensation; challenges to our methodologies for valuing developed technology or intercompany arrangements; limitations on the deductibility of net interest expense; or changes in tax laws, regulations, accounting principles, or interpretations thereof. Our future effective tax rate may be impacted by judicial decisions, changes in interpretation of regulations, as well as additional legislation and guidance.

Proposals to reform U.S. and foreign tax laws could significantly impact how U.S. multinational corporations are taxed on foreign earnings and could increase the U.S. corporate tax rate. Although we cannot predict whether or in what form these proposals may become law, several of the proposals considered, if enacted into law, could have an adverse impact on our effective tax rate, income tax expense, and cash flows. Further, the Organisation for Economic Co-operation and Development (the “OECD”), an international association of 38 countries, including the U.S., has issued guidelines that change long-standing tax principles. The OECD guidelines may introduce tax uncertainty as countries amend their tax laws to adopt certain parts of the guidelines. Some countries have enacted, and others have proposed, taxes based on gross receipts applicable to digital services, regardless of profitability. Recently, substantially all member countries of the OECD/G20 Inclusive Framework agreed to certain tax principles, including a global minimum tax of 15%. Additional changes to global tax laws are likely to occur, and such changes may adversely affect our tax liability.

In addition, we are generally subject to the continuous examination of our income tax returns by the Internal Revenue Service, and other tax authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes, but the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment by management, and there are transactions where the ultimate tax determination is uncertain. Although we believe that our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our consolidated financial statements and may materially affect our financial results in the period or periods for which such determination is made.

We are subject to risks arising from our international operations, which may adversely affect our business, financial condition, and results of operations. We derive a substantial portion of our revenues from our international operations, and we plan to continue expanding our business in international markets. We conduct significant sales and customer support operations directly and indirectly through our distributors and value-added resellers in countries throughout the world and depend on the operations of our contract manufacturers and suppliers that are located outside of the U.S. In addition, a portion of our R&D and our general and administrative operations are conducted outside the U.S. As a result of our international operations, we are affected by economic, business, regulatory, social, and political conditions in foreign countries, including the following:

- changes in general IT spending;
- the impact of the COVID-19 pandemic, and any other adverse public health developments, epidemic disease or other pandemic in the countries in which we operate or where our customers are located;
- the imposition of government controls, inclusive of critical infrastructure protection;
- changes in trade controls, economic sanctions, or other international trade regulations, which may affect our ability to import or export our products to or from various countries;
- laws that restrict sales of products that are developed, manufactured, or incorporate components or assemblies sourced from certain countries or suppliers to specific customers (e.g., U.S. federal government departments and agencies) and industry segments, or for particular uses;

- varying and potentially conflicting laws and regulations, changes in laws and interpretation of laws, misappropriation of intellectual property and reduced intellectual property protection;
- political uncertainty, including demonstrations, that could have an impact on product delivery;
- fluctuations in local economies, including inflationary conditions that could make our solutions more expensive or could increase our costs of doing business in certain countries;
- fluctuations in currency exchange rates (see Quantitative and Qualitative Disclosures about Market Risk for more information);
- tax policies, treaties or laws that could have an unfavorable business impact;
- the negotiation and implementation of free trade agreements between the U.S. and other nations;
- data privacy rules and other regulations that affect cross border data flow; and
- theft or unauthorized use or publication of our intellectual property and other confidential business information.

Any or all of these factors has or could have an adverse impact on our business, financial condition, and results of operations.

Moreover, local laws and customs in many countries differ significantly from or conflict with those in the U.S. or in other countries in which we operate. In many foreign countries, it is common for others to engage in business practices that are prohibited by our internal policies and procedures or U.S. regulations. Certain countries (such as Russia, China and EU member nations with regard to Iran trade) prohibit individuals and companies resident in or operating within their borders to comply with foreign sanctions imposed on such countries themselves or on third countries. There can be no assurance that our employees, contractors, channel partners, and agents will not take actions in violation of our policies and procedures, which are designed to ensure compliance with U.S. and foreign laws and policies. Violations of laws or key control policies by our employees, contractors, channel partners, or agents could result in termination of our relationship, financial reporting problems, fines, and/or penalties for us, or prohibition on the importation or exportation of our products and could have a material adverse effect on our business, financial condition and results of operations.

There are risks associated with our outstanding and future indebtedness. As of December 31, 2021, we had \$1,700.0 million in aggregate principal amount of outstanding senior notes, which we refer to collectively as (the “Notes”). In April 2019, we entered into a credit agreement (the “Credit Agreement”) with certain institutional lenders that provides for a five-year \$500.0 million unsecured revolving credit facility.

We may not be able to generate sufficient cash flow to enable us to satisfy our expenses, make anticipated capital expenditures or service our indebtedness, including the Notes. Our ability to pay our expenses, satisfy our debt obligations, refinance our debt obligations and fund planned capital expenditures is dependent upon our future performance and other factors discussed in this section. However, there can be no assurance that we will be able to manage any of these risks successfully.

The indenture that governs the Notes contains various covenants that limit our ability and the ability of our subsidiaries to, among other things: incur liens, incur sale and leaseback transactions, and consolidate or merge with or into, or sell substantially all of our assets to another person. Further, the Credit Agreement contains two financial covenants along with customary affirmative and negative covenants that include the following:

- maintenance of a leverage ratio no greater than 3.0x (provided that if a material acquisition has been consummated, we are permitted to maintain a leverage ratio no greater than 3.5x for up to four quarters) and an interest coverage ratio no less than 3.0x; and
- covenants that limit or restrict the ability of the Company and its subsidiaries to, among other things, grant liens, merge or consolidate, dispose of all or substantially all of its assets, change their accounting or reporting policies, change their business and incur subsidiary indebtedness, in each case subject to customary exceptions for a credit facility of this size and type.

As a result of these covenants, we are limited in the manner in which we can conduct our business, and we may be unable to engage in favorable business activities or finance future operations or capital needs. Accordingly, these restrictions may limit our ability to successfully operate our business. In addition, under applicable U.S. tax laws and regulations, there are limitations on the deductibility of net business interest expenses. As a result, if our taxable income were to decline, we may not be able to fully deduct our net interest expense, which could have a material impact on our business.

Further, we receive debt ratings from the major credit rating agencies in the U.S. Factors that influence our credit ratings include financial strength as well as transparency with rating agencies and timeliness of financial reporting. There can be no assurance that we will be able to maintain our credit ratings and failure to do so could adversely affect our cost of funds and related margins, liquidity, competitive position and access to capital markets.

Our investments are subject to risks, which may cause losses and affect the liquidity of these investments. We have substantial investments in asset-backed and mortgage-backed securities, certificates of deposit, commercial paper, corporate debt securities, foreign government debt securities, money market funds, mutual funds, time deposits, U.S. government agency securities, and U.S. government securities. We also have investments in privately-held companies. Certain of our investments are subject to general credit, liquidity, market, sovereign debt, and interest rate risks. Our future investment income may fall short of expectations due to changes in interest rates or if the decline in fair value related to creditworthiness of our publicly traded debt investments is judged to be material. In addition, should financial market conditions worsen in the future, investments in some financial instruments may be subject to risks arising from market liquidity and credit concerns, which could have a material adverse effect on our liquidity, financial condition, and results of operations.

The elimination of LIBOR after June 2023 may affect our financial results. All LIBOR tenors, which are relevant to the Company will cease to be published or will no longer be representative after June 30, 2023, and therefore, any of our LIBOR-based borrowings and interest rate derivatives that extend beyond June 30, 2023 will need to be converted to a replacement rate.

GENERAL RISK FACTORS

Failing to adequately evolve our financial and managerial control and reporting systems and processes, or any weaknesses in our internal controls may adversely affect investor perception, and our stock price. We will need to continue to improve our financial and managerial control and our reporting systems and procedures to manage and grow our business effectively in the future. We are required to assess the effectiveness of our internal control over financial reporting annually and to disclose in our filing if such controls were unable to provide assurance that a material error would be prevented or detected in a timely manner. If in the future, our internal controls over financial reporting are determined to not be effective, resulting in a material weakness, investor perceptions regarding the reliability of our financial statements may be adversely affected, which could cause a decline in the market price of our stock and otherwise negatively affect our liquidity and financial condition.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum. The exclusive forum provisions in our bylaws may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our current or former directors, officers, or other employees, which may discourage such lawsuits against us and our current or former directors, officers, and other employees. Alternatively, if a court were to find the exclusive forum provisions contained in our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could have a material and adverse impact on our business.

ITEM 1B. Unresolved Staff Comments

Not applicable.

ITEM 2. Properties

Our corporate headquarters is located at an owned site in Sunnyvale, California. As of December 31, 2021, we leased space (including offices and other facilities) in locations throughout the United States and in various places outside the United States. We believe that our current offices and other facilities are in good condition and appropriately support our current business needs.

ITEM 3. Legal Proceedings

The information set forth under the heading "Legal Proceedings" in Note 15, *Commitments and Contingencies*, in Notes to Consolidated Financial Statements in Item 8 of Part II of this Report, is incorporated herein by reference.

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 is traded on the New York Stock Exchange, or NYSE, under the symbol JNPR.

Stockholders

As of February 9, 2022, there were 563 stockholders of record of our common stock, and we believe a substantially greater number of beneficial owners who hold shares through brokers, banks or other nominees.

Dividends

The declaration and amount of any future cash dividends are at the discretion of the Board of Directors and will depend on our financial performance, economic outlook, and any other relevant considerations.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table provides stock repurchase activity during the three months ended December 31, 2021 (in millions, except per share amounts):

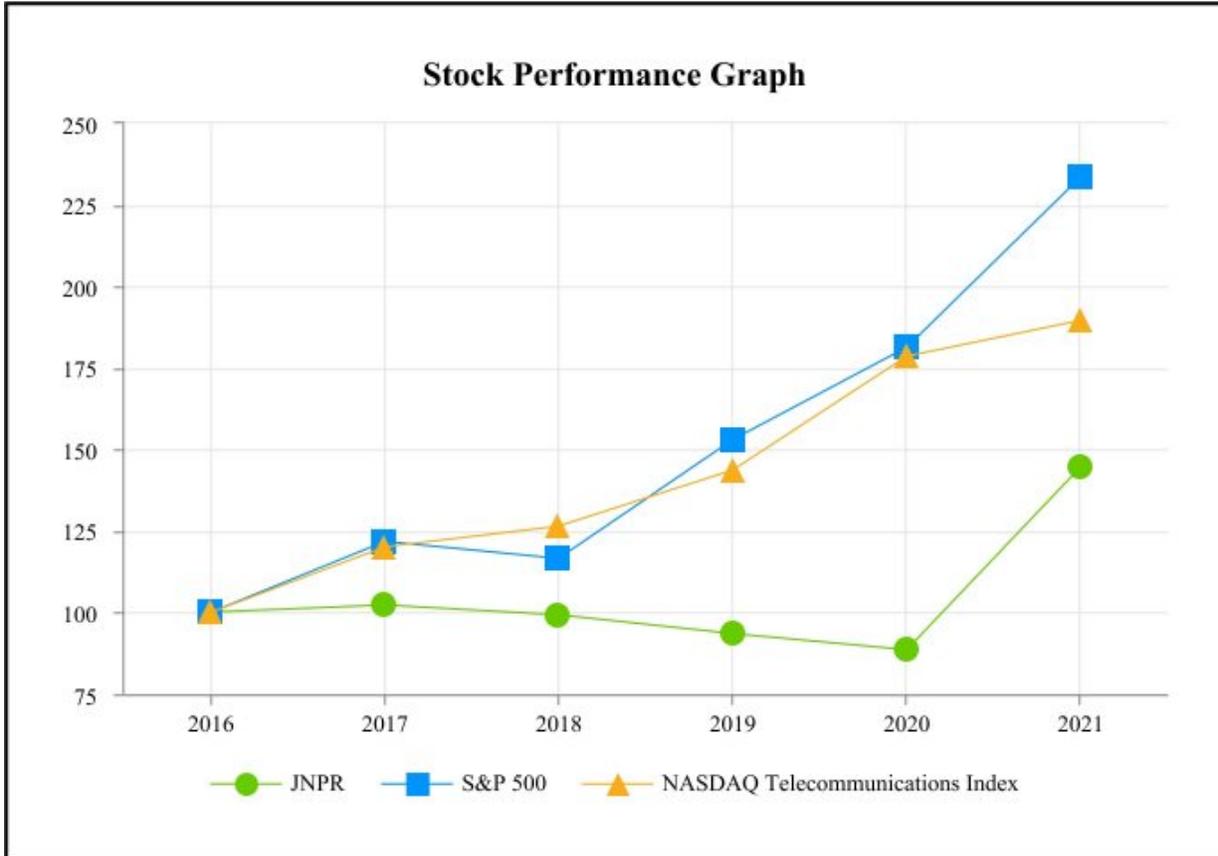
<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs^(*)</u>	<u>Maximum Dollar Value of Shares that May Still Be Purchased Under the Plans or Programs^(*)</u>
October 1 - October 31, 2021	0.2	\$ 29.58	0.2	\$ 1,035.0
November 1 - November 30, 2021	4.5	\$ 31.82	4.5	\$ 891.7
December 1 - December 31, 2021	—	\$ —	—	\$ 891.7
Total	<u>4.7</u>		<u>4.7</u>	

^(*) Shares were repurchased during the periods set forth in the table above under our stock repurchase program, which had been approved by the Board and authorized us to purchase an aggregate of up to \$3.0 billion of our common stock. Future share repurchases under our capital return plan will be subject to a review of the circumstances in place at that time and will be made from time to time in private transactions or open market purchases as permitted by securities laws and other legal requirements. This program may be discontinued at any time. See Note 10, *Equity*, in Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further discussion of our share repurchase program.

Company Stock Performance

The information contained in this Company Stock Performance section shall not be deemed to be incorporated by reference into other U.S. Securities and Exchange Commission, or SEC, filings; nor deemed to be soliciting material or filed with the Commission or subject to Regulation 14A or 14C or subject to Section 18 of the Exchange Act. The comparisons in the performance graph below are based upon historical data and are not indicative of, or intended to forecast, future performance of our common stock.

The performance graph below shows the cumulative total stockholder return over a five-year period assuming the investment of \$100 on December 31, 2016, in each of Juniper Networks' common stock, the Standard & Poor's 500 Stock Index ("S&P 500"), and the NASDAQ Telecommunications Index. Total stockholder return assumes reinvestment of all dividends.



	As of December 31,					
	2016	2017	2018	2019	2020	2021
JNPR	\$ 100.00	\$ 102.29	\$ 99.16	\$ 93.58	\$ 88.54	\$ 144.65
S&P 500	\$ 100.00	\$ 121.82	\$ 116.47	\$ 153.13	\$ 181.29	\$ 233.28
NASDAQ Telecommunications Index	\$ 100.00	\$ 120.23	\$ 126.56	\$ 143.83	\$ 178.63	\$ 189.61

ITEM 6. *[Reserved]*

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

The following discussion should be read with the Business section in Item 1 of Part I and the Consolidated Financial Statements and the related notes in Item 8 of Part II of this Report. We intend the discussion of our financial condition and results of operations to provide information that will assist the reader in understanding our Consolidated Financial Statements, the changes in certain key items in those financial statements from year to year, and the primary factors that accounted for those changes, as well as how certain accounting estimates affect our Consolidated Financial Statements. To aid in understanding our operating results for the periods covered by this Report, we have provided an executive overview, which includes a financial results and key performance metrics overview and a discussion of material events and uncertainties known to management such as the COVID-19 pandemic and global component shortage. These sections should be read in conjunction with the more detailed discussion and analysis of our consolidated financial condition and results of operations in this Item 7, our "Risk Factors" section included in Item 1A of Part I, and our Consolidated Financial Statements and notes thereto included in Item 8 of Part II of this Report.

Executive Overview

Financial Results and Key Performance Metrics Overview

The following table provides an overview of our financial results and key financial metrics (in millions, except per share amounts, percentages, and days sales outstanding, or DSO):

	As of and for the Years Ended December 31,			
	2021	2020	\$ Change	% Change
Net revenues	\$ 4,735.4	\$ 4,445.1	\$ 290.3	7 %
Gross margin	\$ 2,740.1	\$ 2,573.7	\$ 166.4	6 %
Percentage of net revenues	57.9 %	57.9 %		
Operating income	\$ 387.5	\$ 353.1	\$ 34.4	10 %
Percentage of net revenues	8.2 %	7.9 %		
Net income	\$ 252.7	\$ 257.8	\$ (5.1)	(2) %
Percentage of net revenues	5.3 %	5.8 %		
Net income per share				
Basic	\$ 0.78	\$ 0.78	\$ —	— %
Diluted	\$ 0.76	\$ 0.77	\$ (0.01)	(1) %
Operating cash flows	\$ 689.7	\$ 612.0	\$ 77.7	13 %
Stock repurchase plan activity	\$ 433.3	\$ 375.0	\$ 58.3	16 %
Cash dividends declared per common stock	\$ 0.80	\$ 0.80	\$ —	— %
DSO ⁽¹⁾	69	71	(2)	(3) %
Deferred revenue:				
Deferred product revenue	\$ 129.1	\$ 104.7	\$ 24.4	23 %
Deferred service revenue	\$ 1,284.5	\$ 1,181.1	\$ 103.4	9 %
Total	\$ 1,413.6	\$ 1,285.8	\$ 127.8	10 %
Deferred revenue from customer solutions ⁽²⁾	\$ 442.1	\$ 316.4	\$ 125.7	40 %
Deferred revenue from hardware maintenance and professional services	\$ 971.5	\$ 969.4	\$ 2.1	— %
Total	\$ 1,413.6	\$ 1,285.8	\$ 127.8	10 %

⁽¹⁾ DSO is for the fourth quarter ended December 31, 2021, and 2020.

⁽²⁾ Includes deferred revenue from hardware solutions, software licenses, software support and maintenance and SaaS offerings sold in our Automated WAN Solutions, Cloud-Ready Data Center, and AI-Driven Enterprise customer solution categories.

- *Net Revenues:* Net revenues increased during 2021 compared to 2020 across all of our verticals, customer solutions, and geographies. Service net revenues increased primarily due to strong sales of hardware maintenance and software subscriptions.
- *Gross Margin:* Gross margin as a percentage of net revenues was flat during 2021 compared to 2020. Product gross margin decreased primarily due to higher intangible amortization associated with the acquisitions of Apstra, 128 Technology and Netrounds, and to a lesser extent, logistics and other supply chain costs related to the COVID-19 pandemic, partially offset by favorable product and software mix and higher volume. The decrease in product gross margin was offset by the increase in service gross margin, which was primarily due to higher revenue and lower service delivery costs.

- *Operating Margin:* Operating income as a percentage of net revenues increased primarily from the drivers described in the gross margin discussion above and lower restructuring charges. The increase in operating margin was partially offset by higher personnel-related costs.
- *Operating Cash Flows:* Net cash provided by operations increased primarily due to higher invoicing activity, partially offset by higher supplier payments and higher payments for employee compensation.
- *Capital Return:* We continue to return capital to our stockholders. During 2021, we repurchased a total of 15.7 million shares of our common stock in the open market at an average price of \$27.56 per share for an aggregate purchase price of \$433.3 million. During 2021, we paid quarterly dividends of \$0.20 per share, for an aggregate amount of \$259.1 million.
- *DSO:* DSO is calculated as the ratio of ending accounts receivable, net of allowances, divided by average daily net revenues for the preceding 90 days. DSO decreased, primarily driven by higher revenue.
- *Deferred Revenue:* Total deferred revenue increased, primarily driven by an increase in deferrals of SaaS and software license subscriptions.

COVID-19 Pandemic Update

The ongoing COVID-19 pandemic and the containment measures taken by governments and businesses are expected to continue to have a substantial negative impact on businesses around the world and on global, regional, and national economies. As a result, the pandemic has, and may continue to, negatively affect our operations, including as a result of external factors beyond our control, such as restrictions on the physical movement of our employees, contract manufacturers, component suppliers, partners, and customers. The majority of our global workforce has been working remotely since March 2020, and we continue to implement our four-phased approach to office reopening. In order to maximize the protection of the health and safety of our employees working in our offices in the U.S. and India during the current voluntary return to office period, subject to certain exceptions, we require all personnel working onsite in these offices, or traveling for business on behalf of Juniper, to be fully vaccinated against COVID-19. We also require proof of vaccination for employees and guests returning to our sites, where permitted by local laws and regulations. We will continue to follow the guidance of local and national governments, including monitoring the health of our employees who have returned or will be returning to our offices. Numerous ongoing emerging governmental regulations in the U.S. and other countries, including those regarding vaccination mandates and ongoing testing requirements, may negatively impact our operations and increase the complexity of managing the pandemic.

We continue to support healthy customer demand for our products by working with our suppliers and distributors to address supply chain disruptions as well as travel restrictions that have impacted our operations. We have a global supply chain, which consists of primary manufacturing partners and component suppliers. During 2021, the supply constraints we continued to experience were due to both constrained manufacturing capacity as well as component parts shortages as our component vendors were also facing manufacturing challenges. These challenges resulted in extended lead-times to our customers, increased logistics costs, and impacted the volume of products we were able to deliver, which negatively impacted our ability to recognize revenue.

Challenges to our supply chain due to the impact of the pandemic remain dynamic, and we continue to experience higher costs, including logistics costs due to air travel and transport restrictions that limited the availability of flights on which we were able to ship products as well as cost increases and extended shipping times for ocean transit that have increased our dependence on higher-cost air freight. Our supply chain team has been working to meet our customer needs by executing on a strong risk mitigation plan, including multi-sourcing, pre-ordering components, transforming our logistics network, prioritizing critical customers, working with local government agencies to understand challenges, and partnering on solutions that limit disruptions to our operations while ensuring the safety of our employees, partners and suppliers.

The pandemic did not have a substantial net impact to our consolidated operating results or our liquidity position in 2021. We continue to generate operating cash flows to meet our short-term liquidity needs, and we expect to continue to maintain access to the capital markets enabled by our strong credit ratings. In 2021, we did not observe any material impairments of our assets or a significant change in the fair value of assets due to the pandemic.

We enter fiscal year 2022 with strong momentum and record backlog across all verticals, customers, and geographies. We continue to work with government authorities and implement safety measures to ensure that we are able to continue manufacturing and distributing our products during the pandemic. We continue to experience constrained supply, increased logistics costs, and accelerated customer demand, any of which could adversely impact our business, results of operations, and

overall financial performance in future periods. For more information on the impact of the COVID-19 pandemic and supply chain constraints on our business, see the “Risk Factors” section of Item 1A of Part I of this Report.

Global Component Shortage

There is a worldwide shortage of various components, including semiconductors, impacting many industries, caused in-part by the COVID-19 pandemic. Similar to others, we are experiencing ongoing component shortages, which have resulted in extended lead times of certain products and significant disruption to our production schedule. We also experienced and may continue to experience increased component costs, which have had a negative impact on our gross margin. During the past year, we experienced strong product orders across all verticals and customer solutions; we believe some of the strength was attributable to industry supply chain challenges that were causing certain customers to place orders early in an effort to secure supply when needed. We continue to work to resolve our supply chain challenges and have increased inventory levels and purchase commitments. We are working closely with our suppliers to further enhance our resiliency and mitigate the effects of recent disruptions outside of our control. We believe the extended lead times and increased component and logistic costs will likely persist for at least the next few quarters. We have taken pricing actions to mitigate the effects of rising component costs and do not expect these actions to have an impact until later in fiscal year 2022. While the situation is dynamic, at this point in time we believe we will have access to sufficient supplies of semiconductors and other components and will be able to meet our full-year financial forecast. See the section entitled “Risk Factors” in Item 1A of Part I of this Report for further discussion of this risk.

Critical Accounting Estimates

The preparation of the financial statements and related disclosures in conformity with U.S. GAAP requires us to make judgments, assumptions, and estimates that affect the amounts reported in the Consolidated Financial Statements and the accompanying notes. We base our estimates and assumptions on current facts, historical experience, and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Note 1, *Description of Business, Basis of Presentation and Significant Accounting Policies*, in Notes to Consolidated Financial Statements in Item 8 of Part II of this Report, describes the significant accounting policies and methods used in the preparation of the Consolidated Financial Statements.

The below accounting policies require significant judgments, assumptions, and estimates used in the preparation of the Consolidated Financial Statements and actual results could differ materially from the amounts reported based on these policies.

- *Revenue Recognition*: We enter into contracts to sell our products and services, and while most of our sales agreements contain standard terms and conditions, there are agreements that contain non-standard terms and conditions and include promises to transfer multiple goods or services. As a result, significant interpretation and judgment are sometimes required to determine the appropriate accounting for these transactions, including: (1) whether performance obligations are considered distinct that should be accounted for separately versus together, how the price should be allocated among the performance obligations, and when to recognize revenue for each performance obligation; (2) developing an estimate of the stand-alone selling price, or SSP, of each distinct performance obligation; (3) combining contracts that may impact the allocation of the transaction price between product and services; and (4) estimating and accounting for variable consideration, including rights of return, rebates, price protection, expected penalties or other price concessions as a reduction of the transaction price.

Our estimates of SSP for each performance obligation require judgment that considers multiple factors, including, but not limited to, historical discounting trends for products and services, pricing practices in different geographies and through different sales channels, gross margin objectives, internal costs, competitor pricing strategies, and industry technology lifecycles. Our estimates for rights of return, rebates, and price protection are based on historical sales returns and price protection credits, specific criteria outlined in customer contracts or rebate agreements, and other factors known at the time. Our estimates for expected penalties and other price concessions are based on historical trends and expectations regarding future incurrence.

Changes in judgments with respect to these assumptions and estimates could impact the timing or amount of revenue recognition.

- *Income Taxes*: We are subject to income taxes in the United States and numerous foreign jurisdictions. We apply the authoritative accounting guidance for uncertainty in income taxes to all income tax positions, including the potential recovery of previously paid taxes, which if settled unfavorably could adversely affect our provision for income taxes. Significant judgment is required in evaluating our uncertain tax positions and determining our taxes including the interpretation and application of GAAP and complex domestic and international tax laws and matters related to the allocation of international taxation rights between countries. In addition, we are subject to the continuous examination of our income tax returns by the IRS and other tax authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made.

Recent Accounting Pronouncements

See Note 1, *Description of Business, Basis of Presentation and Significant Accounting Policies*, in Notes to the Consolidated Financial Statements in Item 8 of Part II of this Report for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on financial condition and results of operations, which is incorporated herein by reference.

Results of Operations

A discussion regarding our financial condition and results of operations for the fiscal year ended December 31, 2021 compared to 2020 is presented below. A discussion regarding our financial condition and results of operations for fiscal year ended December 31, 2020 compared to 2019 can be found under Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the SEC on February 12, 2021, which is available on the SEC's website at www.sec.gov and our Investor Relations website at <http://investor.juniper.net>.

Revenues

The following table presents net revenues by customer solution (in millions, except percentages):

	Years Ended December 31,						
	2021	2020	2019	2021 vs. 2020		2020 vs. 2019	
				\$ Change	% Change	\$ Change	% Change
Customer Solutions:							
Automated WAN Solutions	\$ 1,665.0	\$ 1,622.2	\$ 1,604.4	\$ 42.8	3 %	\$ 17.8	1 %
<i>Percentage of net revenues</i>	35.2 %	36.5 %	36.1 %				
Cloud-Ready Data Center	727.1	677.1	726.5	50.0	7 %	(49.4)	(7) %
<i>Percentage of net revenues</i>	15.4 %	15.2 %	16.3 %				
AI-Driven Enterprise	830.4	656.2	613.8	174.2	27 %	42.4	7 %
<i>Percentage of net revenues</i>	17.5 %	14.8 %	13.8 %				
Hardware Maintenance and Professional Services	1,512.9	1,489.6	1,500.7	23.3	2 %	(11.1)	(1) %
<i>Percentage of net revenues</i>	31.9 %	33.5 %	33.8 %				
Total net revenues	\$ 4,735.4	\$ 4,445.1	\$ 4,445.4	\$ 290.3	7 %	\$ (0.3)	— %

The following table presents net revenues by customer vertical and geographic region (in millions, except percentages):

	Years Ended December 31,			
	2021	2020	\$ Change	% Change
Cloud	\$ 1,228.0	\$ 1,081.2	\$ 146.8	14 %
<i>Percentage of net revenues</i>	25.9 %	24.3 %		
Service Provider	1,839.1	1,761.7	77.4	4 %
<i>Percentage of net revenues</i>	38.8 %	39.6 %		
Enterprise	1,668.3	1,602.2	66.1	4 %
<i>Percentage of net revenues</i>	35.3 %	36.1 %		
Total net revenues	\$ 4,735.4	\$ 4,445.1	\$ 290.3	7 %
Americas:				
United States	\$ 2,426.9	\$ 2,233.9	\$ 193.0	9 %
Other	222.2	211.2	11.0	5 %
Total Americas	2,649.1	2,445.1	204.0	8 %
<i>Percentage of net revenues</i>	55.9 %	55.0 %		
EMEA	1,314.5	1,233.8	80.7	7 %
<i>Percentage of net revenues</i>	27.8 %	27.8 %		
APAC	771.8	766.2	5.6	1 %
<i>Percentage of net revenues</i>	16.3 %	17.2 %		
Total net revenues	\$ 4,735.4	\$ 4,445.1	\$ 290.3	7 %

Total net revenues increased primarily due to increases across all customer solutions mainly driven by higher sales volume.

The AI-Driven Enterprise revenue increase was primarily driven by Enterprise and Cloud, and to a lesser extent, Service Provider.

The Cloud-Ready Data Center revenue increase was primarily driven by Cloud, partially offset by a decline in Service Provider.

The Automated WAN Solutions revenue increase was primarily driven by Service Provider and Cloud, partially offset by a decline in Enterprise.

Effective in the first quarter of 2021, we began presenting revenues from software and related services as well as total security, as these offerings represent key areas of strategic focus that are critical components to our business success. Software and related services offerings include revenue from software license, software support and maintenance and SaaS contracts. Total security offerings include revenue from our complete portfolio of hardware and software security products, including SD-WAN solutions, as well as services related to our security solutions.

The following table presents net revenues from software and security products and services (in millions, except percentages):

	Years Ended December 31,							
	2021	2020	2019	2021 vs. 2020		2020 vs 2019		
				\$ Change	% Change	\$ Change	% Change	
Software and Related Services	\$ 760.9	\$ 535.7	\$ 550.9	\$ 225.2	42 %	\$ (15.2)	(3) %	
<i>Percentage of net revenues</i>	16.1 %	12.1 %	12.4 %					
Total Security	\$ 656.9	\$ 610.8	\$ 638.2	\$ 46.1	8 %	\$ (27.4)	(4) %	
<i>Percentage of net revenues</i>	13.9 %	13.7 %	14.4 %					

Gross Margins

The following table presents gross margins (in millions, except percentages):

	Years Ended December 31,			
	2021	2020	\$ Change	% Change
Product gross margin	\$ 1,668.7	\$ 1,566.4	\$ 102.3	7 %
<i>Percentage of product revenues</i>	54.2 %	55.1 %		
Service gross margin	1,071.4	1,007.3	64.1	6 %
<i>Percentage of service revenues</i>	64.6 %	63.0 %		
Total gross margin	\$ 2,740.1	\$ 2,573.7	\$ 166.4	6 %
<i>Percentage of net revenues</i>	57.9 %	57.9 %		

Our gross margins as a percentage of net revenues have been and will continue to be affected by general inflationary pressure and a variety of other factors, including the mix and average selling prices of our products and services, new product introductions and enhancements, manufacturing, component and logistics costs, expenses for inventory obsolescence and warranty obligations, cost of support and service personnel, customer mix as we continue to expand our footprint with certain strategic customers, the mix of distribution channels through which our products and services are sold, and import tariffs. For example, our logistics and other supply chain-related costs have increased due to the COVID-19 pandemic and global component shortage. For more information on the impact of COVID-19 and supply chain constraints on our business, see the “Risk Factors” section of Item 1A of Part I of this Report.

Product gross margin

Product gross margin as a percentage of product revenues decreased primarily due to higher intangible amortization associated with the acquisitions of Apstra, 128 Technology and Netrounds, and to a lesser extent, logistics and other supply chain costs related to the COVID-19 pandemic, partially offset by favorable product and software mix and higher volume. We continue to undertake specific efforts to address certain factors impacting our product gross margin. These efforts include performance and

quality improvements through engineering to increase value across our products; optimizing our supply chain and service business; pricing management; and increasing software and solution sales.

Service gross margin

Service gross margin as a percentage of service net revenues increased primarily due to higher revenue and lower service delivery costs.

Operating Expenses

The following table presents operating expenses (in millions, except percentages):

	Years Ended December 31,			
	2021	2020	\$ Change	% Change
Research and development	\$ 1,007.2	\$ 958.4	\$ 48.8	5 %
<i>Percentage of net revenues</i>	21.3 %	21.6 %		
Sales and marketing	1,052.7	938.8	113.9	12 %
<i>Percentage of net revenues</i>	22.2 %	21.1 %		
General and administrative	249.8	255.4	(5.6)	(2) %
<i>Percentage of net revenues</i>	5.3 %	5.7 %		
Restructuring charges	42.9	68.0	(25.1)	(37) %
<i>Percentage of net revenues</i>	0.9 %	1.5 %		
Total operating expenses	<u>\$ 2,352.6</u>	<u>\$ 2,220.6</u>	<u>\$ 132.0</u>	6 %
<i>Percentage of net revenues</i>	49.7 %	50.0 %		

Our operating expenses have historically been driven in large part by personnel-related costs, including salaries and wages; commissions and bonuses, which we refer to collectively as variable compensation; benefits; share-based compensation; and travel. Facility and information technology, or IT, departmental costs are allocated to each department based on usage and headcount. We had a total of 10,191 and 9,950 employees as of December 31, 2021, and 2020, respectively. Our headcount increased by 241 employees, or 2%, primarily from hiring for the sales and marketing organization. We expect inflationary pressures to impact operating expense, at least for the next twelve months.

Research and development

Research and development expense, or R&D, increased primarily due to higher personnel-related costs driven by higher variable compensation and share-based compensation expenses.

Sales and marketing

Sales and marketing expense, or S&M, increased primarily due to higher personnel-related costs driven by headcount growth, higher variable compensation and share-based compensation expenses, as well as higher costs associated with marketing initiatives. The increase was partially offset by lower professional services costs and decreased travel expenses due to the COVID-19 pandemic.

Restructuring charges

Restructuring charges decreased primarily due to higher severance costs related to voluntary and involuntary workforce reductions recorded under the 2020 Restructuring Plan, partially offset by higher facility consolidation, contract termination and other exit costs recorded under the 2021 Restructuring Plan.

Loss on Extinguishment of Debt

The following table presents the loss on extinguishment of debt (in millions, except percentages):

	Years Ended December 31,			
	2021	2020	\$ Change	% Change
Loss on extinguishment of debt	\$ (60.6)	\$ (55.0)	\$ (5.6)	10 %
<i>Percentage of net revenues</i>	<i>(1.3)%</i>	<i>(1.2)%</i>		

In 2021 and 2020, we incurred a loss on extinguishment of debt related to the redemption of our Senior Notes maturing in March 2024 and June 2025. The loss primarily consists of a premium on the early redemption and acceleration of unamortized debt discount and fees on the redeemed debt.

Other Expense, Net

The following table presents other expense, net (in millions, except percentages):

	Years Ended December 31,			
	2021	2020	\$ Change	% Change
Interest income	\$ 14.9	\$ 36.3	\$ (21.4)	(59) %
Interest expense	(50.8)	(77.0)	26.2	(34) %
Gain on investments, net	17.6	13.3	4.3	32 %
Other	1.5	(5.5)	7.0	N/M
Total other expense, net	\$ (16.8)	\$ (32.9)	\$ 16.1	(49) %
<i>Percentage of net revenues</i>	<i>(0.4)%</i>	<i>(0.7)%</i>		

N/M - percentage is not meaningful.

Interest income primarily includes interest earned on our cash, cash equivalents and investments. Interest expense primarily includes interest, net of capitalized interest expense, from long-term debt and customer financing arrangements. Gain on investments, net, primarily includes gains from the sale of investments in public and privately-held companies, and any observable changes in fair value and impairment charges recorded on these investments. Other typically consists of foreign exchange gains and losses and other non-operational income and expense items.

Total other expense, net, decreased primarily due to lower interest expense related to our debt portfolio, partially offset by lower interest income related to our fixed income investment portfolio, as a result of lower yields from a lower average portfolio balance.

Income Tax Provision

The following table presents the income tax provision (benefit) (in millions, except percentages):

	Years Ended December 31,			
	2021	2020	\$ Change	% Change
Income tax provision	\$ 57.4	\$ 7.4	\$ 50.0	676 %
<i>Effective tax rate</i>	<i>18.5 %</i>	<i>2.8 %</i>		

The effective tax rate for fiscal year 2021 was higher than fiscal year 2020, primarily due to the net difference in discrete items in fiscal year 2021 compared to fiscal year 2020 and a change in the geographic mix of earnings. For a complete reconciliation of our effective tax rate to the U.S. federal statutory rate of 21% and further explanation of our income tax provision, see Note 13, *Income Taxes*, in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report.

As a result of the Tax Act, beginning January 1, 2022, all U.S. and non-U.S. based R&D expenditures must be capitalized and amortized over five and fifteen years, respectively. Absent a change in legislation, cash taxes are expected to increase significantly for several years and the Company's effective tax rate may be adversely impacted.

Liquidity and Capital Resources

Liquidity and capital resources may be impacted by our operating activities as well as acquisitions, investments in strategic relationships, repurchases of shares of our common stock, and payment of cash dividends on our common stock. Since the enactment of the Tax Cuts and Jobs Act of 2017 ("Tax Act"), we have repatriated a significant amount of cash from outside of the U.S., and plan to continue to repatriate on an ongoing basis. We intend to use the repatriated cash to invest in the business, support value-enhancing merger and acquisitions, or M&A, and fund our return of capital to stockholders.

Based on past performance and current expectations, we believe that our existing cash and cash equivalents, short-term, and long-term investments, cash generated from operations together with the revolving credit facility and our ability to access to capital markets will be sufficient to fund our operations; planned stock repurchases and dividends; capital expenditures; purchase commitments and other liquidity requirements; and anticipated growth for at least the next twelve months. However, our future liquidity and capital requirements may vary materially from those now planned depending on many factors, including, but not limited to, our growth rate; the timing and amount we spend to support development efforts; the expansion of sales and marketing activities; the introduction of new and enhanced products and services; the costs to acquire or invest in businesses and technologies; an increase in manufacturing or component costs; and the risks and uncertainties detailed in the "Risk Factors" section of Item 1A of Part I of this Report.

The Company's material cash requirements include the following contractual and other obligations.

Debt

As of December 31, 2021, we had outstanding fixed-rate senior notes with varying maturities for an aggregate principal amount of \$1,700.0 million (collectively the "Notes"), none of which is payable within 12 months. Future interest payments associated with the Notes total \$705.3 million, with \$55.4 million payable within 12 months.

Purchase Commitments with Contract Manufacturers and Suppliers

In order to reduce manufacturing lead times and in the interest of having access to adequate component supply, we enter into agreements with contract manufacturers and certain suppliers to procure inventory based on the Company's requirements. A significant portion of the Company's purchase commitments arising from these agreements consists of firm and non-cancelable commitments. As of December 31, 2021, we had purchase commitments of \$2,632.2 million, with \$2,094.3 million payable within 12 months.

Tax

Our transition tax liability represents future cash payments on accumulated foreign earnings of subsidiaries as a result of the Tax Act. The Company has elected to pay its transition tax, net of applicable tax refunds, over the eight-year period provided in the Tax Act. As of December 31, 2021, the balance of our transition tax obligation was \$250.6 million, with none payable within 12 months.

As of December 31, 2021, the Company had \$79.9 million included in long-term income taxes payable on the Consolidated Balance Sheets for unrecognized tax positions. At this time, the Company is unable to make a reasonably reliable estimate of the timing of payments related to this amount due to uncertainties in the timing of tax audit outcomes.

As a result of the Tax Act, beginning January 1, 2022, all U.S. and non-U.S. based R&D expenditures must be capitalized and amortized over five and fifteen years, respectively. Absent a change in legislation, cash taxes are expected to increase significantly for the next several years.

Leases

The Company leases its facilities and certain equipment under non-cancelable operating leases that have remaining lease terms of 1 to 10 years and 1 to 4 years, respectively. As of December 31, 2021, we had fixed lease payment obligations of \$203.6 million, with \$48.7 million payable within 12 months.

Unconditional Purchase Obligations

Unconditional purchase obligations consist of agreements that include firm and non-cancelable terms to transfer funds in the future for fixed or minimum amounts or quantities to be purchased at fixed or minimum prices. As of December 31, 2021, we had unconditional purchase obligations of \$129.3 million, with \$61.0 million payable within 12 months. See Note 15, *Commitments and Contingencies*, in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further discussion of our unconditional purchase obligations.

Guarantees

We have financial guarantees consisting of guarantees of product and service performance and standby letters of credit for certain lease facilities, insurance programs, and customs of \$2.4 million as of December 31, 2021.

In addition to our cash requirements, we have a capital return program authorized by the Board of Directors (the "Board"). In January 2018, the Board, approved a \$2.0 billion share repurchase program, which we refer to as the 2018 Stock Repurchase Program. In October 2019, the Board authorized a \$1.0 billion increase to the 2018 Stock Repurchase Program for a total of \$3.0 billion.

During the fiscal year ended December 31, 2021, we repurchased 15.7 million shares of our common stock in the open market at an average price of \$27.56 per share for an aggregate purchase price of \$433.3 million, under the 2018 Stock Repurchase Program. As of December 31, 2021, there was \$0.9 billion of authorized funds remaining under the 2018 Stock Repurchase Program.

Future share repurchases under the 2018 Stock Repurchase Program will be subject to a review of the circumstances at that time and will be made from time to time in private transactions or open market purchases as permitted by securities laws and other legal requirements. Our 2018 Stock Repurchase Program may be discontinued at any time. See Note 10, *Equity*, in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further discussion of our share purchase program.

In addition, any future dividends, and the establishment of record and payment dates, are subject to approval by the Board or an authorized committee thereof. See Note 16, *Subsequent Events*, in the Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for discussion of our dividend declaration subsequent to December 31, 2021.

ITEM 7A. Quantitative and Qualitative Disclosures about Market Risk**Interest Rate Risk****Interest Income Risk - Available-for-Sale Fixed Income Securities**

The primary objectives of our investment activities are, in order of priority, to preserve principal, maintain liquidity, and maximize yield. The value of our investments is subject to market price volatility. To minimize this risk, we maintain an investment portfolio of various holdings, types, and maturities, which includes asset-backed and mortgage-backed securities, certificates of deposit, commercial paper, corporate debt securities, foreign government debt securities, time deposits, U.S. government agency securities, and U.S. government securities. At any time, a rise in interest rates could have a material adverse impact on the fair value of our investment portfolio. Conversely, a decline in interest rates could have a material impact on interest income from our investment portfolio. We do not currently hedge these interest rate exposures.

The following tables present hypothetical changes in fair value of our available-for-sale fixed income securities held as of December 31, 2021 and 2020 that are sensitive to changes in interest rates assuming immediate parallel shifts in the yield curve of 50 basis points, or BPS, 100 BPS and 150 BPS, which are representative of the historical movements in the Federal Funds Rate (in millions):

	- 150 BPS	- 100 BPS	- 50 BPS	Fair Value as of December 31, 2021	+ 50 BPS	+ 100 BPS	+ 150 BPS
Available-for-sale fixed income securities	\$ 820.2	\$ 816.7	\$ 813.5	\$ 810.1	\$ 806.7	\$ 803.4	\$ 800.1

	- 150 BPS	- 100 BPS	- 50 BPS	Fair Value as of December 31, 2020	+ 50 BPS	+ 100 BPS	+ 150 BPS
Available-for-sale fixed income securities	\$ 1,411.5	\$ 1,406.3	\$ 1,401.1	\$ 1,395.8	\$ 1,390.7	\$ 1,385.5	\$ 1,380.3

Interest rate swaps

The Company uses interest rate swaps to convert certain of our fixed interest rate notes to floating interest rates based on the London InterBank Offered Rate (LIBOR), resulting in a net increase or decrease in interest expense. These swaps hedge against the interest rate risk exposures of the designated debt issuances. As of December 31, 2021 and December 31, 2020, the aggregate notional amount of the interest rate swaps was \$600.0 million and \$300.0 million, respectively. As of December 31, 2021, the fair value of the interest rate swaps resulted in an asset of \$2.1 million and a liability of \$2.5 million. As of December 31, 2020, the aggregate fair value of the interest rate swaps resulted in an asset of \$20.3 million. A hypothetical 10% change in the interest rates as of December 31, 2021 would not have had a material impact to our operating results or the fair value of the interest rate swaps.

Interest Rate Locks

The Company uses interest rate locks, which hedge the impact of changes in the benchmark interest rate to future interest payments and will be terminated upon closing of our future debt issuance. We record changes in the fair value of these cash flow hedges of interest rate risk in accumulated other comprehensive income (loss) until the anticipated refinancing. Upon refinancing of our debt and termination of the derivative instruments, the fair value of these interest rate locks will be amortized over the term of our new debt to interest expense. As of December 31, 2021 and December 31, 2020, the aggregate notional amount of the interest rate locks was \$650.0 million. As of December 31, 2021 and December 31, 2020, the fair value of these contracts resulted in an asset of \$45.0 million and \$30.7 million, respectively. A hypothetical 10% change in the interest rates as of December 31, 2021 would not have had a material impact to the fair value of the interest rate locks.

Foreign Currency Risk and Foreign Exchange Forward Contracts

Periodically, we use derivatives to hedge against fluctuations in foreign exchange rates. We do not enter into derivatives for speculative or trading purposes.

We use foreign currency forward contracts to mitigate variability in gains and losses generated from the re-measurement of certain monetary assets and liabilities denominated in foreign currencies. These foreign exchange forward contracts typically have maturities of approximately one to four months.

Our sales and costs of product revenues are primarily denominated in U.S. Dollars. Our cost of service revenue and operating expenses are denominated in U.S. Dollars as well as other foreign currencies, including the British Pound, Chinese Yuan, Euro, and the Indian Rupee. Approximately 81% of such costs and operating expenses are denominated in U.S. Dollars. Periodically, we use foreign currency forward and/or option contracts to hedge certain forecasted foreign currency transactions to reduce variability in cost of service revenue and operating expenses caused by non-U.S. Dollar denominated operating expense and costs. In designing a specific hedging approach, we consider several factors, including offsetting exposures, significance of exposures, costs associated with entering into a particular hedge instrument, and potential effectiveness of the hedge. These derivatives are designated as cash flow hedges and have maturities of thirty-six months or less. The change in operating expenses including cost of service revenue, research and development, sales and marketing, and general and administrative expenses, due to foreign currency fluctuations was a reduction to operating expenses of \$10.7 million, or 0.2% and of \$11.6 million, or 0.3% for years ended December 31, 2021 and December 31, 2020, respectively. See Note 5, *Derivative Instruments*, in Notes to Consolidated Financial Statements in Item 8 of Part II of this Report for further discussion of our derivative and hedging activity.

We have performed a sensitivity analysis as of December 31, 2021 and as of December 31, 2020, using a modeling technique that measures the change in the amount of non-U.S. Dollar cash, cash equivalents and marketable securities arising from a hypothetical 10% movement in the levels of foreign currency exchange rates relative to the U.S. Dollar, with all other variables held constant. The foreign currency exchange rates we used were based on market rates in effect on December 31, 2021 and December 31, 2020, respectively. The sensitivity analysis indicated that a hypothetical 10% movement in foreign currency exchange rates would change the amount of cash, cash equivalents, and investments we would report in U.S. Dollars as of December 31, 2021 and December 31, 2020 by \$37.0 million, or 2.2%, and by \$33.4 million, or 1.4%, respectively.

Equity Price Risk

We have also invested in privately-held companies. Depending on the nature of these investments, some can be carried at cost, adjusted for changes from observable transactions for identical or similar investments of the same issuer, less impairment, and others can be carried at fair value. The carrying values of our investments in privately-held companies were \$197.1 million and \$201.9 million as of December 31, 2021 and December 31, 2020, respectively. The privately-held companies in which we invest can still be considered to be in the startup or development stages. These investments are inherently risky because the markets for the technologies or products these companies are developing are typically in the early stages, and may never materialize. We could lose our entire investment in these companies. Our evaluation of investments in privately-held companies is based on the fundamentals of the businesses invested in, including, among other factors, the nature of their technologies and potential for financial return.

ITEM 8. Financial Statements and Supplementary Data

**Juniper Network, Inc.
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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Juniper Networks, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Juniper Networks, Inc. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 11, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of this critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Identification of distinct performance obligations in revenue contracts

Description of the matter As described in Note 1 to the consolidated financial statements, the Company's contracts with customers sometimes contain multiple performance obligations, which are accounted for separately if they are distinct. In such cases, the transaction price is then allocated to the distinct performance obligations on a relative standalone selling price basis and revenue is recognized when control of the distinct performance obligation is transferred. For example, product revenue is recognized at the time of hardware shipment or delivery of software license, and support revenue is recognized over time as the services are performed.

Auditing the Company's revenue recognition was challenging, specifically related to the effort required to identify and determine the distinct performance obligations and the associated timing of revenue recognition. For example, there were nonstandard terms and conditions that required judgment to determine the distinct performance obligations and the impact on the timing of revenue recognition.

How we addressed the matter in our audit We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's revenue recognition process, including controls to identify and determine the distinct performance obligations and the timing of revenue recognition.

Among the procedures we performed to test the identification and determination of the distinct performance obligations and the timing of revenue recognition, we read the executed contract and purchase order to understand the contract, identified the performance obligation(s), determined the distinct performance obligations, and evaluated the timing and amount of revenue recognized for a sample of individual sales transactions. We evaluated the accuracy of the Company's contract summary documentation, specifically related to the identification and determination of distinct performance obligations and the timing of revenue recognition.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1996.
San Jose, California

February 11, 2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Juniper Networks, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Juniper Networks, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Juniper Networks, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Apstra, Inc. and WiteSand Systems Inc., which are included in the 2021 consolidated financial statements of the Company and constituted less than 2.0% of total assets and less than 4.0% of net assets, respectively as of December 31, 2021 and less than 1.0% of net revenues and less than 1.0% of net income for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Apstra, Inc. and WiteSand Systems Inc.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 and our report dated February 11, 2022, expressed an unqualified opinion thereon.

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/ Ernst & Young LLP

San Jose, California
February 11, 2022

Management's Report on Internal Control Over Financial Reporting

The management of Juniper Networks, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

The Company's internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. 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 (iii) 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 Consolidated 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.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021, based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control - Integrated Framework* as published in 2013. Management has excluded from its assessment, the internal control over financial reporting of Apstra, Inc. and WiteSand Systems Inc., which are included in the December 31, 2021 Consolidated Financial Statements, and constituted less than 2.0% of total assets and less than 4.0% of net assets, respectively as of December 31, 2021, and less than 1.0% of net revenues and less than 1.0% of net income for the year then ended. Based on that assessment, management concluded that, as of December 31, 2021, the Company's internal control over financial reporting was effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2021 has been audited by Ernst & Young LLP, the independent registered public accounting firm that audits the Company's Consolidated Financial Statements, as stated in their report preceding this report, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2021.

Juniper Networks, Inc.**Consolidated Statements of Operations
(In millions, except per share amounts)**

	Years Ended December 31,		
	2021	2020	2019
Net revenues:			
Product	\$ 3,078.1	\$ 2,845.0	\$ 2,867.7
Service	1,657.3	1,600.1	1,577.7
Total net revenues	4,735.4	4,445.1	4,445.4
Cost of revenues:			
Product	1,409.4	1,278.6	1,227.0
Service	585.9	592.8	601.6
Total cost of revenues	1,995.3	1,871.4	1,828.6
Gross margin	2,740.1	2,573.7	2,616.8
Operating expenses:			
Research and development	1,007.2	958.4	955.7
Sales and marketing	1,052.7	938.8	939.3
General and administrative	249.8	255.4	244.3
Restructuring charges	42.9	68.0	35.3
Total operating expenses	2,352.6	2,220.6	2,174.6
Operating income	387.5	353.1	442.2
Loss on extinguishment of debt	(60.6)	(55.0)	(15.3)
Other expense, net	(16.8)	(32.9)	(12.5)
Income before income taxes	310.1	265.2	414.4
Income tax provision	57.4	7.4	69.4
Net income	\$ 252.7	\$ 257.8	\$ 345.0
Net income per share:			
Basic	\$ 0.78	\$ 0.78	\$ 1.01
Diluted	\$ 0.76	\$ 0.77	\$ 0.99
Shares used in computing net income per share:			
Basic	324.4	330.4	343.2
Diluted	331.6	335.2	348.2

See accompanying Notes to Consolidated Financial Statements

Juniper Networks, Inc.**Consolidated Statements of Comprehensive Income
(In millions)**

	Years Ended December 31,		
	2021	2020	2019
Net income	\$ 252.7	\$ 257.8	\$ 345.0
Other comprehensive (loss) income, net of tax:			
Available-for-sale debt securities:			
Change in net unrealized gains and losses	(5.0)	5.7	4.6
Net realized gains reclassified into net income	(1.2)	(1.3)	(0.4)
Net change on available-for-sale debt securities	(6.2)	4.4	4.2
Cash flow hedges:			
Change in net unrealized gains and losses	(13.5)	54.4	(8.9)
Net realized (gains) and losses reclassified into net income	(25.2)	7.6	5.5
Net change on cash flow hedges	(38.7)	62.0	(3.4)
Change in foreign currency translation adjustments	(12.8)	7.7	(1.1)
Other comprehensive (loss) income, net	(57.7)	74.1	(0.3)
Comprehensive income	\$ 195.0	\$ 331.9	\$ 344.7

See accompanying Notes to Consolidated Financial Statements

Juniper Networks, Inc.
Consolidated Balance Sheets
(In millions, except par values)

	December 31, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 922.5	\$ 1,361.9
Short-term investments	315.5	412.1
Accounts receivable, net of allowance for doubtful accounts of \$6.7 and \$9.9 as of December 31, 2021 and 2020, respectively	994.4	964.1
Inventory*	272.6	210.2
Prepaid expenses and other current assets*	451.6	322.9
Total current assets	2,956.6	3,271.2
Property and equipment, net	703.0	762.3
Operating lease assets	161.3	184.6
Long-term investments	455.5	656.6
Purchased intangible assets, net	284.3	266.7
Goodwill	3,762.1	3,669.6
Other long-term assets	564.2	567.3
Total assets	\$ 8,887.0	\$ 9,378.3
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 273.7	\$ 277.0
Accrued compensation	336.0	270.7
Deferred revenue	937.9	867.3
Short-term debt	—	421.5
Other accrued liabilities	328.9	324.6
Total current liabilities	1,876.5	2,161.1
Long-term debt	1,686.8	1,705.8
Long-term deferred revenue	475.7	418.5
Long-term income taxes payable	330.5	312.5
Long-term operating lease liabilities	142.2	163.5
Other long-term liabilities	58.4	73.4
Total liabilities	4,570.1	4,834.8
Commitments and contingencies (Note 15)		
Stockholders' equity:		
Preferred stock, \$0.00001 par value; 10.0 shares authorized; none issued and outstanding	—	—
Common stock, \$0.00001 par value; 1,000.0 shares authorized; 321.6 shares and 327.7 shares issued and outstanding as of December 31, 2021 and 2020, respectively	—	—
Additional paid-in capital	6,972.6	7,156.9
Accumulated other comprehensive (loss) income	(2.1)	55.6
Accumulated deficit	(2,653.6)	(2,669.0)
Total stockholders' equity	4,316.9	4,543.5
Total liabilities and stockholders' equity	\$ 8,887.0	\$ 9,378.3

(*): The prior period amount has been reclassified to conform to the current period presentation. Previously, Inventory was reported as Prepaid expenses and other current assets.

See accompanying Notes to Consolidated Financial Statements

Juniper Networks, Inc.
Consolidated Statements of Cash Flows
(In millions)

	Years Ended December 31,		
	2021	2020	2019
Cash flows from operating activities:			
Net income	\$ 252.7	\$ 257.8	\$ 345.0
Adjustments to reconcile net income to net cash provided by operating activities:			
Share-based compensation expense	222.6	190.2	202.2
Depreciation, amortization, and accretion	237.4	212.4	210.3
Operating lease assets expense	44.9	42.3	42.0
Loss on extinguishment of debt	60.6	55.0	15.3
Deferred income taxes	71.7	(52.3)	2.9
Other	(1.1)	(2.9)	3.5
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable, net	(31.8)	(76.1)	(118.1)
Prepaid expenses and other assets	(310.0)	(117.8)	(100.7)
Accounts payable	0.2	56.0	6.4
Accrued compensation	70.3	38.7	6.5
Income taxes payable	24.3	(57.2)	(40.5)
Other accrued liabilities	(80.8)	4.4	(46.8)
Deferred revenue	128.7	61.5	0.9
Net cash provided by operating activities	<u>689.7</u>	<u>612.0</u>	<u>528.9</u>
Cash flows from investing activities:			
Purchases of property and equipment	(100.0)	(100.4)	(109.6)
Purchases of available-for-sale debt securities	(649.8)	(967.0)	(3,209.8)
Proceeds from sales of available-for-sale debt securities	546.1	360.4	1,520.0
Proceeds from maturities and redemptions of available-for-sale debt securities	394.0	865.0	1,642.3
Purchases of equity securities	(10.1)	(17.4)	(107.1)
Proceeds from sales of equity securities	25.6	9.7	14.2
Proceeds from Pulse note receivable	—	50.0	—
Payments for business acquisitions, net of cash and cash equivalents acquired	(182.6)	(438.1)	(270.9)
Subsequent payments related to acquisitions in prior years	(10.1)	(45.9)	(7.3)
Other	0.7	(5.2)	—
Net cash provided by (used in) investing activities	<u>13.8</u>	<u>(288.9)</u>	<u>(528.2)</u>
Cash flows from financing activities:			
Repurchase and retirement of common stock	(443.5)	(381.1)	(554.9)
Proceeds from issuance of common stock	56.4	54.7	55.6
Payment of dividends	(259.1)	(264.1)	(260.1)
Payment of debt	(423.8)	(376.2)	(950.0)
Issuance of debt, net	—	792.4	495.2
Payment for debt extinguishment costs	(58.3)	(52.9)	(14.6)
Other	(3.4)	4.8	—
Net cash used in financing activities	<u>(1,131.7)</u>	<u>(222.4)</u>	<u>(1,228.8)</u>
Effect of foreign currency exchange rates on cash, cash equivalents, and restricted cash	(12.1)	5.8	(1.2)
Net (decrease) increase in cash, cash equivalents, and restricted cash	(440.3)	106.5	(1,229.3)
Cash, cash equivalents, and restricted cash at beginning of period	1,383.0	1,276.5	2,505.8
Cash, cash equivalents, and restricted cash at end of period	<u>\$ 942.7</u>	<u>\$ 1,383.0</u>	<u>\$ 1,276.5</u>
Supplemental disclosures of cash flow information:			
Cash paid for interest, net of amounts capitalized	\$ 62.6	\$ 87.2	\$ 90.6
Cash paid for income taxes, net	\$ 113.2	\$ 84.1	\$ 98.8

See accompanying Notes to Consolidated Financial Statements

Juniper Networks, Inc.

Consolidated Statements of Changes in Stockholders' Equity
(In millions, except per share amounts)

	Shares	Common Stock and Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2018	346.4	\$ 7,672.8	\$ (18.2)	\$ (2,831.4)	\$ 4,823.2
Net income	—	—	—	345.0	345.0
Other comprehensive loss, net	—	—	(0.3)	—	(0.3)
Issuance of common stock	9.8	55.6	—	—	55.6
Common stock assumed upon business combination	—	4.6	—	—	4.6
Repurchase and retirement of common stock	(20.3)	(264.6)	—	(250.3)	(514.9)
Purchase of forward contract under accelerated share repurchase program ("ASR")	—	(40.0)	—	—	(40.0)
Share-based compensation expense	—	202.2	—	—	202.2
Payments of cash dividends (\$0.76 per share of common stock)	—	(260.1)	—	—	(260.1)
Cumulative adjustment upon adoption of ASU 2017-12 ("Topic 815"), net	—	—	—	0.1	0.1
Cumulative adjustment upon adoption of ASU 2016-02 ("Topic 842"), net	—	—	—	(4.8)	(4.8)
Balance at December 31, 2019	335.9	7,370.5	(18.5)	(2,741.4)	4,610.6
Net income	—	—	—	257.8	257.8
Other comprehensive loss, net	—	—	74.1	—	74.1
Issuance of common stock	10.0	54.7	—	—	54.7
Common stock assumed upon business combination	—	1.5	—	—	1.5
Repurchase and retirement of common stock	(18.2)	(235.7)	—	(185.4)	(421.1)
Purchase of forward contract under ASR	—	40.0	—	—	40.0
Share-based compensation expense	—	190.0	—	—	190.0
Payments of cash dividends (\$0.80 per share of common stock)	—	(264.1)	—	—	(264.1)
Balance at December 31, 2020	327.7	7,156.9	55.6	(2,669.0)	4,543.5
Net income	—	—	—	252.7	252.7
Other comprehensive loss, net	—	—	(57.7)	—	(57.7)
Issuance of common stock	9.9	56.4	—	—	56.4
Common stock assumed upon business combination	—	2.7	—	—	2.7
Repurchase and retirement of common stock	(16.0)	(206.2)	—	(237.3)	(443.5)
Share-based compensation expense	—	221.9	—	—	221.9
Payments of cash dividends (\$0.80 per share of common stock)	—	(259.1)	—	—	(259.1)
Balance at December 31, 2021	321.6	\$ 6,972.6	\$ (2.1)	\$ (2,653.6)	\$ 4,316.9

See accompanying Notes to Consolidated Financial Statements

Juniper Networks, Inc.
Notes to Consolidated Financial Statements

Note 1. Description of Business, Basis of Presentation and Significant Accounting Policies

Description of Business

Juniper Networks, Inc. (the “Company” or “Juniper”) designs, develops, and sells products and services for high-performance networks, to enable customers to build scalable, reliable, secure and cost-effective networks for their businesses, while achieving agility and improved operating efficiency through automation. Juniper challenges the inherent complexity that comes with networking in the multicloud era. Juniper does this with products, solutions and services that transform the way people connect, work and live. Juniper simplifies the process of transitioning to a secure and automated multicloud environment to enable secure, AI-driven networks that connect the world.

Basis of Presentation

The Consolidated Financial Statements, which include the Company and its wholly-owned subsidiaries, are prepared in accordance with U.S. generally accepted accounting principles (“U.S. GAAP”). All intercompany balances and transactions have been eliminated. Certain reclassifications have been made to the amounts for the prior year in order to conform to the current year's presentation.

Use of Estimates

The preparation of the financial statements and related disclosures in accordance with U.S. GAAP requires the Company to make judgments, assumptions, and estimates that affect the amounts reported in the Consolidated Financial Statements and the accompanying notes. The Company bases its estimates and assumptions on current facts, historical experience, and various other factors that it believes are reasonable under the circumstances, to determine the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from these estimates.

Cash, Cash Equivalents, and Investments

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, demand deposits with banks, highly liquid investments in money market funds, commercial paper, government securities, certificates of deposits, time deposits, and corporate debt securities, which are readily convertible into cash. All highly liquid investments with original maturities of three months or less from Juniper's purchase date are classified as cash equivalents.

Investments in Available-for-Sale Debt Securities

The Company's investments in debt securities are classified as available-for-sale and include the Company's fixed income securities and investments in privately-held companies, consisting of debt and redeemable preferred stock securities.

Fixed income securities primarily consist of corporate debt securities, U.S. treasury securities, time deposits, asset-backed and mortgage-backed securities, certificate of deposits, commercial paper, U.S. government agency securities, and foreign government debt securities. Fixed income securities are initially recorded at cost and periodically adjusted to fair value in the Consolidated Balance Sheets. The Company periodically evaluates these investments to determine if impairment charges are required. The Company determines whether a credit loss exists for available-for-sale debt securities in an unrealized loss position. When the fair value of a security is below its amortized cost, the amortized cost will be reduced to its fair value and the resulting loss will be recorded in Consolidated Statements of Operations, if it is more likely than not that we are required to sell the impaired security before recovery of its amortized cost basis, or we have the intention to sell the security. If neither of these conditions are met, the Company considers the extent to which the fair value is less than the amortized cost, any changes to the rating of the security by a rating agency, and review of the issuer's financial statements. If factors indicate a credit loss exists, an allowance for credit loss is recorded through other expense, net, limited by the amount that the fair value is less than the amortized cost basis.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

The Company's privately-held debt and redeemable preferred stock securities are included in other long-term assets in the Consolidated Balance Sheets and are recorded at fair value. Fair value is reassessed when the Company is made aware of information indicating a change in the enterprise value of the investee, including known acquisition offers, subsequent funding rounds, and investee's plans for liquidation. The Company periodically evaluates these securities for indicators of impairment, including the inability to recover a portion of or the entire carrying amount of the investment, the inability of the investee to sustain earnings, the reduction in or termination of financial commitment to the investee from other investors, the intention to sell the investment, and whether it is more likely than not that the Company will be required to sell the investment before recovery of the entire amortized cost basis. If the Company determines that the decline in an investment's value indicates credit losses, the difference is recognized as an impairment loss in its Consolidated Statements of Operations.

For all available-for-sale debt securities, unrealized gains and the amount of unrealized loss relating to factors other than credit loss are reported as a separate component of accumulated other comprehensive loss in the Consolidated Balance Sheets. Realized gains and losses are determined based on the specific identification method and are reported in the Consolidated Statements of Operations.

Investments in Equity Securities

The Company's investments in equity securities with readily determinable fair values consist of money market funds, amounts under the non-qualified compensation plan ("NQDC") that are invested in mutual funds, and investments in public companies. These investments are measured at fair value with changes in fair value recognized in the Consolidated Statements of Operations.

Equity securities without readily determinable fair values include the Company's investments in privately-held companies consisting of non-redeemable preferred stock and common stock securities. The Company accounts for these securities at cost, adjusted for changes from observable transactions for identical or similar investments of the same issuer, less impairments. Fair value of these equity securities is reassessed when the Company identifies observable price changes indicating that an adjustment upward or downward to the carrying value is necessary. Any observable changes in fair value are recognized in earnings as of the date that the observable transaction took place, rather than the current reporting date. In addition, the Company periodically evaluates equity securities without readily determinable fair values to determine if impairment charges are required by evaluating whether an event or change in circumstance has occurred that may have a significant adverse effect on the fair value of the investment. A qualitative assessment is performed each reporting period to assess whether there are any impairment indicators, including, but not limited to, significant deterioration in the investee's earnings performance; credit rating; asset quality or business prospects; adverse change in the regulatory, economic, or technological environment; change in the general market condition of the geographic area or industry; acquisition offers; and the ability to continue as a going concern. If such indicators are present, the Company estimates the fair value of impaired investments and recognizes an impairment loss in the Consolidated Statement of Operations equal to the difference between the carrying value and fair value.

Fair Value

Fair value is defined as the price that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining fair value, the Company considers the principal or most advantageous market in which it transacts, and considers assumptions that market participants would use when pricing the asset or liability. The Company applies the following fair value hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. These inputs are valued using market-based approaches.

Level 3 – Inputs are unobservable inputs based on the Company's assumptions. These inputs, if any, are valued using internal financial models.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Derivative Instruments

The Company uses derivative instruments, primarily foreign currency forward and interest rate contracts, to hedge certain foreign currency and interest rate exposures. The Company does not enter into derivatives for speculative or trading purposes.

The Company uses foreign currency forward contracts to hedge certain forecasted foreign currency transactions relating to operating expenses. These derivatives are designated as cash flow hedges, which are carried at fair value with the derivative's gain or loss initially reported as a component of accumulated other comprehensive loss, and upon occurrence of the forecasted transaction, is subsequently reclassified into the costs of services or operating expense line item to which the hedged transaction relates. Cash flows from such hedges are classified as operating activities.

The Company also uses foreign currency forward contracts to mitigate variability in gains and losses generated from the re-measurement of certain monetary assets and liabilities denominated in non-functional currencies. These derivatives are carried at fair value with changes recorded in other expense, net in the Consolidated Statements of Operations in the same period as the changes in the fair value from the re-measurement of the underlying assets and liabilities. Cash flows from such derivatives are classified as operating activities.

The Company uses interest rate swaps to convert certain of our fixed interest rate notes to floating interest rates based on the London InterBank Offered Rate (LIBOR). All interest rate swaps will expire within nine years. The change in fair value of the derivative instrument substantially offsets the change in the fair value of the hedged item. These derivatives are classified in the Consolidated Statements of Cash Flows in the same section as the underlying item.

The Company uses interest rate locks, which fix the benchmark interest rates of future debt issuance. The Company records changes in fair value of interest rate locks in accumulated other comprehensive income (loss) in the consolidated balance sheets, in the period of change. When the forecasted transaction occurs, the Company will start to amortize the accumulated gains or losses included as a component of other comprehensive income (loss) related to the interest rate lock cash flow hedges to interest expense. In the event the underlying forecasted transaction does not occur, or it becomes probable that it will not occur, the gains or losses on the related cash flow hedge from accumulated other comprehensive income (loss) will be reclassified to other income and expense within the income statement.

The Company presents its derivative assets and derivative liabilities on a gross basis in the Consolidated Balance Sheets. However, under agreements containing provisions on set-off with certain counterparties, subject to applicable requirements, the Company is allowed to net-settle transactions, with a single net amount payable by one party to the other. The Company is neither required to pledge nor entitled to receive cash collateral related to these derivative transactions.

Inventory

Inventory consists primarily of component parts to be used in the manufacturing process and finished goods, and is stated at the lower of cost or net realizable value. In addition, the Company purchases and holds inventory to provide adequate component supplies over the life of the underlying products. Cost is computed using standard cost, which approximates actual cost, on a first-in, first-out basis. A charge is recorded to cost of product when inventory is determined to be in excess of anticipated demand or considered obsolete. At the point of loss recognition, a new, lower-cost basis for that inventory is established, and subsequent changes in facts and circumstances do not result in the restoration or increase in the newly established cost basis.

Leases

The Company determines if an arrangement is a lease at inception. The Company evaluates classification of leases as either operating or finance at commencement and, as necessary, at modification. As of December 31, 2021, the Company did not have any finance leases. Operating leases are included in operating lease right-of-use ("ROU") assets, other accrued liabilities, and operating lease liabilities on the Company's Consolidated Balance Sheets. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease.

Operating lease ROU assets and liabilities are recognized on the commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made prior to lease commencement and excludes lease incentives. Variable lease payments not dependent on an index or a rate, are expensed as incurred and are not included within the ROU asset and

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

lease liability calculation. Variable lease payments primarily include reimbursements of costs incurred by lessors for common area maintenance and utilities. The Company's lease terms are the noncancelable period, including any rent-free periods provided by the lessor, and include options to extend or terminate the lease when it is reasonably certain that it will exercise that option. At lease inception, and in subsequent periods as necessary, the Company estimates the lease term based on its assessment of extension and termination options that are reasonably certain to be exercised. Lease costs are recognized on a straight-line basis over the lease term.

The Company does not separate non-lease components from lease components for all underlying classes of assets. In addition, the Company does not recognize ROU assets and lease liabilities for short-term leases, which have a lease term of twelve months or less and do not include an option to purchase the underlying asset that the Company is reasonably certain to exercise. Lease cost for short-term leases is recognized on a straight-line basis over the lease term.

Property and Equipment

Property and equipment are recorded at cost less accumulated depreciation. Depreciation is calculated using the straight-line method, over the estimated useful lives of the following assets:

	Estimated Useful Life (years)
Computers, equipment, and software	1.5 to 10
Furniture and fixtures	5 to 7
Building and building improvements	7 to 40
Land improvements	10 to 40
Leasehold improvements	Lease term, not to exceed 10 years

Land is not depreciated. Construction-in-process is related to the construction or development of property and equipment that have not yet been placed in service for their intended use.

Business Combinations

The purchase price of an acquired entity is allocated to tangible assets, liabilities, and intangible assets, including in-process research and development (IPR&D) based on their estimated fair values with the residual of the purchase price recorded as goodwill. The determination of the value of the intangible assets acquired involves certain estimates, such as expected future cash flows, which include consideration of future growth rates and margins, attrition rates, future changes in technology, discount rates, and the expected use of the acquired assets. These factors are also considered in determining the useful life of the acquired intangible assets. IPR&D is initially capitalized at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, the IPR&D is reclassified as an amortizable purchased intangible asset and amortized over the asset's estimated useful life. Acquisition related expenses are recognized separately from business combination and are expensed as incurred. The Company's Consolidated Financial Statements include the operating results of acquired businesses from the date of each acquisition.

Goodwill and Intangible Assets

Goodwill is tested for impairment annually on November 1 or more frequently if certain circumstances indicate the carrying value of goodwill is impaired. Goodwill is tested for impairment at the reporting unit level. A qualitative assessment is first performed to determine whether it is necessary to quantitatively test goodwill for impairment. This initial assessment includes, among others, consideration of macroeconomic conditions and financial performance. If the qualitative assessment indicates that it is more likely than not that an impairment exists, a quantitative analysis is performed by determining the fair value of the reporting unit using a combination of the discounted cash flow and the market approaches. Goodwill is considered impaired if the carrying value of the reporting unit exceeds its fair value. A goodwill impairment loss is recognized for the amount that the carrying amount of the reporting unit, including goodwill, exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit.

Intangible assets consist of existing technology, customer relationships, and trade name, which are amortized over the period of estimated benefit using the straight-line method and estimated useful lives of 4 or 5 years. Other intangible assets acquired in a business combination related to IPR&D projects are considered to be indefinite-lived until the completion or abandonment of the associated research and development efforts. Indefinite-lived intangibles are not amortized into the results of operations but instead are evaluated for impairment. If and when development is complete, the associated assets would be deemed finite-lived

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

and would be amortized as cost of revenues over their respective estimated useful lives at that point in time. If the research and development project is abandoned, the acquired IPR&D assets are written off and charged to expense in the period of abandonment.

Impairment of Long-lived Assets

Long-lived assets, such as property, plant, and equipment, ROU assets, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset, or asset group, to estimated undiscounted future cash flows expected to be generated by the asset, or asset group. An impairment charge is recognized by the amount by which the carrying amount of the asset, or asset group, exceeds its fair value.

Warranty Reserves

The Company generally offers a one-year warranty or limited life-time warranty on most of its hardware products, and a 90-day warranty on the media that contains the software embedded in the products. Warranty costs are recognized as part of the Company's cost of sales based on associated material costs, logistics costs, labor costs, and overhead at the time revenue is recognized. Material costs are estimated primarily based upon the historical costs to repair or replace product returns within the warranty period. Labor, logistics and overhead costs are estimated primarily based upon historical trends in the cost to support customer cases within the warranty period. Warranty reserve is reported within other accrued liabilities in the Consolidated Balance Sheets.

Contract Manufacturer Liabilities

The Company establishes a liability for non-cancelable, non-returnable purchase commitments with its contract manufacturers for carrying charges, quantities in excess of its demand forecasts, or obsolete material charges for components purchased by the contract manufacturers to meet the Company's demand forecast or customer orders. The demand forecasts are based upon historical trends and analysis from the Company's sales and marketing organizations, adjusted for overall market conditions.

Loss Contingencies

The Company is subject to the possibility of various loss contingencies arising in the ordinary course of business. Management considers the likelihood of loss related to the incurrence of a liability as well as its ability to reasonably estimate the amount of loss, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. The Company regularly evaluates current information available to determine whether such accruals should be adjusted and whether new accruals are required.

Foreign Currency

Assets and liabilities of foreign operations with non-U.S. Dollar functional currency are translated to U.S. Dollars using exchange rates in effect at the end of the period. Revenue and expenses are translated to U.S. Dollars using rates that approximate those in effect during the period. The resulting translation adjustments are included in the Company's Consolidated Balance Sheets in the stockholders' equity section as a component of accumulated other comprehensive loss. The Company remeasures monetary assets and monetary liabilities in non-functional currencies and records the resulting foreign exchange transaction gains and losses in other expense, net in the Consolidated Statements of Operations.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Revenue Recognition

Revenue is recognized when promised goods or services are transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services by following a five-step process, (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price, and (5) recognize revenue when or as the Company satisfies a performance obligation, as further described below.

Identify the contract with a customer. The Company generally considers a sales contract and/or agreement with an approved purchase order as a customer contract provided that collection is considered probable, which is assessed based on the creditworthiness of the customer as determined by credit checks, payment histories, and/or other circumstances. The Company combines contracts with a customer if contracts are negotiated with a single commercial substance or contain price dependencies.

Identify the performance obligations in the contract. Product performance obligations include hardware, software licenses, and service performance obligations including hardware maintenance, software post-contract support and maintenance, Software-as-a-Service ("SaaS"), education and training, and professional services. Certain software licenses and related post-contract support are combined into a single performance obligation when the maintenance updates are critical to the continued delivery of the software functionality.

Determine the transaction price. The transaction price for the Company's contracts with its customers consists of both fixed and variable consideration provided it is probable that a significant reversal of revenue will not occur when the uncertainty related to variable consideration is resolved. Fixed consideration includes amounts to be contractually billed to the customer while variable consideration includes estimates for rights of return, rebates, and price protection, which are based on historical sales returns and price protection credits, specific criteria outlined in rebate agreements, and other factors known at the time. The Company generally invoices customers for hardware, software licenses and related maintenance arrangements at time of delivery, and professional services either upfront or upon meeting certain milestones. Customer invoices are generally due within 30 to 90 days after issuance. The Company's contracts with customers typically do not include significant financing components as the period between the transfer of performance obligations and timing of payment are generally within one year.

Allocate the transaction price to the performance obligations in the contract. For contracts that contain multiple performance obligations, the Company allocates the transaction price to the performance obligations on a relative stand-alone selling price ("SSP") basis. SSP is based on multiple factors including, but not limited to historical discounting trends for products and services, pricing practices in different geographies and through different sales channels, gross margin objectives, internal costs, competitor pricing strategies, and industry technology lifecycles.

Recognize revenue when or as the Company satisfies a performance obligation. Revenue for hardware and certain software licenses, are recognized at a point in time, which is generally upon shipment or delivery. Certain software licenses combined with post-contract support and maintenance are recognized over time on a ratable basis over the term of the license. Revenue for maintenance, software post-contract support and maintenance, and SaaS is recognized over time on a ratable basis over the contract term. Revenue from education, training, and professional services is recognized over time as services are completed or ratably over the contractual period of generally one year or less.

Deferred product revenue represents unrecognized revenue related to undelivered product commitments and other shipments that have not met revenue recognition criteria. Deferred service revenue represents billed amounts for service contracts, which include technical support, hardware and software maintenance, professional services, SaaS, and education and training, for which services have not been rendered.

Revenue is recognized net of any taxes collected, which are subsequently remitted to governmental authorities.

Deferred Commissions

Sales commissions earned by the Company's sales force are considered incremental and recoverable costs of obtaining a contract with a customer. These costs are recorded as prepaid expenses or other long-term assets and are deferred and then amortized over a period of benefit which is typically over the term of the customer contracts. Amortization expense is included in sales and marketing expenses in the accompanying Consolidated Statements of Operations.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Research and Development

Costs to research, design, and develop the Company's products are expensed as incurred.

Software Development Costs

Capitalization of software development costs for software to be sold, leased, or otherwise marketed begins when a product's technological feasibility has been established and ends when a product is available for general release to customers. Generally, the Company's products are released soon after technological feasibility has been established. As a result, costs incurred between achieving technological feasibility and product general availability have not been significant.

The Company capitalizes costs associated with internal-use software systems during the application development stage. Such capitalized costs include external direct costs incurred in developing or obtaining the applications and payroll and payroll-related costs for employees, who are directly associated with the development of the applications.

Advertising

Advertising costs are charged to sales and marketing expense as incurred. Advertising expense was \$26.6 million, \$21.7 million, and \$14.6 million, for 2021, 2020, and 2019, respectively.

Share-Based Compensation

The Company measures and recognizes compensation cost for all share-based awards made to employees and directors, including employee stock options, restricted stock awards ("RSAs"), restricted stock units ("RSUs"), performance share awards ("PSAs") and employee stock purchases related to the Employee Stock Purchase Plan ("ESPP"). For service condition only awards, share-based compensation expense is based on the fair value of the underlying awards and amortized on a straight-line basis. For PSAs, share-based compensation expense is amortized on a straight-line basis for each separate vesting portion of the awards. The Company accounts for forfeitures as they occur.

The Company utilizes the Black-Scholes-Merton ("BSM") option-pricing model to estimate the fair value of its ESPP purchase rights. The BSM model requires various highly subjective assumptions that represent management's best estimates of volatility, risk-free interest rate, expected life, and dividend yield. The Company estimates expected volatility based on the implied volatility of market-traded options, on the Company's common stock, adjusted for other relevant factors including historical volatility of the Company's common stock over the most recent period commensurate with the estimated expected life of the Company's ESPP. The expected life of ESPP purchase rights approximates the offering period.

The Company determines the grant date fair value of its RSUs, RSAs, and PSAs based on the closing market price of the Company's common stock on the date of grant, adjusted by the present value of the dividends expected to be paid on the underlying shares of common stock during the requisite and derived service period as these awards are not entitled to receive dividends until vested.

For market-based RSUs, the Company estimates the fair value and derived service period using the Monte Carlo simulation option pricing model ("Monte Carlo model"). The determination of the grant date fair value and derived service periods using the Monte Carlo model is affected by the Company's stock price, comparative market-based returns, as well as various highly subjective assumptions that represent management's best estimates of volatility, risk-free interest rate, and dividend yield. The Company estimates expected volatility based on the implied volatility of market-traded options, on the Company's common stock, adjusted for other relevant factors, including historical volatility of the Company's common stock over the contractual life of the Company's market-based RSUs.

Provision for Income Taxes

Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax basis of assets and liabilities and their reported amounts. Valuation allowances are recorded to reduce deferred tax assets to the amount that will more likely than not be realized.

The Company accounts for uncertainty in income taxes using a two-step approach to recognize and measure uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. The Company classifies the liability for unrecognized tax benefits as current to the extent that the Company anticipates payment (or receipt) of cash within one year. Interest and penalties related to uncertain tax positions are recognized in the provision for income taxes. The Company accounts for the current impacts of U.S. tax on certain foreign subsidiaries income, which is referred to as Global Intangible Low-Taxed Income in the year earned.

Concentrations of Risk

Financial instruments that subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, investments, derivatives, and accounts receivable. The Company invests only in high-quality credit instruments and maintains its cash, cash equivalents and available-for-sale investments in fixed income securities with several high-quality institutions. Deposits held with banks, including those held in foreign branches of global banks, may exceed the amount of insurance provided on such deposits. We mitigate the concentration of credit risk in our investment portfolio through diversification of the investments in various industries and asset classes, and limits to the amount of credit exposure to any single issuer and credit rating.

The Company's derivatives expose it to credit risk to the extent that counterparties may be unable to meet the terms of the agreement. The Company has a risk assessment and mitigation framework to evaluate the potential risk of loss with any one counterparty resulting from this type of credit risk. As part of this risk mitigation framework, the Company transacts with major financial institutions with high credit ratings and also enters into master netting agreements, which permit net settlement of the transactions with the same counterparty. The Company performs periodic evaluations of the relative credit standing of these financial institutions. Therefore, the Company does not expect material losses as a result of defaults by counterparties.

Generally, credit risk with respect to accounts receivable is diversified due to the number of entities comprising the Company's customer base and their dispersion across different geographic locations throughout the world. The Company performs ongoing credit evaluations of its customers and generally does not require collateral on accounts receivable. During the years ended December 31, 2021, 2020, and 2019, no single customer accounted for 10% or more of net revenues.

The Company relies on sole suppliers for certain critical components such as application-specific integrated circuits. Additionally, the Company relies primarily on a limited number of significant independent contract manufacturers and original design manufacturers for the production of its products. The inability of any supplier or manufacturer to fulfill supply requirements of the Company could negatively impact future operating results.

Recently Adopted Accounting Standards

Simplifying the Accounting for Income Taxes: On January 1, 2021, the Company adopted ASU No. 2019-12 (Topic 740) *Income Taxes — Simplifying the Accounting for Income Taxes*, which enhances and simplifies various aspects related to accounting for income taxes. Upon adoption, the standard did not have a material impact on the Condensed Consolidated Financial Statements.

Recent Accounting Standards Not Yet Adopted

Reference Rate Reform: In March 2020, the FASB issued ASU No. 2020-04 (Topic 848), Reference Rate Reform, which provides temporary optional expedients and exceptions to the existing guidance on contract modifications and hedge accounting to ease the financial reporting burdens related to the expected market transition from the London Interbank Offered Rate (LIBOR) and other interbank offered rates to alternative reference rates. The amendments were effective upon issuance and may be applied through December 31, 2022, to any new or amended contracts, hedging relationships, and other transactions that reference LIBOR. The Company does not expect adoption and transition to alternative reference rates to have a material impact on its Consolidated Financial Statements.

Accounting for Contract Assets and Contract Liabilities from Contracts with Customers: In October, 2021, the FASB issued ASU No. 2021-08 (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, Revenue from Contracts with Customers, as if it had originated the contracts. The standard is effective for the Company's fiscal year beginning January 1, 2023, with early adoption permitted. The Company is currently evaluating the effect of this pronouncement on its Consolidated Financial Statements.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 2. Business Combinations

2021 Acquisitions

Pro forma results of operations for the acquisitions have not been presented, as the financial impact to the Company's consolidated results of operations is not material. The goodwill recognized for these acquisitions is primarily attributable to expected synergies and is not deductible for U.S. federal income tax purposes.

Apstra

On January 27, 2021, the Company acquired 100% ownership of Apstra, Inc. ("Apstra"), a company that provides intent-based networking, open programmability, and automated closed loop assurance for the management of data center networks. The purchase consideration was \$179.4 million, consisting of \$176.7 million in cash and \$2.7 million in share-based awards attributable to services prior to the acquisition. The acquisition is expected to expand upon the Company's data center networking portfolio to advance its vision to transform data center operations.

WiteSand

During the fourth quarter of 2021, Juniper acquired 100% ownership of WiteSand Systems Inc. ("WiteSand"), a company that provides cloud-based network infrastructure solutions, for a purchase consideration of \$21.8 million in cash. The preliminary purchase price allocation is subject to potential measurement period adjustments relating to certain tax and legal matters. The acquisition is expected to expand upon the Company's AI-driven enterprise network solution.

2020 Acquisitions

128 Technology

On November 30, 2020, the Company acquired 100% ownership of 128 Technology for \$448.2 million. The purchase consideration consisted of cash of \$446.8 million and approximately \$1.4 million in share-based awards attributable to employee services prior to the acquisition. The acquisition is expected to enhance Juniper's AI-driven enterprise network portfolio by uniting 128 Technology's session-smart networking with Juniper's campus and branch solutions driven by Mist AI.

Under the terms of the acquisition agreement with 128 Technology, the Company assumed certain share-based awards for continuing employees, which were granted in contemplation of future services. The fair value of these share-based awards was \$29.3 million, which will be expensed as share-based compensation over the remaining service period.

Netrounds

On October 26, 2020, the Company acquired 100% ownership of Netrounds for \$33.6 million of cash. The acquisition of Netrounds, a company that provides a programmable, software-based active test and service assurance platform suitable for fixed and mobile networks, is expected to enhance Juniper's automated WAN solutions by further simplifying operations for service providers and ensuring positive end-user experiences.

Acquisition Costs

The Company recognized \$8.9 million and \$24.6 million of acquisition-related costs during the years ended December 31, 2021 and December 31, 2020, respectively. These acquisition-related costs were expensed in the period incurred within general and administrative expense in the Company's Consolidated Statements of Operations.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition dates (in millions):

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

	2021		2020	
	Apstra	WiteSand	128 Technology	Netrounds
Cash and cash equivalents	\$ 1.8	\$ 1.5	\$ 29.1	\$ 1.0
Goodwill	84.0	10.2	298.8	24.7
Intangible assets	87.8	9.3	116.7	8.7
Other assets acquired	12.6	0.8	14.3	0.8
Liabilities assumed	(6.8)	—	(10.7)	(1.6)
Total	\$ 179.4	\$ 21.8	\$ 448.2	\$ 33.6

The following table summarizes the fair value of the separately identifiable intangible assets at the time of acquisition and the period over which each intangible asset will be amortized (in millions, except years):

	2021				2020			
	Apstra		WiteSand		128 Technology		Netrounds	
	Weighted Average Estimated Useful Life (In Years)	Amount	Weighted Average Estimated Useful Life (In Years)	Amount	Weighted Average Estimated Useful Life (In Years)	Amount	Weighted Average Estimated Useful Life (In Years)	Amount
Intangible assets:								
Existing technology	5	\$ 80.5	5	\$ 9.3	5	\$ 88.0	4	\$ 5.3
Customer relationships	1.5	7.3	—	—	5	27.0	5	3.4
Backlog	—	—	—	—	1.5	1.7	—	—
Total intangible assets acquired		\$ 87.8		\$ 9.3		\$ 116.7		\$ 8.7

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 3. Cash Equivalents and Investments
Investments in Available-for-Sale Debt Securities

The following table summarizes the Company's unrealized gains and losses and fair value of investments designated as available-for-sale debt securities as of December 31, 2021 and December 31, 2020 (in millions):

	As of December 31, 2021				As of December 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Fixed income securities:								
Asset-backed and mortgage-backed securities	\$ 139.1	\$ —	\$ (0.5)	\$ 138.6	\$ 76.5	\$ 0.2	\$ —	\$ 76.7
Certificates of deposit	5.0	—	—	5.0	32.9	—	—	32.9
Commercial paper	75.8	—	—	75.8	89.3	—	—	89.3
Corporate debt securities	443.3	0.7	(1.5)	442.5	632.0	5.5	(0.1)	637.4
Foreign government debt securities	12.8	—	(0.1)	12.7	4.6	—	—	4.6
Time deposits	35.2	—	—	35.2	255.6	—	—	255.6
U.S. government agency securities	26.8	—	(0.1)	26.7	65.3	0.2	—	65.5
U.S. government securities	73.5	0.1	—	73.6	232.8	1.0	—	233.8
Total fixed income securities	811.5	0.8	(2.2)	810.1	1,389.0	6.9	(0.1)	1,395.8
Privately-held debt and redeemable preferred stock securities	9.6	37.4	—	\$ 47.0	18.3	37.4	—	55.7
Total available-for-sale debt securities	\$ 821.1	\$ 38.2	\$ (2.2)	\$ 857.1	\$ 1,407.3	\$ 44.3	\$ (0.1)	\$ 1,451.5
Reported as:								
Cash equivalents	\$ 47.2	\$ —	\$ —	\$ 47.2	\$ 333.7	\$ —	\$ —	\$ 333.7
Short-term investments	306.8	0.7	(0.1)	307.4	404.3	1.2	—	405.5
Long-term investments	457.5	0.1	(2.1)	455.5	651.0	5.7	(0.1)	656.6
Other long-term assets	9.6	37.4	—	47.0	18.3	37.4	—	55.7
Total	\$ 821.1	\$ 38.2	\$ (2.2)	\$ 857.1	\$ 1,407.3	\$ 44.3	\$ (0.1)	\$ 1,451.5

The following table presents the contractual maturities of the Company's total fixed income securities as of December 31, 2021 (in millions):

	Amortized Cost	Estimated Fair Value
Due in less than one year	\$ 354.0	\$ 354.6
Due between one and five years	457.5	455.5
Total	\$ 811.5	\$ 810.1

As of December 31, 2021, the Company's unrealized loss of \$2.2 million resulted from 393 investments that were primarily in an unrealized loss position for less than 12 months. The gross unrealized losses related to these investments were primarily due to changes in market interest rates. The Company anticipates that it will recover the entire amortized cost basis of such available-for-sale debt securities and has determined that no allowance for credit losses was required to be recognized during the years ended December 31, 2021 and December 31, 2020.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

During the year ended December 31, 2021, the Company had gross realized gains of \$15.3 million and no material gross realized losses from available-for-sale debt securities. During the years ended December 31, 2020, and 2019, there were no material gross realized gains or losses from available-for-sale debt securities.

Investments in Equity Securities

The following table presents the Company's investments in equity securities as of December 31, 2021 and 2020 (in millions):

	As of December 31,	
	2021	2020
Equity investments with readily determinable fair value		
Money market funds	\$ 382.0	\$ 536.6
Mutual funds	33.4	29.3
Publicly-traded equity securities	8.1	6.6
Equity investments without readily determinable fair value	150.1	146.2
Total equity securities	<u>\$ 573.6</u>	<u>\$ 718.7</u>
Reported as:		
Cash equivalents	\$ 371.5	\$ 519.8
Short-term investments	8.1	6.6
Prepaid expenses and other current assets	15.1	9.9
Other long-term assets	178.9	182.4
Total	<u>\$ 573.6</u>	<u>\$ 718.7</u>

During the years ended December 31, 2021, 2020, and 2019, there were no material unrealized gains or losses recognized for equity investments.

Restricted Cash and Investments

The Company has restricted cash and investments for: (i) amounts held in escrow accounts, as required in connection with certain acquisitions completed primarily in 2020 and 2021; (ii) amounts held under the Company's short-term disability plan in California; and (iii) amounts under the Company's non-qualified deferred compensation plan for senior-level employees. Restricted investments consist of equity investments. As of December 31, 2021, the carrying value of restricted cash and investments was \$64.1 million, of which \$32.2 million was included in prepaid expenses and other current assets and \$31.9 million was included in other long-term assets on the Consolidated Balance Sheets.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash included in the Consolidated Balance Sheets as of December 31, 2021 and December 31, 2020 (in millions):

	As of December 31,	
	2021	2020
Cash and cash equivalents	\$ 922.5	\$ 1,361.9
Restricted cash included in Prepaid expenses and other current assets	17.2	19.2
Restricted cash included in Other long-term assets	3.0	1.9
Total cash, cash equivalents, and restricted cash	<u>\$ 942.7</u>	<u>\$ 1,383.0</u>

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 4. Fair Value Measurements
Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table provides a summary of assets and liabilities measured at fair value on a recurring basis and as reported in the Consolidated Balance Sheets (in millions):

	Fair Value Measurements at December 31, 2021				Fair Value Measurements at December 31, 2020			
	Quoted Prices in Active Markets For Identical Assets (Level 1)	Significant Other Observable Remaining Inputs (Level 2)	Significant Other Unobservable Remaining Inputs (Level 3)	Total	Quoted Prices in Active Markets For Identical Assets (Level 1)	Significant Other Observable Remaining Inputs (Level 2)	Significant Other Unobservable Remaining Inputs (Level 3)	Total
Assets:								
Available-for-sale debt securities:								
Asset-backed and mortgage-backed securities	\$ —	\$ 138.6	\$ —	\$ 138.6	\$ —	\$ 76.7	\$ —	\$ 76.7
Certificates of deposit	—	5.0	—	5.0	—	32.9	—	32.9
Commercial paper	—	75.8	—	75.8	—	89.3	—	89.3
Corporate debt securities	—	442.5	—	442.5	—	637.4	—	637.4
Foreign government debt securities	—	12.7	—	12.7	—	4.6	—	4.6
Time deposits	—	35.2	—	35.2	—	255.6	—	255.6
U.S. government agency securities	—	26.7	—	26.7	—	65.5	—	65.5
U.S. government securities	42.3	31.3	—	73.6	140.0	93.8	—	233.8
Privately-held debt and redeemable preferred stock securities	—	—	47.0	47.0	—	—	55.7	55.7
Total available-for-sale debt securities	42.3	767.8	47.0	857.1	140.0	1,255.8	55.7	1,451.5
Equity securities:								
Money market funds	382.0	—	—	382.0	536.6	—	—	536.6
Mutual funds	33.4	—	—	33.4	29.3	—	—	29.3
Publicly-traded equity securities	8.1	—	—	8.1	6.6	—	—	6.6
Total equity securities	423.5	—	—	423.5	572.5	—	—	572.5
Derivative assets:								
Foreign exchange contracts	—	9.2	—	9.2	—	38.0	—	38.0
Interest rate contracts	—	47.1	—	47.1	—	51.0	—	51.0
Total derivative assets	—	56.3	—	56.3	—	89.0	—	89.0
Total assets measured at fair value on a recurring basis	\$ 465.8	\$ 824.1	\$ 47.0	\$ 1,336.9	\$ 712.5	\$ 1,344.8	\$ 55.7	\$ 2,113.0
Liabilities:								
Derivative liabilities:								
Foreign exchange contracts	\$ —	\$ (24.0)	\$ —	\$ (24.0)	\$ —	\$ (0.5)	\$ —	\$ (0.5)
Interest rate contracts	—	(2.5)	—	(2.5)	—	—	—	—
Total derivative liabilities	—	(26.5)	—	(26.5)	—	(0.5)	—	(0.5)
Total liabilities measured at fair value on a recurring basis	\$ —	\$ (26.5)	\$ —	\$ (26.5)	\$ —	\$ (0.5)	\$ —	\$ (0.5)
Total assets, reported as:								
Cash equivalents	\$ 371.6	\$ 47.2	\$ —	\$ 418.8	\$ 519.8	\$ 333.7	\$ —	\$ 853.5
Short-term investments	41.5	274.0	—	315.5	101.0	311.1	—	412.1
Long-term investments	8.8	446.7	—	455.5	45.6	611.0	—	656.6
Prepaid expenses and other current assets	15.1	8.8	—	23.9	9.9	28.0	—	37.9
Other long-term assets	28.8	47.4	47.0	123.2	36.2	61.0	55.7	152.9
Total assets measured at fair value on a recurring basis	\$ 465.8	\$ 824.1	\$ 47.0	\$ 1,336.9	\$ 712.5	\$ 1,344.8	\$ 55.7	\$ 2,113.0

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

	Fair Value Measurements at December 31, 2021				Fair Value Measurements at December 31, 2020			
	Quoted Prices in Active Markets For Identical Assets (Level 1)	Significant Other Observable Remaining Inputs (Level 2)	Significant Other Unobservable Remaining Inputs (Level 3)	Total	Quoted Prices in Active Markets For Identical Assets (Level 1)	Significant Other Observable Remaining Inputs (Level 2)	Significant Other Unobservable Remaining Inputs (Level 3)	Total
Total liabilities, reported as:								
Other accrued liabilities	\$ —	\$ (14.9)	\$ —	\$ (14.9)	\$ —	\$ (0.3)	\$ —	\$ (0.3)
Other long-term liabilities	—	(11.6)	—	(11.6)	—	(0.2)	—	(0.2)
Total liabilities measured at fair value on a recurring basis	\$ —	\$ (26.5)	\$ —	\$ (26.5)	\$ —	\$ (0.5)	\$ —	\$ (0.5)

The Company's Level 2 available-for-sale debt securities are priced using quoted market prices for similar instruments or non-binding market prices that are corroborated by observable market data. The Company uses inputs such as actual trade data, benchmark yields, broker/dealer quotes, or alternative pricing sources with reasonable levels of price transparency which are obtained from quoted market prices, independent pricing vendors, or other sources, to determine the ultimate fair value of these assets. The Company's derivative instruments are classified as Level 2, as they are not actively traded and are valued using pricing models that use observable market inputs. During the years ended December 31, 2021 and 2020, the Company had no transfers into or out of Level 3 of the fair value hierarchy of its assets or liabilities measured at fair value.

The Company's privately-held debt and redeemable preferred stock securities are classified as Level 3 assets due to the lack of observable inputs to determine fair value. The Company estimates the fair value of its privately-held debt and redeemable preferred stock securities on a recurring basis using an analysis of the financial condition and near-term prospects of the investee, including recent financing activities and the investee's capital structure. During the year ended December 31, 2021, the Company realized a gain of \$13.4 million from disposal of securities with an aggregate cost of \$9.6 million related to privately-held debt and redeemable preferred stock.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

The Company's investments in equity securities without readily determinable fair value are classified as Level 3 assets due to the lack of observable inputs to determine fair value. The Company estimates the fair value on a nonrecurring basis (i.e. when an observable transaction occurs) using an analysis of the financial condition and near-term prospects of the investee, including recent financing activities and the investee's capital structure. As of December 31, 2021 and December 31, 2020, there have been no material adjustments for price changes to the equity securities without readily determinable fair value.

Certain of the Company's assets, including intangible assets and goodwill, are measured at fair value on a nonrecurring basis. There were no significant impairment charges recognized during the years ended December 31, 2021, 2020, and 2019.

As of December 31, 2021 and 2020, the Company had no liabilities measured at fair value on a nonrecurring basis.

Assets and Liabilities Not Measured at Fair Value

The carrying amounts of the Company's accounts receivable, accounts payable, and other accrued liabilities approximate fair value due to their short maturities. As of December 31, 2021 and December 31, 2020, the estimated fair value of the Company's total outstanding debt in the Consolidated Balance Sheets was \$1,845.6 million and \$2,386.6 million, respectively, based on observable market inputs (Level 2).

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 5. Derivative Instruments

The notional amount of the Company's derivative instruments is summarized as follows (in millions):

	As of December 31,	
	2021	2020
Designated derivatives:		
Cash flow hedges:		
Foreign currency contracts	\$ 873.9	\$ 722.1
Interest rate lock contracts	650.0	650.0
Fair value hedges:		
Interest rate swap contracts	600.0	300.0
Total designated derivatives	\$ 2,123.9	\$ 1,672.1
Non-designated derivatives	144.6	174.1
Total	\$ 2,268.5	\$ 1,846.2

The fair value of derivative instruments on the Consolidated Balance Sheets was as follows:

	Balance Sheet Location	As of December 31,	
		2021	2020
Derivative assets:			
Derivatives designated as hedging instruments:			
Foreign currency contracts as cash flow hedges	Other current assets	\$ 8.7	\$ 27.8
Foreign currency contracts as cash flow hedges	Other long-term assets	0.4	10.0
Interest rate lock contracts	Other long-term assets	45.0	30.7
Interest rate swap contracts	Other long-term assets	2.1	20.3
Total derivatives designated as hedging instruments		\$ 56.2	\$ 88.8
Derivatives not designated as hedging instruments	Other current assets	0.1	0.2
Total derivative assets		\$ 56.3	\$ 89.0
Derivative liabilities:			
Derivatives designated as hedging instruments:			
Foreign currency contracts	Other accrued liabilities	\$ 14.8	\$ 0.2
Foreign currency contracts	Other long-term liabilities	9.1	0.2
Interest rate swap contracts	Other long-term liabilities	2.5	—
Total derivatives designated as hedging instruments		\$ 26.4	\$ 0.4
Derivatives not designated as hedging instruments	Other accrued liabilities	0.1	0.1
Total derivative liabilities		\$ 26.5	\$ 0.5

Offsetting of Derivative Instruments

The Company presents its derivative instruments at gross fair values in the Consolidated Balance Sheets. As of December 31, 2021 and December 31, 2020 the potential effects of set-off associated with the derivative contracts would be a reduction to both derivative assets and derivative liabilities by \$17.5 million and \$0.5 million, respectively.

Designated Derivatives

The Company uses foreign currency forward contracts to hedge the Company's planned cost of revenues and operating expenses denominated in foreign currencies. These derivatives are designated as cash flow hedges and typically have maturities of thirty-six months or less.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

The Company enters into interest rate swaps, designated as fair value hedges, to convert the fixed interest rates of certain Senior Notes to floating interest rates. In April 2021, the Company entered into swaps for an aggregate notional amount of \$300.0 million for its fixed-rate 2030 Notes in addition to the swaps entered in 2019 for an aggregate notional amount of \$300.0 million for its fixed-rate 2041 Notes. The interest rate swaps will expire within nine years.

In 2020, the Company entered into interest rate locks with large financial institutions, which fix the benchmark interest rates of future debt issuance for an aggregate notional amount of \$650.0 million. These contracts are designated as cash flow hedges and are expected to terminate within four years.

Effect of Derivative Instruments on the Consolidated Statements of Operations

For cash flow hedges, the Company recognized an unrealized loss of \$9.1 million, unrealized gain of \$63.5 million and unrealized loss of \$6.3 million in accumulated other comprehensive loss for the effective portion of its derivative instruments during the years ended December 31, 2021, 2020, and 2019, respectively.

For foreign currency forward contracts, the Company reclassified a gain of \$28.9 million, and losses of \$9.0 million and \$3.8 million out of accumulated other comprehensive loss to cost of revenues and operating expenses in the Consolidated Statement of Operations during the years ended December 31, 2021, 2020, and 2019, respectively. As of December 31, 2021, an estimated \$6.1 million of unrealized net loss within accumulated other comprehensive loss is expected to be reclassified into earnings within the next twelve months.

Non-Designated Derivatives

The Company also uses foreign currency forward contracts to mitigate variability in gains and losses generated from the remeasurement of certain monetary assets and liabilities denominated in foreign currencies. These foreign exchange forward contracts typically have maturities of approximately one to four months. The outstanding non-designated derivative instruments are carried at fair value. Changes in the fair value of these derivatives recorded in other expense, net within the Consolidated Statements of Operations were not material during the years ended December 31, 2021, 2020, and 2019, respectively.

See Note 1, *Description of Business, Basis of Presentation and Significant Accounting Policies*, for the Company's policy regarding the offsetting of derivative assets and derivative liabilities.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 6. Goodwill and Purchased Intangible Assets
Goodwill

The Company's goodwill activity was as follows (in millions):

	Total
December 31, 2019	\$ 3,337.1
Additions due to business combinations	332.5
December 31, 2020	3,669.6
Additions due to business combinations	92.5
December 31, 2021	\$ 3,762.1

We conducted our annual impairment test of goodwill during the fourth quarter of 2021; the estimated fair value of our reporting unit was substantially in excess of the carrying value. There was no goodwill impairment during the years ended December 31, 2021, 2020, and 2019.

Purchased Intangible Assets

The Company's purchased intangible assets, net, were as follows (in millions):

	As of December 31, 2021				As of December 31, 2020			
	Gross	Accumulated Amortization	Accumulated Impairments and Other Charges	Net	Gross	Accumulated Amortization	Accumulated Impairments and Other Charges	Net
Finite-lived intangible assets:								
Technologies and patents	\$ 913.1	\$ (660.7)	\$ (55.1)	\$ 197.3	\$ 823.5	\$ (598.2)	\$ (55.1)	\$ 170.2
Customer contracts, support agreements, and related relationships	136.3	(98.6)	(2.8)	34.9	129.2	(84.4)	(2.8)	42.0
Trade names and other	9.6	(6.5)	—	3.1	9.6	(4.1)	—	5.5
Total	1,059.0	(765.8)	(57.9)	235.3	962.3	(686.7)	(57.9)	217.7
Indefinite-lived intangible assets:								
IPR&D	49.0	—	—	49.0	49.0	—	—	49.0
Total purchased intangible assets	\$ 1,108.0	\$ (765.8)	\$ (57.9)	\$ 284.3	\$ 1,011.3	\$ (686.7)	\$ (57.9)	\$ 266.7

Amortization expense related to purchased intangible assets with finite lives was \$79.5 million, \$40.6 million, and \$34.7 million for the years ended December 31, 2021, 2020, and 2019, respectively. There were no significant impairment charges related to purchased intangible assets during the years ended December 31, 2021, 2020, and 2019.

As of December 31, 2021, the estimated future amortization expense of purchased intangible assets with finite lives was as follows (in millions):

Years Ending December 31,	Amount
2022	\$ 74.9
2023	68.7
2024	49.2
2025	39.6
2026	2.9
Total	\$ 235.3

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 7. Other Financial Information**Total Inventory**

Total inventory consisted of the following (in millions):

	As of December 31,	
	2021	2020
Production and service materials	\$ 208.6	\$ 158.1
Finished goods	75.6	63.8
Total inventory	\$ 284.2	\$ 221.9
Reported as:		
Inventory	\$ 272.6	\$ 210.2
Other long-term assets	11.6	11.7
Total inventory	\$ 284.2	\$ 221.9

Property and Equipment, Net

Property and equipment, net, consisted of the following (in millions):

	As of December 31,	
	2021	2020
Computers and equipment	\$ 1,023.5	\$ 1,057.5
Software	226.8	231.1
Leasehold improvements	197.6	223.8
Furniture and fixtures	46.8	49.6
Building and building improvements	269.3	256.0
Land and land improvements	243.5	243.5
Construction-in-process	11.2	17.7
Property and equipment, gross	2,018.7	2,079.2
Accumulated depreciation	(1,315.7)	(1,316.9)
Property and equipment, net	\$ 703.0	\$ 762.3

Depreciation expense was \$151.0 million, \$166.2 million, and \$184.0 million in 2021, 2020, and 2019, respectively.

Warranties

Changes in the Company's warranty reserve were as follows (in millions):

	As of December 31,	
	2021	2020
Beginning balance	\$ 30.2	\$ 31.4
Provisions made during the period, net	39.5	37.1
Actual costs incurred during the period	(36.7)	(38.3)
Ending balance	\$ 33.0	\$ 30.2

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Revenue

See Note 12, *Segments*, for disaggregated revenue by customer solution, customer vertical, and geographic region.

Product revenue of \$74.0 million included in deferred revenue at January 1, 2021 was recognized during the year ended December 31, 2021. Service revenue of \$770.4 million included in deferred revenue at January 1, 2021 was recognized during the year ended December 31, 2021.

Remaining Performance Obligations

Remaining Performance Obligations (RPO) are comprised mainly of deferred product and service revenue, and to a lesser extent, unbilled service revenue from non-cancellable contracts for which the Company has not invoiced and has an obligation to perform, and for which revenue has not yet been recognized in the financial statements.

The following table summarizes the breakdown of RPO as of December 31, 2021 and when the Company expects to recognize the amounts as revenue (in millions):

	Revenue Recognition Expected by Period			
	Total	Less than 1 year	1-3 years	More than 3 years
Product	\$ 135.8	\$ 117.1	\$ 15.6	\$ 3.1
Service	1,296.0	828.7	371.1	96.2
Total	<u>\$ 1,431.8</u>	<u>\$ 945.8</u>	<u>\$ 386.7</u>	<u>\$ 99.3</u>

Deferred Commissions

Deferred commissions were \$34.9 million and \$27.4 million as of December 31, 2021 and 2020, respectively. During the years ended December 31, 2021 and 2020, amortization expense for the deferred commissions were \$189.8 million and \$145.9 million, respectively, and there were no impairment charges recognized.

Other Expense, Net

Other expense, net consisted of the following (in millions):

	Years Ended December 31,		
	2021	2020	2019
Interest income	\$ 14.9	\$ 36.3	\$ 79.1
Interest expense	(50.8)	(77.0)	(88.7)
Gain (loss) on investments, net	17.6	13.3	(3.8)
Other	1.5	(5.5)	0.9
Other expense, net	<u>\$ (16.8)</u>	<u>\$ (32.9)</u>	<u>\$ (12.5)</u>

Interest income primarily includes interest earned on the Company's cash, cash equivalents and investments. Interest expense primarily includes interest, net of capitalized interest expense, from long-term debt and customer financing arrangements. Gain (loss) on investments, net, primarily includes gains (losses) from the sale of investments in public and privately-held companies, and any observable changes in fair value and impairment charges recorded on these investments. Other typically consists of foreign exchange gains and losses and other non-operational income and expense items.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 8. Restructuring Charges

The following table presents restructuring charges included in the Consolidated Statements of Operations (in millions):

	Years Ended December 31,		
	2021	2020	2019
Severance	\$ 13.6	\$ 62.8	\$ 21.5
Facility consolidations	8.1	5.2	2.1
Contract terminations and other	21.2	—	11.7
Total	<u>\$ 42.9</u>	<u>\$ 68.0</u>	<u>\$ 35.3</u>
Reported as:			
Restructuring charges	\$ 42.9	\$ 68.0	\$ 35.3
Total	<u>\$ 42.9</u>	<u>\$ 68.0</u>	<u>\$ 35.3</u>

2021 Restructuring Plan

During the first quarter of 2021, the Company initiated a restructuring plan (the "2021 Restructuring Plan") driven by recent acquisitions and strategic changes and designed to enable reinvestment in certain key priority areas, which resulted in severance, facility consolidations, contract terminations, and other exit related costs. The 2021 Restructuring Plan activities are expected to be substantially completed during the first half of 2022.

In connection with the 2021 Restructuring Plan, we incurred cumulative charges of \$42.9 million for the twelve months ended December 31, 2021. These costs were reported as restructuring charges in the Consolidated Statements of Operations.

Prior Restructuring Activities

In 2020, the Company initiated a restructuring plan (the "2020 Restructuring Plan") designed to realign its workforce with the Company's sales strategy, enhance productivity and cost efficiencies, and enable reinvestment in certain key priority areas, which resulted in severance costs and other exit related costs, including impairment charges. In connection with the 2020 Restructuring Plan, during the fourth quarter of 2020, the Company implemented a voluntary early retirement program for employees who met certain eligibility requirements, which resulted in additional severance costs that were recorded to restructuring charges in the Consolidated Statement of Operations.

In 2019, the Company initiated a restructuring plan (the "2019 Restructuring Plan") to realign its workforce with the Company's sales strategy, improve productivity, and enhance cost efficiencies, which resulted in severance, facility consolidation, and contract termination costs that were recorded to restructuring charges in the Consolidated Statement of Operations.

Restructuring Liabilities

Restructuring liabilities are reported within other accrued liabilities in the Consolidated Balance Sheets. The following table provides a summary of changes in the restructuring liabilities associated with the 2021 Restructuring Plan and 2020 Restructuring Plan (in millions):

	December 31, 2020	Charges/ (Benefits)	Cash Payments	Other	December 31, 2021
Severance	\$ 50.7	\$ 13.6	\$ (63.9)	\$ 1.0	\$ 1.4
Facility consolidations	—	8.1	—	(8.1)	—
Contract terminations and other	—	21.2	(4.5)	(5.8)	10.9
Total	<u>\$ 50.7</u>	<u>\$ 42.9</u>	<u>\$ (68.4)</u>	<u>\$ (12.9)</u>	<u>\$ 12.3</u>

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 9. Debt and Financing
Debt

The following table summarizes the Company's total debt (in millions, except percentages):

	<u>Maturity Date</u>	<u>Effective Interest Rates</u>	<u>As of December 31,</u>	
			<u>2021</u>	<u>2020</u>
Senior Notes ("Notes"):				
4.500% fixed-rate notes ("2024 Notes")	March 2024	4.70 %	\$ —	\$ 265.8
4.350% fixed-rate notes ("2025-I Notes")	June 2025	4.47 %	—	158.0
1.200% fixed-rate notes ("2025-II Notes")	December 2025	1.37 %	400.0	400.0
3.750% fixed-rate notes ("2029 Notes")	August 2029	3.86 %	500.0	500.0
2.000% fixed-rate notes ("2030 Notes")	December 2030	2.12 %	400.0	400.0
5.950% fixed-rate notes ("2041 Notes")	March 2041	6.03 %	400.0	400.0
Total Notes			1,700.0	2,123.8
Unaccreted discount and debt issuance costs			(12.9)	(16.8)
Hedge accounting fair value adjustments ^(*)			(0.3)	20.3
Total			<u>\$ 1,686.8</u>	<u>\$ 2,127.3</u>

^(*) Represents the fair value adjustments for interest rate swaps with an aggregate notional amount of \$600.0 million. These interest rate swaps convert the fixed interest rates of certain Senior Notes to floating interest rates and are designated as fair value hedges. See Note 5, *Derivative Instruments*, for a discussion of the Company's interest rate swaps.

In December 2020, the Company issued \$400.0 million aggregate principal amount of 1.20% senior notes due 2025 ("2025-II Notes") and \$400.0 million aggregate principal amount of 2.00% senior notes due 2030 ("2030 Notes"). The net proceeds from the issuances of the 2025-II Notes and the 2030 Notes, together with cash on hand, were used for the repayment of \$500.0 million aggregate principal amount of the Company's 4.50% senior notes due 2024 and \$300.0 million aggregate principal amount of the Company's 4.35% senior notes due 2025.

In December 2020, the Company, through a cash tender offer, partly repurchased \$234.2 million in aggregate principal amount of 2024 Notes and \$142.0 million in aggregate principal amount of 2025-I Notes. The repayments resulted in a loss on extinguishment of debt of \$55.0 million, consisting primarily of a premium on the tender offer and acceleration of unamortized debt discount and fees on the redeemed debt, which was recorded within the Consolidated Statements of Operations.

In January 2021, the Company redeemed the remaining \$265.8 million of its outstanding 2024 Notes and the remaining \$158.0 million of its outstanding 2025-I Notes, for a principal redemption amount in the aggregate of \$482.1 million, plus accrued interest. The repayments resulted in a loss on extinguishment of debt of \$60.6 million, consisting primarily of a premium on the early redemption and acceleration of unamortized debt discount and fees on the redeemed debt.

The Notes above are the Company's senior unsecured and unsubordinated obligations, ranking equally in right of payment to all of the Company's existing and future senior unsecured and unsubordinated indebtedness, and senior in right of payment to any of the Company's future indebtedness that is expressly subordinated to the Notes.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

As of December 31, 2021, the Company's aggregate debt maturities based on outstanding principal were as follows (in millions):

Years Ending December 31,	Amount
2022	\$ —
2023	—
2024	—
2025	400.0
2026	—
Thereafter	1,300.0
Total	\$ 1,700.0

The Company may redeem the Notes, either in whole or in part, at any time at a redemption price equal to the greater of (i) 100% of the aggregate principal amount of the Notes to be redeemed or (ii) the sum of the present values of the remaining scheduled payments discounted to the redemption date, plus, in either case, accrued and unpaid interest, if any.

In the event of a change of control repurchase event, the holders of the Notes may require the Company to repurchase for cash all or part of the Notes at a purchase price equal to 101% of the aggregate principal amount, plus accrued and unpaid interest, if any.

Interest on the Notes is payable in cash semiannually. The effective interest rates for the Notes include the interest on the Notes, accretion of the discount, and amortization of issuance costs. The indenture that governs the Notes also contain various covenants, including limitations on the Company's ability to incur liens or enter into sale-leaseback transactions over certain dollar thresholds.

As of December 31, 2021, the Company was in compliance with all covenants in the indenture governing the Notes.

Revolving Credit Facility

In April 2019, the Company entered into a credit agreement (the "Credit Agreement") with certain institutional lenders that provides for a five-year \$500.0 million unsecured revolving credit facility (the "Revolving Credit Facility"), with an option to increase the Revolving Credit Facility by up to an additional \$200.0 million, subject to the lenders' approval. Proceeds of loans made under the Revolving Credit Facility may be used by the Company for working capital and general corporate purposes. The Revolving Credit Facility will terminate in April 2024.

Borrowings under the Revolving Credit Facility will bear interest, at either (i) a floating rate per annum equal to the base rate plus a margin of between 0.00% and 0.375%, depending on the Company's public debt rating or (ii) a per annum rate equal to the reserve adjusted Eurocurrency rate, plus a margin of between 0.910% and 1.375%, depending on the Company's public debt rating. Base rate is defined as the greatest of (A) Citibank's base rate, (B) the federal funds rate plus 0.500% or (C) the ICE Benchmark Administration Settlement Rate applicable to dollars for a period of one month plus 1.00%. The Eurocurrency rate is determined for U.S. dollars and Pounds Sterling as the rate at which deposits in such currency are offered in the London interbank market for the applicable interest period and for Euro as the rate specified for deposits in Euro with a maturity comparable to the applicable interest period.

On December 17, 2021, an amendment to the Credit Agreement was executed that defines the Secured Overnight Financing Rate (SOFR) as the benchmark rate for U.S. dollar borrowings in the absence of LIBOR, and the Sterling Overnight Index Average (SONIA) as the benchmark rate for Pounds Sterling borrowings following the cessation of GBP LIBOR on December 31, 2021.

The Revolving Credit Facility requires the Company to maintain a leverage ratio no greater than 3.0x (provided that if a material acquisition has been consummated, the Company is permitted to maintain a leverage ratio no greater than 3.5x for up to four quarters) and an interest coverage ratio no less than 3.0x during the term of the credit facility.

As of December 31, 2021, the Company had not borrowed any funds under the Credit Agreement and was in compliance with all covenants in the Credit Agreement.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Financing Arrangements

The Company provides certain customers with access to extended financing arrangements that allow for longer payment terms than those typically provided by the Company by factoring accounts receivable to third-party financing providers ("financing providers"). The program does not and is not intended to affect the timing of the Company's revenue recognition. Under the financing arrangements, proceeds from the financing providers are due to the Company within 1 to 90 days from the sale of the receivable. In these transactions with the financing providers, the Company surrenders control over the transferred assets.

Pursuant to the financing arrangements for the sale of receivables, the Company sold receivables of \$31.9 million, \$57.5 million and \$64.0 million during the years ended December 31, 2021, 2020, and 2019, respectively. The Company received cash proceeds from financing providers of \$32.5 million, \$57.4 million, and \$69.7 million during the years ended December 31, 2021, 2020, and 2019, respectively. As of December 31, 2021 and December 31, 2020, the amounts owed by the financing providers were \$3.2 million and \$3.9 million, respectively, which were recorded in accounts receivable on the Company's Consolidated Balance Sheets.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 10. Equity

The following table summarizes dividends paid, stock repurchases and retirements under the Company's stock repurchase programs, and stock repurchases for tax withholdings (in millions, except per share amounts):

Year	Dividends		Shares	Stock Repurchases			Tax Withholding Amount	Total
	Per Share	Amount		Average price per share ^(*)	Amount	Amount		
2021	\$ 0.80	\$ 259.1	15.7	\$ 27.56	\$ 433.3	\$ 10.2	\$ 702.6	
2020	\$ 0.80	\$ 264.1	17.9	\$ 23.47	\$ 375.0	\$ 6.2	\$ 645.3	
2019	\$ 0.76	\$ 260.1	20.1	\$ 25.36	\$ 550.0	\$ 5.0	\$ 815.1	

^(*) \$23.47 average price per share for 2020 includes \$375.0 million in open market purchases, and settlement of the forward contract of \$40.0 million under the ASR, which was initiated during the fourth quarter of 2019.

Cash Dividends on Shares of Common Stock

During 2021, 2020, and 2019, the Company declared and paid quarterly cash dividends of \$0.20, \$0.20 and \$0.19 per common share, totaling \$259.1 million, \$264.1 million, and \$260.1 million, respectively, on its outstanding common stock. Any future dividends, and the establishment of record and payment dates, are subject to approval by the Board of Directors (the "Board") of Juniper or an authorized committee thereof. See Note 16, *Subsequent Events*, for discussion of the Company's dividend declaration subsequent to December 31, 2021.

Stock Repurchase Activities

In January 2018, the Board approved a \$2.0 billion share repurchase program ("2018 Stock Repurchase Program"). In October 2019, the Board authorized a \$1.0 billion increase to the 2018 Stock Repurchase Program for a total of \$3.0 billion.

As part of the 2018 Stock Repurchase Program, in April 2019, the Company entered into an accelerated share repurchase program ("ASR") and repurchased \$300.0 million of the Company's common stock. The aggregate number of shares ultimately repurchased of 11.6 million shares of the Company's common stock was determined based on a volume weighted average repurchase price, less an agreed upon discount, of \$25.79 per share. The shares received by the Company were retired, accounted for as a reduction to stockholder's equity in the Consolidated Balance Sheets, and treated as a repurchase of common stock for purposes of calculating earnings per share.

As part of the 2018 Stock Repurchase Program, in October 2019, the Company entered into an ASR with a financial institution to repurchase an aggregate of \$200.0 million of the Company's outstanding common stock. The Company made an up-front payment of \$200.0 million pursuant to the ASR and received and retired an initial 6.4 million shares of the Company's common stock for an aggregate price of \$160.0 million based on the market price of \$25.15 per share of the Company's common stock on the date of the transaction. In January 2020, the ASR was completed, and an additional 1.8 million shares were received for a total repurchase of 8.2 million shares of the Company's common stock at a volume weighted average repurchase price, less an agreed upon discount, of \$24.44 per share. The shares received by the Company were retired, accounted for as a reduction to stockholder's equity in the Consolidated Balance Sheets, and treated as a repurchase of common stock for purposes of calculating earnings per share.

During the fiscal year ended December 31, 2021, the Company repurchased 15.7 million shares of its common stock in the open market at an average price of \$27.56 per share for an aggregate purchase price of \$433.3 million under the 2018 Stock Repurchase Program.

As of December 31, 2021, there were \$0.9 billion of authorized funds remaining under the 2018 Stock Repurchase Program. See Note 16, *Subsequent Events*, for a discussion of the Company's stock repurchase activity subsequent to December 31, 2021.

Future share repurchases under the 2018 Stock Repurchase Program will be subject to a review of the circumstances at that time and will be made from time to time in private transactions or open market purchases as permitted by securities laws and other legal requirements.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

In addition to repurchases under the 2018 Stock Repurchase Program, the Company withholds shares of common stock from certain employees in connection with the vesting of stock awards issued to such employees to satisfy applicable tax withholding requirements. Such withheld shares are treated as common stock repurchases in our financial statements as they reduce the number of shares that would have been issued upon vesting.

Accumulated Other Comprehensive Income (Loss), Net of Tax

The components of accumulated other comprehensive income (loss), net of related taxes, for the years ended December 31, 2021, 2020, and 2019 were as follows (in millions):

	Unrealized Gains/Losses on Available-for- Sale Debt Securities ⁽¹⁾	Unrealized Gains/Losses on Cash Flow Hedges ⁽²⁾	Foreign Currency Translation Adjustments	Total
Balance as of December 31, 2018	\$ 25.5	\$ (0.9)	\$ (42.8)	\$ (18.2)
Other comprehensive income (loss) before reclassifications	4.6	(8.9)	(1.1)	(5.4)
Amount reclassified from accumulated other comprehensive income (loss)	(0.4)	5.5	—	5.1
Other comprehensive income (loss), net	4.2	(3.4)	(1.1)	(0.3)
Balance as of December 31, 2019	\$ 29.7	\$ (4.3)	\$ (43.9)	\$ (18.5)
Other comprehensive income before reclassifications	5.7	54.4	7.7	67.8
Amount reclassified from accumulated other comprehensive income (loss)	(1.3)	7.6	—	6.3
Other comprehensive income, net	4.4	62.0	7.7	74.1
Balance as of December 31, 2020	\$ 34.1	\$ 57.7	\$ (36.2)	\$ 55.6
Other comprehensive loss before reclassifications	(5.0)	(13.5)	(12.8)	(31.3)
Amount reclassified from accumulated other comprehensive income (loss)	(1.2)	(25.2)	—	(26.4)
Other comprehensive loss, net	(6.2)	(38.7)	(12.8)	(57.7)
Balance as of December 31, 2021	\$ 27.9	\$ 19.0	\$ (49.0)	\$ (2.1)

⁽¹⁾ The reclassifications out of accumulated other comprehensive income (loss) during the years ended December 31, 2021, 2020, and 2019 for realized gains on available-for-sale debt securities were not material, and were included in other expense, net, in the Consolidated Statements of Operations.

⁽²⁾ The reclassifications out of accumulated other comprehensive income (loss) for realized gains and losses on cash flow hedges was \$28.9 million for the year ended December 31, 2021 and not material for the years ended 2020 and 2019. The reclassified amounts were included within cost of revenues, research and development, sales and marketing, and general and administrative in the Consolidated Statements of Operations.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 11. Employee Benefit Plans***Equity Incentive Plans***

The Company's equity incentive plans include the 2015 Equity Incentive Plan (the "2015 Plan") and the 2008 Employee Stock Purchase Plan (the "ESPP"). The Company has granted RSUs and PSAs under the 2015 Plan and purchase rights under the ESPP. In addition, in connection with certain past acquisitions, the Company has assumed or substituted stock options, RSUs, RSAs, and PSAs granted under the stock plans of the acquired companies. Such awards were converted into or replaced with the Company's stock options, RSUs, RSAs, and PSAs, respectively.

The 2015 Plan was adopted and approved by the Company's stockholders in May 2015 and had an initial authorized share reserve of 38.0 million shares of common stock, plus the addition of any shares subject to outstanding awards under the 2006 Equity Incentive Plan and the Amended and Restated 1996 Stock Plan that were outstanding as of May 19, 2015, and that subsequently expire or otherwise terminate, up to a maximum of an additional 29.0 million shares. In May 2017, the Company's stockholders approved an additional 23.0 million shares of common stock for issuance under the 2015 Plan, and in May 2019, the Company's stockholders approved an additional 3.7 million shares of common stock for issuance under the 2015 Plan. As of December 31, 2021, an aggregate of 16.5 million shares were subject to outstanding equity awards and 5.1 million shares were available for future issuance under the 2015 Plan.

The ESPP was adopted and approved by the Company's stockholders in May 2008. In May 2020, the Company's stockholders approved an additional 8.0 million shares of common stock for issuance under the ESPP. To date, the Company's stockholders have approved a share reserve of 43.0 million shares of the Company's common stock for issuance under the ESPP. The ESPP permits eligible employees to acquire shares of the Company's common stock at a 15% discount (as determined in the ESPP) through periodic payroll deductions of up to 10% of base compensation, subject to individual purchase limits of 6,000 shares in any twelve-month period or \$25,000 worth of stock, determined at the fair market value of the shares at the time the stock purchase option is granted, in one calendar year. The ESPP provides 24 month offering periods with four 6-month purchase periods. A new 24-month offering period will commence every six months thereafter. The purchase price for the Company's common stock under the ESPP is 85% of the lower of the fair market value of the shares at (1) the beginning of the applicable offering period or (2) the end of each 6-month purchase period during such offering period. The ESPP will continue in effect until February 25, 2028, unless terminated earlier under the provisions of the ESPP. As of December 31, 2021, approximately 34.2 million shares have been issued and 8.8 million shares remain available for future issuance under the ESPP.

In 2021, in connection with the acquisitions of Apstra and WiteSand, the Company assumed an aggregate of 2.5 million shares of stock options, RSUs, RSAs, and PSAs. In 2020, in connection with the acquisition of 128 Technology, the Company assumed an aggregate of 3.9 million shares of stock options, RSUs, RSAs, and PSAs. No additional awards can be granted under the stock plans of the acquired companies. As of December 31, 2021, approximately 5.8 million shares of common stock were outstanding under all awards assumed or substituted through the Company's acquisitions.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

RSU, RSA, and PSA Activities

RSUs generally vest over three years from the date of grant, and RSAs and PSAs generally vest over a period of two to three years provided that certain annual performance targets and other vesting criteria are met. Until vested, RSUs and PSAs do not have the voting and dividend participation rights of common stock and the shares underlying the awards are not considered issued and outstanding.

The following table summarizes the Company's RSU, RSA, and PSA activity and related information as of and for the year ended December 31, 2021 (in millions, except per share amounts and years):

	Outstanding RSUs, RSAs, and PSAs			
	Number of Shares	Weighted Average Grant-Date Fair Value per Share	Weighted Average Remaining Contractual Term (In Years)	Aggregate Intrinsic Value
Balance at December 31, 2020	19.9	\$ 23.05		
Granted ⁽¹⁾⁽²⁾	10.2	26.19		
Awards assumed upon the acquisitions of Apstra and WiteSand ⁽²⁾	2.5	26.28		
Vested ⁽³⁾	(7.8)	23.66		
Canceled	(2.6)	23.91		
Balance at December 31, 2021	22.2	\$ 24.55	1.3	\$ 791.3
As of December 31, 2021				
Vested and expected-to-vest RSUs, RSAs, and PSAs	19.7	\$ 24.96	1.3	\$ 703.7

⁽¹⁾ Includes 8.2 million service-based, 1.5 million performance-based, and 0.5 million market-based RSUs and PSAs, as applicable. The number of shares subject to performance-based and market-based conditions represents the aggregate maximum number of shares that may be issued pursuant to the award over its full term. The grant date fair value of RSUs and PSAs was reduced by the present value of dividends expected to be paid on the underlying shares of common stock during the requisite and derived service period as these awards are not entitled to receive dividends until vested.

⁽²⁾ The weighted-average grant-date fair value of RSUs, RSAs, and PSAs granted and assumed or substituted during 2021, 2020, and 2019 was \$26.21, \$21.59, and \$25.26, respectively. The grant date fair value of RSUs and PSAs was reduced by the present value of dividends expected to be paid on the underlying shares of common stock during the requisite and derived service period as these awards are not entitled to receive dividends until vested. During 2021, the Company declared a quarterly cash dividend of \$0.20 per share of common stock on January 28, 2021, April 27, 2021, July 27, 2021 and October 26, 2021.

⁽³⁾ Total fair value of RSUs, RSAs, and PSAs vested during 2021, 2020, and 2019 was \$184.2 million, \$174.7 million, and \$170.0 million, respectively.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Shares Available for Grant

The following table presents the stock activity and the total number of shares available for grant under the 2015 Plan (in millions):

	Number of Shares
Balance as of December 31, 2020	12.1
Additional shares authorized	—
RSUs and PSAs granted ^(*)	(10.5)
RSUs and PSAs canceled ^(*)	3.5
Balance as of December 31, 2021	<u>5.1</u>

^(*) In May 2019, the 2015 Plan was amended, and the amendment removed the fungible share adjustment used to determine shares available for issuance. Under the original terms of the 2015 Plan, RSUs and PSAs with a per share or unit purchase price lower than 100% of the fair market value of the Company's common stock on the day of the grant were counted against shares authorized under the plan as two and one-tenth shares of common stock ("the prior fungible rate") for each share subject to such award. Pursuant to the amendment, beginning on May 14, 2019, each share award granted under the 2015 Plan reduces the share reserve by one share and all share awards granted on May 14, 2019 and thereafter that are later forfeited, canceled or terminated are returned to the share reserve in the same manner. During 2021, among the total 3.5 million of canceled shares, 2.2 million shares represent the shares returned to the share reserve at the prior fungible rate. The number of shares subject to PSAs granted represents the maximum number of shares that may be issued pursuant to the award over its full term.

Employee Stock Purchase Plan

During 2021, 2020, and 2019, employees purchased 2.8 million, 2.7 million and 2.4 million shares of common stock through the ESPP at an average exercise price of \$19.81, \$19.59, and \$22.04 per share, respectively.

Valuation Assumptions

The weighted-average assumptions used and the resulting estimates of fair value for ESPP purchase rights and market-based RSUs were as follows:

	Years Ended December 31,		
	2021	2020	2019
ESPP Purchase Rights:			
Volatility	32%	31%	27%
Risk-free interest rate	0.1%	0.8%	2.1%
Expected life (years)	1.3	1.3	1.2
Dividend yield	3.0%	3.3%	2.9%
Weighted-average fair value per share	\$6.96	\$6.34	\$6.65
Market-based RSUs:			
Volatility	30%	25%	25%
Risk-free interest rate	0.2%	1.3%	2.4%
Dividend yield	3.4%	3.3%	2.8%
Weighted-average fair value per share	\$30.70	\$26.32	\$27.32

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Share-Based Compensation Expense

Share-based compensation expense associated with stock options, RSUs, RSAs, PSAs, and ESPP purchase rights was recorded in the following cost and expense categories in the Company's Consolidated Statements of Operations (in millions):

	Years Ended December 31,					
	2021		2020		2019	
Cost of revenues - Product	\$	5.3	\$	5.4	\$	5.7
Cost of revenues - Service		18.2		15.8		17.3
Research and development		93.1		78.8		94.0
Sales and marketing		65.9		58.2		56.0
General and administrative		40.1		31.4		29.2
Total	\$	222.6	\$	189.6	\$	202.2

The following table summarizes share-based compensation expense by award type (in millions):

	Years Ended December 31,					
	2021		2020		2019	
Stock options	\$	9.3	\$	7.3	\$	7.7
RSUs, RSAs, and PSAs		196.2		162.6		176.5
ESPP Purchase Rights		17.1		19.7		18.0
Total	\$	222.6	\$	189.6	\$	202.2

For the years ended December 31, 2021, 2020 and 2019, the Company recognized tax benefits on total stock-based compensation expense, which are reflected in the income tax provision in the Consolidated Statements of Operations, of \$28.2 million, \$23.5 million, and \$29.6 million, respectively.

For the years ended December 31, 2021, 2020, and 2019, the realized tax benefit related to awards vested or exercised during the period was \$31.7 million, \$21.7 million and \$30.6 million, respectively. These amounts do not include the indirect effects of stock-based awards, which primarily relate to the research and development tax credit.

As of December 31, 2021, the total unrecognized compensation cost related to unvested share-based awards was \$357.4 million to be recognized over a weighted-average period of 1.8 years.

401(k) Plan

The Company maintains a savings and retirement plan qualified under Section 401(k) of the Internal Revenue Code of 1986, as amended (the "IRC"). Employees meeting the eligibility requirements, as defined under the IRC, may contribute up to the statutory limits each year. The Company currently matches 30% of all eligible employee contributions which vest immediately. The Company's matching contributions to the plan totaled \$22.3 million, \$22.0 million, and \$20.2 million during 2021, 2020, and 2019, respectively.

Deferred Compensation Plan

The Company's NQDC plan is an unfunded and unsecured deferred compensation arrangement. Under the NQDC plan, officers and other senior employees may elect to defer a portion of their compensation and contribute such amounts to one or more investment funds. As of December 31, 2021, the liability of the Company to the plan participants was \$33.3 million, of which \$4.4 million was included within other accrued liabilities and \$28.9 million was included in other long-term liabilities on the Consolidated Balance Sheets. The Company had investments of \$33.3 million correlating to the deferred compensation obligations, of which \$4.4 million was included within prepaid expenses and other current assets and \$28.9 million was included within other long-term assets on the Consolidated Balance Sheets. As of December 31, 2020, the liability of the Company was \$29.3 million, of which \$3.1 million was included within other accrued liabilities and \$26.2 million was included in other long-term liabilities on the Consolidated Balance Sheets. The Company had investments of \$29.3 million correlating to

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Notes to Consolidated Financial Statements (Continued)

the deferred compensation obligations, of which \$3.1 million was included within prepaid expenses and other current assets and \$26.2 million was included within other long-term assets on the Consolidated Balance Sheets.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 12. Segments

The Company operates in one reportable segment. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance, accompanied by disaggregated information about net revenues by customer solution, customer vertical, and geographic region as presented below.

Effective in the first quarter of fiscal year 2021, the Company began reporting its revenue by customer solution in the following three categories: Automated WAN Solutions, Cloud-Ready Data Center, AI-Driven Enterprise. In addition, the Company began reporting Hardware Maintenance and Professional Services in the first quarter of fiscal year 2021. The change provides for alignment on key growth drivers that is aligned with the Company's strategy.

The following table presents net revenues by customer solution (in millions):

	Years Ended December 31,		
	2021	2020	2019
Customer Solutions:			
Automated WAN Solutions	\$ 1,665.0	\$ 1,622.2	\$ 1,604.4
Cloud-Ready Data Center	727.1	677.1	726.5
AI-Driven Enterprise	830.4	656.2	613.8
Hardware Maintenance and Professional Services	1,512.9	1,489.6	1,500.7
Total	<u>\$ 4,735.4</u>	<u>\$ 4,445.1</u>	<u>\$ 4,445.4</u>

The following table presents net revenues by customer vertical (in millions):

	Years Ended December 31,		
	2021	2020	2019
Cloud	\$ 1,228.0	\$ 1,081.2	\$ 1,059.8
Service Provider	1,839.1	1,761.7	1,827.8
Enterprise	1,668.3	1,602.2	1,557.8
Total	<u>\$ 4,735.4</u>	<u>\$ 4,445.1</u>	<u>\$ 4,445.4</u>

The Company attributes revenues to geographic region based on the customer's shipping address. The following table presents net revenues by geographic region (in millions):

	Years Ended December 31,		
	2021	2020	2019
Americas:			
United States	\$ 2,426.9	\$ 2,233.9	\$ 2,299.8
Other	222.2	211.2	218.2
Total Americas	<u>2,649.1</u>	<u>2,445.1</u>	<u>2,518.0</u>
Europe, Middle East, and Africa	1,314.5	1,233.8	1,215.3
Asia Pacific	771.8	766.2	712.1
Total	<u>\$ 4,735.4</u>	<u>\$ 4,445.1</u>	<u>\$ 4,445.4</u>

During the years ended December 31, 2021, 2020, and 2019, no customer accounted for greater than 10% of the Company's net revenues.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

The following table presents geographic information for property and equipment, net (in millions).

	<u>As of December 31,</u>	
	<u>2021</u>	<u>2020</u>
United States	\$ 623.4	\$ 667.4
International	79.6	94.9
Property and equipment, net	<u>\$ 703.0</u>	<u>\$ 762.3</u>

The Company tracks assets by physical location. The majority of the Company's assets, excluding cash and cash equivalents and investments, as of December 31, 2021 and December 31, 2020, were attributable to U.S. operations.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 13. Income Taxes

The components of pretax income are summarized as follows (in millions):

	Years Ended December 31,		
	2021	2020	2019
Domestic	\$ 264.6	\$ 204.2	\$ 296.2
Foreign	45.5	61.0	118.2
Total pretax income	<u>\$ 310.1</u>	<u>\$ 265.2</u>	<u>\$ 414.4</u>

The provision (benefit) for income taxes is summarized as follows (in millions):

	Years Ended December 31,		
	2021	2020	2019
Current provision (benefit):			
Federal	\$ 63.4	\$ 73.4	\$ 6.2
States	15.9	20.3	14.4
Foreign	48.2	(21.6)	48.5
Total current provision (benefit)	<u>127.5</u>	<u>72.1</u>	<u>69.1</u>
Deferred (benefit) provision:			
Federal	(54.3)	(58.7)	0.8
States	(4.1)	(6.6)	2.8
Foreign	(11.7)	0.6	(3.3)
Total deferred (benefit) provision	<u>(70.1)</u>	<u>(64.7)</u>	<u>0.3</u>
Total provision (benefit) for income taxes	<u>\$ 57.4</u>	<u>\$ 7.4</u>	<u>\$ 69.4</u>

The provision (benefit) for income taxes differs from the amount computed by applying the federal statutory tax rate of 21% to pretax income for each of the years presented as follows (in millions):

	Years Ended December 31,		
	2021	2020	2019
Expected provision at statutory rate	\$ 65.1	\$ 55.7	\$ 87.0
State taxes, net of federal benefit	6.5	8.7	9.4
Foreign income at different tax rates	(0.2)	(5.9)	1.8
R&D tax credits	(16.6)	(16.4)	(18.8)
Share-based compensation	(2.2)	9.0	3.8
Non-deductible compensation	4.2	3.5	3.3
Temporary differences not currently benefited	—	(0.9)	12.9
Recognition of previously unrecognized tax benefits	—	(63.7)	(25.4)
Cost sharing adjustment- Altera	—	20.1	—
Lapses in federal statutes of limitations	—	—	(7.5)
Other	0.6	(2.7)	2.9
Total provision (benefit) for income taxes	<u>\$ 57.4</u>	<u>\$ 7.4</u>	<u>\$ 69.4</u>

In 2020, the Company recorded a \$63.7 million benefit, including interest and penalties, related to a multi-year recognition of previously unrecognized tax benefits and a \$20.1 million charge, including interest, for a cumulative impact of cost sharing for share-based compensation described below.

On June 7, 2019, the Ninth Circuit Court of Appeals issued an opinion in *Altera Corp. v. Commissioner* requiring related parties in an intercompany cost-sharing arrangement to share expenses related to share-based compensation. On February 10, 2020, Altera appealed this decision to the U.S. Supreme Court, which on June 22, 2020, declined to review the decision. Based

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

on the Supreme Court's decision, the Company's share-based compensation is subject to cost sharing, and the Company recorded a \$20.1 million charge referenced above during the year ended December 31, 2020.

Deferred income taxes reflect the net tax effects of tax carry-forward items and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's long-term deferred tax assets and deferred tax liabilities are as follows (in millions):

	As of December 31,	
	2021	2020
Deferred tax assets:		
Net operating loss carry-forwards	\$ 72.5	\$ 48.2
Research and other credit carry-forwards	272.2	252.8
Deferred revenue	47.7	43.4
Share-based compensation	17.9	15.0
Capitalized R&D expenditure	102.0	60.5
Reserves and accruals not currently deductible	61.0	43.5
Operating lease liabilities	45.4	51.3
Other	9.9	10.6
Total deferred tax assets	628.6	525.3
Valuation allowance	(300.9)	(261.5)
Deferred tax assets, net of valuation allowance	327.7	263.8
Deferred tax liabilities:		
Property and equipment basis differences	(1.3)	(20.1)
Purchased intangible assets	(56.5)	(45.6)
Unremitted foreign earnings	(25.5)	(25.5)
Net unrealized gain	(21.0)	(21.1)
Operating lease assets	(39.9)	(44.9)
Total deferred tax liabilities	(144.2)	(157.2)
Net deferred tax assets	\$ 183.5	\$ 106.6

As of December 31, 2021 and 2020, the Company had a valuation allowance on its U.S. and foreign deferred tax assets of \$300.9 million and \$261.5 million, respectively. The balance at December 31, 2021 consisted of \$2.0 million, \$288.7 million and \$10.2 million against the Company's U.S. federal, state, and foreign deferred tax assets, respectively, which the Company believes are not more likely than not to be utilized in future years. The valuation allowance increased in 2021 and 2020 by \$39.4 million and \$12.1 million, respectively, primarily related to the changes in state R&D tax credits.

As of December 31, 2021, the Company had federal, California and other states net operating loss carry-forwards of approximately \$205.5 million, \$197.9 million and \$144.6 million, respectively. The California net operating loss carry-forwards of \$197.9 million are expected to expire unused. The Company also had federal and California tax credit carry-forwards of approximately \$6.6 million and \$292.4 million, respectively. Unused net operating loss carry-forwards will expire at various dates beginning in the year 2022. The California tax credit carry-forwards will carry forward indefinitely.

The Company provides deferred tax liabilities for all tax consequences associated with the undistributed earnings that are expected to be repatriated to subsidiaries' parent unless the subsidiaries' earnings are considered indefinitely reinvested. The Company has made no provision for deferred taxes on approximately \$83.1 million of cumulative undistributed earnings of certain foreign subsidiaries through December 31, 2021. These earnings are considered indefinitely invested in operations of the subsidiaries, as the Company intends to utilize these amounts to fund future expansion of its operations. If these earnings were distributed to the parent, the Company would be subject to additional taxes of approximately \$16.9 million.

As of December 31, 2021, 2020, and 2019, the total amount of gross unrecognized tax benefits was \$113.4 million, \$116.0 million, and \$151.3 million, respectively. As of December 31, 2021, approximately \$110.5 million of the \$113.4 million gross unrecognized tax benefits, if recognized, would affect the effective tax rate before considering valuation allowance.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

A reconciliation of the beginning and ending amount of the Company's total gross unrecognized tax benefits was as follows (in millions):

	Years Ended December 31,		
	2021	2020	2019
Balance at beginning of year	\$ 116.0	\$ 151.3	\$ 178.1
Tax positions related to current year:			
Additions	7.7	5.3	5.9
Tax positions related to prior years:			
Additions	3.3	18.1	0.8
Reductions	(3.6)	(52.0)	(3.3)
Settlements	(9.4)	(1.8)	(22.5)
Lapses in statutes of limitations	(0.6)	(4.9)	(7.7)
Balance at end of year	<u>\$ 113.4</u>	<u>\$ 116.0</u>	<u>\$ 151.3</u>

As of December 31, 2021, 2020, and 2019, the Company had accrued interest and penalties related to unrecognized tax benefits of \$8.1 million, \$5.3 million, and \$29.9 million, respectively, as other long-term liabilities in the Consolidated Balance Sheets. Due to the changes in the level of gross unrecognized tax benefits, the Company recognized a benefit for net interest and penalties of \$2.7 million, \$20.7 million and \$2.8 million in its Consolidated Statements of Operations during the years ended December 31, 2021, 2020, and 2019, respectively. The Company recognizes interest and penalties related to unrecognized tax benefits as a component of income tax expense.

The Company engages in continuous discussions and negotiations with tax authorities regarding tax matters in various jurisdictions. There is a greater than remote likelihood that the balance of the gross unrecognized tax benefits will decrease by up to \$7.3 million within the next twelve months due to the completion of tax review cycles in various tax jurisdictions and lapses of applicable statutes of limitation.

The Company conducts business globally and, as a result, Juniper Networks or one or more of its subsidiaries files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities throughout the world, including such major jurisdictions as the Netherlands, U.K., France, Germany, Japan, China, Australia, India, and the U.S. With few exceptions, the Company is no longer subject to U.S. federal, state and local, and non-U.S. income tax examinations for years before 2012.

The Company is currently under examination by the Internal Revenue Service and the India tax authorities for the 2017 through 2018 tax years and the 2012 through 2017 tax years, respectively. The Company regularly assesses the likelihood of an adverse outcome resulting from such examinations. As of December 31, 2021, the Company believes the resolution of the audits is unlikely to have a material effect on its consolidated financial condition or results of operations.

The Company is pursuing all available administrative remedies relative to these ongoing matters. The Company believes that it has adequately provided for any reasonably foreseeable outcomes related to these proposed adjustments and the ultimate resolution of these matters is unlikely to have a material effect on its consolidated financial condition or results of operations; however, there is still a possibility that an adverse outcome of these matters could have a material effect on its consolidated financial condition and results of operations.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 14. Net Income per Share

The Company computed basic and diluted net income per share as follows (in millions, except per share amounts):

	Years Ended December 31,		
	2021	2020	2019
Numerator:			
Net income	\$ 252.7	\$ 257.8	\$ 345.0
Denominator:			
Weighted-average shares used to compute basic net income per share	324.4	330.4	343.2
Dilutive effect of employee stock awards	7.2	4.8	5.0
Weighted-average shares used to compute diluted net income per share	331.6	335.2	348.2
Net income per share:			
Basic	\$ 0.78	\$ 0.78	\$ 1.01
Diluted	\$ 0.76	\$ 0.77	\$ 0.99
Anti-dilutive shares	0.5	5.3	4.7

Basic net income per share is computed using net income available to common stockholders and the weighted-average number of common shares outstanding for the period. Diluted net income per share is computed using net income available to common stockholders and the weighted-average number of common shares outstanding plus potentially dilutive common shares outstanding during the period. Dilutive potential common shares consist of common shares issuable upon exercise of stock options and purchase rights, and vesting of RSUs, RSAs, and PSAs. The Company includes the common shares underlying PSAs in the calculation of diluted net income per share only when they become contingently issuable. Anti-dilutive shares are excluded from the computation of diluted net income per share.

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

Note 15. Commitments and Contingencies**Commitments***Unconditional Purchase Obligations*

Unconditional purchase obligations consist of agreements that include firm and non-cancelable terms to transfer funds in the future for fixed or minimum amounts or quantities to be purchased at fixed or minimum prices. For obligations with cancellation provisions, the amounts included in the following table were limited to the non-cancelable portion of the agreement terms or the minimum cancellation fee.

The following table summarizes the Company's unconditional purchase obligations as of December 31, 2021 (in millions):

Years Ending December 31,	Unconditional Purchase Obligations
2022	\$ 61.0
2023	43.9
2024	16.5
2025	7.3
2026	0.6
Total	<u>\$ 129.3</u>

In December 2018, the Company entered into a Master Services Agreement and certain Statements of Work, as subsequently amended (collectively, the "Agreement") with International Business Machines Corporation ("IBM"). As of December 31, 2021, the Company expects to pay IBM \$145.3 million over the remaining initial term of the Agreement. The table above does not include fees payable to IBM under the contract as the Company is unable to make a reasonably reliable estimate of the amount of the payments related to each of the years under this contract due to uncertainties in the usage of the services.

Leases

The Company leases its facilities and certain equipment under non-cancelable operating leases that have remaining lease terms of 1 to 10 years and 1 to 4 years, respectively. Each leased facility is subject to an individual lease or sublease, which could provide various options to extend or terminate the lease agreement. Facilities are primarily comprised of corporate offices, data centers, and R&D facilities. Equipment includes vehicles and various office equipment. The Company also has variable lease payments that are primarily comprised of common area maintenance and utility charges. The Company's lease agreements do not contain any residual value guarantees or restrictive covenants.

The components of lease costs and other information related to leases were as follows (in millions, except years and percentages):

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

	Years Ended December 31,	
	2021	2020
Operating lease cost	\$ 57.4	\$ 50.8
Variable lease cost	11.5	13.4
Total lease cost	<u>\$ 68.9</u>	<u>\$ 64.2</u>
Operating cash outflows from operating leases	\$ 57.8	\$ 54.2
ROU assets obtained in exchange for new operating lease liabilities	\$ 29.7	\$ 54.7
	As of December 31,	
	2021	2020
Weighted average remaining lease term (years)	4.6	4.9
Weighted average discount rate	3.3 %	3.7 %

As of December 31, 2021, future operating lease payments for each of the next five years and thereafter are as follows (in millions):

Years Ending December 31,	Amount
2022	\$ 48.7
2023	47.6
2024	43.1
2025	34.6
2026	14.3
Thereafter	15.3
Total lease payments	<u>203.6</u>
Less: interest	(14.2)
Total	<u>\$ 189.4</u>

Balance Sheet Information

Other accrued liabilities	\$ 47.2
Long-term operating lease liabilities	142.2
Total	<u>\$ 189.4</u>

Purchase Commitments with Contract Manufacturers and Suppliers

In order to reduce manufacturing lead times and in the interest of having access to adequate component supply, the Company enters into agreements with contract manufacturers and certain suppliers to procure inventory based on the Company's requirements. A significant portion of the Company's purchase commitments arising from these agreements consists of firm and non-cancelable commitments. The following table summarizes the Company's purchase commitments as of December 31, 2021 (in millions):

Years Ending December 31,	Purchase Commitments
2022	\$ 2,094.3
2023	523.0
2024	14.4
2025	0.5
Total	<u>\$ 2,632.2</u>

Juniper Networks, Inc.
Notes to Consolidated Financial Statements (Continued)

The Company establishes a liability in connection with purchase commitments related to quantities in excess of its demand forecasts or obsolete materials charges for components purchased by the contract manufacturers based on the Company's demand forecast or customer orders. As of December 31, 2021, the Company had accrued \$19.8 million based on its estimate of such charges.

Debt and Interest Payment on Debt

As of December 31, 2021, the Company held total outstanding debt consisting of the Notes with a carrying value of \$1,686.8 million. See Note 9, *Debt and Financing*, for further discussion of the Company's long-term debt and expected future principal maturities.

Tax Liability

Our transition tax liability represents future cash payments on accumulated foreign earnings of subsidiaries as a result of the Tax Cuts and Jobs Act of 2017 ("Tax Act"). The Company has elected to pay its transition tax, net of applicable tax refunds, over the eight-year period provided in the Tax Act. The long-term income taxes payable of \$250.6 million represents the remaining balance of the Company's transition tax obligation.

As of December 31, 2021, the Company had \$79.9 million included in long-term income taxes payable on the Consolidated Balance Sheets for unrecognized tax positions. At this time, the Company is unable to make a reasonably reliable estimate of the timing of payments related to this amount due to uncertainties in the timing of tax audit outcomes.

Guarantees

The Company enters into agreements with customers that contain indemnification provisions relating to potential situations where claims could be alleged that the Company's products solely, or in combination with other third-party products, infringe the intellectual property rights of a third-party. As of December 31, 2021 and 2020, the Company recorded \$1.9 million and \$6.7 million, respectively, for such indemnification obligations in other accrued liabilities and other long-term liabilities on the Consolidated Balance Sheets. The Company also has financial guarantees consisting of standby letters of credit for certain lease facilities, insurance programs and customs of \$2.4 million and \$29.0 million, as of December 31, 2021 and December 31, 2020, respectively.

Legal Proceedings

The Company is involved in investigations, disputes, litigation, and legal proceedings. The Company records an accrual for loss contingencies for legal proceedings when it believes that an unfavorable outcome is both (a) probable and (b) the amount or range of any possible loss is reasonably estimable. The Company intends to aggressively defend itself in these matters, and while there can be no assurances and the outcome of these matters is currently not determinable, the Company currently believes that these existing claims or proceedings are not likely, individually and in the aggregate, to have a material adverse effect on its financial position. Notwithstanding the foregoing, there are many uncertainties associated with any litigation and these matters or other third-party claims against the Company may cause the Company to incur costly litigation and/or substantial settlement charges. In addition, the resolution of any intellectual property litigation may require the Company to make royalty payments, which could adversely affect gross margins in future periods. If any of those events were to occur, the Company's business, financial condition, results of operations, and cash flows could be adversely affected. The actual liability in any such matters may be materially different from the Company's estimates, if any, which could result in the need to adjust the liability and record additional expenses.

Note 16. Subsequent Events

Dividend Declaration

On January 27, 2022, the Company announced a cash dividend of \$0.21 per share of common stock to be paid on March 22, 2022 to stockholders of record as of the close of business on March 1, 2022.

Stock Repurchase Activities

Subsequent to December 31, 2021, through the date of filing of this Report (the "filing date"), the Company repurchased 2.6 million shares of its common stock in the open market, for an aggregate purchase price of \$91.1 million at an average price of \$34.75 per share, under the 2018 Stock Repurchase Program. Repurchases of approximately 2.0 million shares were settled prior to the filing of this Report and the remaining shares will be settled after the filing date. The Company has an aggregate of \$0.8 billion of authorized funds remaining under the 2018 Stock Repurchase Program as of the filing date.

ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

ITEM 9A. Controls and Procedures

(a) *Management's Annual Report on Internal Control Over Financial Reporting*: See "Management's Annual Report on Internal Control over Financial Reporting" under Item 8 of Part II of this Report, which is incorporated herein by reference.

(b) For the "Report of Independent Registered Public Accounting Firm," see the report under Item 8 of Part II of this Report, which is incorporated herein by reference.

Evaluation of Disclosure Controls and Procedures

Attached as exhibits to this Report are certifications of our principal executive officer and principal financial officer, which are required in accordance with Rule 13a-14 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). This "Controls and Procedures" section includes information concerning the controls and related evaluations referred to in the certifications and it should be read in conjunction with the certifications for a more complete understanding of the topics presented.

We carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon that evaluation, our principal executive officer and principal financial officer concluded that, as of the end of the period covered in this Report, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting during the fourth quarter of 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We have not experienced any significant impact to our internal controls over financial reporting despite the fact that most of our employees are working remotely due to the COVID-19 pandemic. The design of our processes and controls allow for remote execution with accessibility to secure data. We are continually monitoring and assessing the COVID-19 situation to minimize the impact, if any, on the design and operating effectiveness on our internal controls.

ITEM 9B. Other Information

Disclosure pursuant to Section 13(r) of the Securities Exchange Act of 1934

Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 and Section 13(r) of the Securities Exchange Act of 1934, as amended, require an issuer to disclose certain information in its annual and quarterly reports, as applicable, if it or any of its affiliates knowingly engaged in certain activities, transactions or dealings related to Iran or with certain individuals or entities that are subject to specific U.S. economic sanctions during the relevant reporting period. In certain instances, such disclosure is required even where the activities, transactions or dealings are conducted in compliance with applicable law, and whether or not the activities are sanctionable under U.S. law.

On March 2, 2021, the U.S. government designated the Russian Federal Security Service (the “FSB”) as a blocked party under Executive Order 13382; however, on the same day, the U.S. Department of the Treasury’s Office of Foreign Assets Control issued General License No. 1B (the “OFAC General License”), which generally authorizes U.S. companies to engage in certain transactions and dealings with the FSB necessary and ordinarily incident to requesting or obtaining licenses, permits, certifications or notifications issued or registered by the FSB for the importation, distribution or use of information technology products in the Russian Federation.

In the normal course of business, the Company or its subsidiaries file notifications with, or apply for import licenses and permits from, the FSB as required pursuant to Russian encryption product import controls for the purpose of enabling the Company or its subsidiaries or their channel partners to import and distribute certain products in the Russian Federation. In the fiscal year ended December 31, 2021, as permitted and authorized by the OFAC General License, the Company filed notifications with and/or applied for import licenses and permits from the FSB. There are no gross revenues or net profits directly associated with these activities, and the Company and its subsidiaries do not distribute or sell products or provide services to the FSB. The Company expects that we or our subsidiaries will continue to file notifications with and apply for import licenses and permits from the FSB to qualify our products for importation and distribution in the Russian Federation if and as permitted by applicable U.S. law, including the OFAC General License.

ITEM 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

ITEM 10. *Directors, Executive Officers and Corporate Governance*

For information with respect to our executive officers, see Part I, Item 1 of this Annual Report on Form 10-K, under “Information about our Executive Officers.”

Information concerning our directors, including director nominations, and our audit committee and audit committee financial expert, is included in our definitive Proxy Statement to be filed with the SEC in connection with our 2022 Annual Meeting of Stockholders (the “Proxy Statement”) under “Corporate Governance Principles and Board Matters” and “Election of Directors” and is incorporated herein by reference.

With regard to the information required by this Item regarding compliance with Section 16(a) of the Exchange Act, we will provide disclosure of delinquent Section 16(a) reports, if any, in our Proxy Statement under “Delinquent Section 16(a) Reports” and such disclosure, if any, is incorporated herein by reference.

Information concerning our worldwide code of business conduct that applies to our principal executive officer and all other employees is included in the Proxy Statement under “Corporate Governance Principles and Board Matters” and is incorporated herein by reference.

ITEM 11. *Executive Compensation*

Information required by Item 402 of Regulation S-K is included in the Proxy Statement under “Director Compensation,” and “Executive Compensation,” and is incorporated herein by reference.

Information concerning compensation committee interlocks and insider participation appearing in the Proxy Statement under “Compensation Committee Interlocks and Insider Participation” is incorporated herein by reference.

Information concerning the compensation committee report appearing in the Proxy Statement under “Compensation Committee Report” is incorporated herein by reference.

ITEM 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Information concerning the security ownership of certain beneficial owners and management is included in the Proxy Statement under “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” and is incorporated herein by reference.

Information concerning our equity compensation plan information is included in the Proxy Statement under “Equity Compensation Plan Information” and is incorporated herein by reference.

ITEM 13. *Certain Relationships and Related Transactions, and Director Independence*

Information concerning certain relationships and related transactions is included in the Proxy Statement under the heading “Certain Relationships and Related Transactions” and is incorporated herein by reference.

Information concerning director independence is included in the Proxy Statement under the heading “Board Independence” and is incorporated herein by reference.

ITEM 14. *Principal Accountant Fees and Services*

Information concerning principal accountant fees and services and the audit committee's pre-approval policies and procedures is included in the Proxy Statement under the heading “Principal Accountant Fees and Services” and is incorporated herein by reference.

PART IV**ITEM 15. Exhibits and Financial Statement Schedules**

(a) The following documents are filed as part of this Report:

1. Consolidated Financial Statements

See Index to Consolidated Financial Statements at Item 8 herein.

2. Financial Statement Schedules

Juniper Networks, Inc.**Schedule II - Valuation and Qualifying Accounts
Years Ended December 31, 2021, 2020, and 2019
(In millions)**

	Balance at Beginning of Year	Charged to (Reversed from) Costs and Expenses	Write-offs, Net of Recoveries	Balance at End of Year
Allowance for Doubtful Accounts				
2021	\$ 9.9	\$ (3.2)	\$ —	\$ 6.7
2020	\$ 5.5	\$ 4.4	\$ —	\$ 9.9
2019	\$ 4.9	\$ 1.7	\$ (1.1)	\$ 5.5
	Balance at Beginning of Year	Charged as a Reduction in Revenues	Used	Balance at End of Year
Sales Return Reserve				
2021	\$ 28.4	\$ 57.6	\$ (54.6)	\$ 31.4
2020	\$ 24.8	\$ 60.7	\$ (57.1)	\$ 28.4
2019	\$ 32.7	\$ 59.5	\$ (67.4)	\$ 24.8

All other schedules have been omitted as the required information is not applicable or the information is presented in the Consolidated Financial Statements or notes thereto under Item 8 herein.

3. Exhibits

Exhibit No.	Exhibit	Incorporated by Reference			
		Filing	Exhibit No.	File No.	File Date
3.1	Restated Certificate of Incorporation of Juniper Networks, Inc. and Certificate of Amendment	S-8	4.1	333-218344	5/30/2017
3.2	Amended and Restated Bylaws of Juniper Networks, Inc.	8-K	3.2	001-34501	5/30/2017
4.1	Description of Juniper Networks, Inc. Registered Securities	10-K	4.1	001-34501	2/20/2020
4.2	Indenture, dated March 3, 2011, by and between Juniper Networks, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	4.1	001-34501	3/4/2011
4.3	First Supplemental Indenture, dated March 3, 2011, by and between Juniper Networks, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	4.8	001-34501	3/4/2011
4.4	Sixth Supplemental Indenture, dated August 26, 2019, by and between Juniper Networks, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	4.1	001-34501	8/26/2019
4.5	Seventh Supplemental Indenture, dated December 10, 2020, by and between Juniper Networks, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	4.1	001-34501	12/10/2020
4.6	Form of Note for Juniper Networks, Inc.'s 5.950% Senior Notes due 2041	8-K	4.8	001-34501	3/4/2011
4.7	Form of Note for Juniper Networks, Inc.'s 1.200% Senior Notes due 2025	8-K	4.1	001-34501	12/10/2020
4.8	Form of Note for Juniper Networks, Inc.'s 2.000% Senior Notes due 2030	8-K	4.1	001-34501	12/10/2020
4.9	Form of Note for Juniper Networks, Inc.'s 3.750% Senior Notes due 2029	8-K	4.1	001-34501	8/26/2019
10.1	Juniper Networks, Inc. Performance Bonus Plan (As Amended and Restated Effective February 19, 2020)+	10-Q	10.1	001-34501	5/5/2020
10.2	Juniper Networks, Inc. Deferred Compensation Plan+	S-8	4.4	333-151669	6/16/2008
10.3	Amended and Restated Juniper Networks, Inc. 2015 Equity Incentive Plan+	10-Q	10.4	001-34501	8/7/2019
10.4	Amended and Restated Juniper Networks, Inc. 2008 Employee Stock Purchase Plan, as amended and restated as of May 14, 2020+	10-Q	10.1	001-34501	8/4/2020
10.5	Form of Restricted Stock Unit Agreement effective as of May 19, 2015+	8-K	10.2	001-34501	5/20/2015
10.6	Form of Performance Share Agreement effective as of May 19, 2015+	8-K	10.3	001-34501	5/20/2015
10.7	Form of Indemnification Agreement entered into by Juniper Networks, Inc. with each of its directors, officers and certain employees, approved for use on August 9, 2018+	8-K	10.1	001-34501	8/10/2018
10.8	Form of Stock Option Agreement effective as of May 19, 2015+	8-K	10.4	001-34501	5/20/2015
10.9	Amended and Restated Juniper Networks, Inc. Form of Restricted Stock Unit Agreement effective as of December 1, 2021*+				
10.10	Amended and Restated Juniper Networks, Inc. Form of Performance Share Agreement effective as of December 1, 2021*+				
10.11	Form of Change of Control Agreement for Certain Officers, approved for use on November 2, 2020+	10-Q	10.1	001-34501	11/2/2020
10.12	Form of Severance Agreement for Certain Officers, approved for use on November 2, 2020+	10-Q	10.2	001-34501	11/2/2020
10.13	Settlement, Release and Cross-License Agreement, dated May 27, 2014, by and between Juniper Networks, Inc. and Palo Alto Networks, Inc.	8-K	10.1	001-34501	5/29/2014
10.14	Credit Agreement, dated as of April 25, 2019, by and among Juniper Networks, Inc., the lenders from time to time party thereto and Citibank, N.A., as administrative agent, as amended by Amendment No. 1 dated as of December 17, 2021*				
10.15	Master Services Agreement, dated December 31, 2018, between Juniper Networks, Inc. and International Business Machines Corporation, and Amendment No.1 dated as of January 4, 2019†	10-K	10.29	001-34501	2/22/2019

Exhibit No.	Exhibit	Incorporated by Reference			
		Filing	Exhibit No.	File No.	File Date
10.16	Amendment No.2 to the Master Services Agreement, dated as of June 26, 2020, between Juniper Networks, Inc. and International Business Machines Corporation††	10-Q	10.2	001-34501	8/4/2020
10.17	Amendment No.3 to the Master Services Agreement, dated as of December 18, 2020, between Juniper Networks, Inc. and International Business Machines Corporation	10-K	10.19	001-34501	2/12/2021
10.18	Amendment No.4 to the Master Services Agreement, dated as of January 20, 2021, between Juniper Networks, Inc. and International Business Machines Corporation	10-Q	10.1	001-34501	4/30/2021
10.19	Amendment No.5 to the Master Services Agreement, dated as of March 8, 2021, between Juniper Networks, Inc. and International Business Machines Corporation	10-Q	10.2	001-34501	4/30/2021
10.20	Amendment No.6 to the Master Services Agreement, dated as of March 10, 2021, between Juniper Networks, Inc. and International Business Machines Corporation††	10-Q	10.3	001-34501	4/30/2021
10.21	Amendment No.7 to the Master Services Agreement, dated as of June 1, 2021 between Juniper Networks, Inc. and International Business Machines Corporation††	10-Q	10.1	001-34501	7/30/2021
10.22	Amendment No.8 to the Master Services Agreement, dated as of May 17, 2021, between Juniper Networks, Inc. and International Business Machines Corporation††	10-Q	10.2	001-34501	7/30/2021
10.23	Amendment No.9 to the Master Services Agreement, dated as of June 1, 2021, between Juniper Networks, Inc. and International Business Machines Corporation††	10-Q	10.3	001-34501	7/30/2021
10.24	Amendment No.10 to the Master Services Agreement, dated as of August 31, 2021, between Juniper Networks, Inc. and International Business Machines Corporation*				
10.25	Amendment No.11 to the Master Services Agreement, dated as of October 6, 2021, between Juniper Networks, Inc. and International Business Machines Corporation*††				
10.26	Amendment No.12 to the Master Services Agreement, dated as of November 9, 2021, between Juniper Networks, Inc. and International Business Machines Corporation*				
10.27	Form of Executive Compensation Recovery Agreement for Certain Officers, approved for use in November 2015+	10-K	10.60	001-34501	2/29/2016
21.1	Subsidiaries of the Company*				
23.1	Consent of Independent Registered Public Accounting Firm*				
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934*				
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934*				
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**				
32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**				
101	The following materials from Juniper Networks Inc.'s Annual Report on Form 10-K for the year ended December 31, 2021, formatted in iXBRL (inline eXtensible Business Reporting Language): (i) the Consolidated Statements of Operations, (ii) Consolidated Statements of Comprehensive Income, (iii) Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, and (v) Consolidated Statements of Changes in Stockholders' Equity, and (iv) Notes to Consolidated Financial Statements, tagged as blocks of text*				
104	The cover page from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, formatted in Inline XBRL (included in Exhibit 101)*				

- * Filed herewith
- ** Furnished herewith
- + Indicates management contract or compensatory plan, contract or arrangement.
- † Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment that has been separately filed with the Securities and Exchange Commission.
- †† Portion of this exhibit (indicated by asterisks) have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K, which portions will be furnished to the SEC upon request.

(b) Exhibits

See Exhibits in Item 15(a)(3) above in this Report.

(c) None

ITEM 16. *Form 10-K Summary*

Not applicable.

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.

Juniper Networks, Inc.

February 11, 2022 By: /s/ Kenneth B. Miller
Kenneth B. Miller
Executive Vice President, Chief Financial Officer
(Duly Authorized Officer and Principal Financial Officer)

February 11, 2022 By: /s/ Thomas A. Austin
Thomas A. Austin
Vice President, Corporate Controller and Chief Accounting Officer
(Duly Authorized Officer and Principal Accounting Officer)

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Rami Rahim</u> Rami Rahim	Chief Executive Officer and Director (Principal Executive Officer)	February 11, 2022
<u>/s/ Kenneth B. Miller</u> Kenneth B. Miller	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 11, 2022
<u>/s/ Thomas A. Austin</u> Thomas A. Austin	Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	February 11, 2022
<u>/s/ Scott Kriens</u> Scott Kriens	Chairman of the Board	February 11, 2022
<u>/s/ Gary Daichendt</u> Gary Daichendt	Director	February 11, 2022
<u>/s/ Anne T. DelSanto</u> Anne T. DelSanto	Director	February 11, 2022
<u>/s/ Kevin DeNuccio</u> Kevin DeNuccio	Director	February 11, 2022
<u>/s/ James Dolce</u> James Dolce	Director	February 11, 2022
<u>/s/ Christine M. Gorjanc</u> Christine M. Gorjanc	Director	February 11, 2022
<u>/s/ Janet B. Haugen</u> Janet B. Haugen	Director	February 11, 2022
<u>/s/ Rahul Merchant</u> Rahul Merchant	Director	February 11, 2022
<u>/s/ William R. Stensrud</u> William R. Stensrud	Director	February 11, 2022

JUNIPER NETWORKS, INC.
2015 EQUITY INCENTIVE PLAN
NOTICE OF GRANT OF RESTRICTED STOCK UNITS

Unless otherwise defined herein, the terms defined in the Juniper Networks, Inc. 2015 Equity Incentive Plan, as amended and restated (the “Plan”) shall have the same defined meanings in this Notice of Grant of Restricted Stock Units (the “Notice of Grant”), the Restricted Stock Unit Agreement set forth in Exhibit A, any additional terms and conditions for your country included in the Country-Specific Appendix attached hereto as Exhibit B (the “Appendix”) and any other exhibits to these documents (collectively, this “Agreement”).

Name (“Participant”): [Insert Name]

Effective [Insert Grant Date], Juniper Networks, Inc. (the “Company”) hereby grants you an Award (this “Award”) of Restricted Stock Units subject to the terms and conditions of the Plan and this Agreement, as follows:

[Grant ID:] [_____]

Number of Restricted Stock Units: [_____]

Each such Restricted Stock Unit is equivalent to one Share of Common Stock of the Company for purposes of determining the number of Shares subject to this Award. None of the Restricted Stock Units will be issued (nor will you have the rights of a stockholder with respect to the underlying Shares) until the vesting conditions described below are satisfied.

This Award vests as to [Insert Number of Shares] Shares on [Insert Initial Vest Date], and the RSU vests thereafter until all of the Shares are vested in accordance with the specific vesting dates set forth in your online account, subject to your remaining a Service Provider through such applicable vesting dates.

You acknowledge and agree that this Agreement and the vesting schedule for this Award do not constitute an express or implied promise of continued employment or engagement as a Service Provider for the vesting period, for any period, or at all, and shall not interfere with your right or the Company’s or, if different, your employer’s right to terminate your relationship as a Service Provider at any time, with or without cause.

Your electronic acceptance (including deemed acceptance, if applicable) of this Agreement indicates your acceptance of and agreement with the terms and conditions of this Award, as set forth in this Agreement, including the exhibits and the Plan, and your acknowledgment that this Agreement and the Plan constitute your entire agreement with respect to this Award and may not be modified adversely to your interest except by means of a writing agreed by the Company and you.

If you do not notify the Company at stock-admin@juniper.net that you choose to decline this Award within 45 days of the grant date of this Award, you will be deemed to have accepted this Agreement and the terms and conditions of the Plan and this Agreement.

Exhibit A

RESTRICTED STOCK UNIT AGREEMENT

1. Grant. The Company hereby grants to Participant an award of Restricted Stock Units (“RSUs”), as set forth in the Notice of Grant, subject to all of the terms and conditions in this Agreement, including any additional terms and conditions for Participant’s country included in the Country-Specific Appendix attached hereto as Exhibit B and the Plan, which is incorporated by reference.

2. Company’s Obligation to Pay. Each RSU represents the right to receive a Share on the vesting date. Unless and until the RSUs vest in the manner set forth in Sections 3 or 4, Participant will have no right to payment with respect to such RSUs. Prior to actual distribution of Shares pursuant to any vested RSUs, such RSUs will represent an unfunded and unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. Any RSUs that vest in accordance with Sections 3 or 4 will be paid to Participant (or in the event of Participant’s death, to his or her estate) in whole Shares, subject to Participant satisfying any obligations for Tax-Related Items (as defined in Section 8). Subject to the provisions of Sections 4 and 8, vested RSUs will be paid as soon as practicable after vesting, but in each such case within the period 60 days following the vesting date. In no event will Participant be permitted, directly or indirectly, to specify the taxable year of the payment of any RSUs payable under this Agreement.

3. Vesting Schedule. Subject to Section 4, to Plan Sections 16 and 17 and to any other relevant Plan provisions, the RSUs awarded by this Agreement will vest in Participant according to the vesting schedule specified in the Notice of Grant.

4. Administrator Discretion. The Administrator, in its discretion, may accelerate the vesting of any portion of the RSUs at any time, subject to the terms of the Plan. In that case, the RSUs will be vested as of the date and to the extent specified by the Administrator and will be paid as provided in Section 2 above. The payment of Shares vesting pursuant to this Section 4 will be paid at a time or in a manner that is exempt from, or complies with, Code Section 409A.

5. [Reserved.]

6. Forfeiture upon Termination as Service Provider. Any RSUs that have not vested as of the time Participant’s termination as a Service Provider will immediately cease vesting and revert to the Plan following Participant’s termination, subject to Applicable Laws. For purposes of the RSUs, Participant’s engagement as a Service Provider will be considered terminated as of the date Participant ceases to actively provide services to the Company or any member of the Company Group (regardless of the reason for such termination and whether or not the termination is later found to be invalid or in breach of employment laws in the jurisdiction where Participant is a Service Provider or the terms of Participant’s engagement agreement, if any).

7. Payments after Death. Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to the administrator or executor of Participant’s estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

8. Tax Obligations.
(a) Tax Withholding.

(i) No Shares issuable on a vesting date will be issued to Participant until satisfactory arrangements (as determined by the Administrator) have been made by Participant for the payment of income, employment, social insurance, National Insurance Contributions, payroll tax, fringe benefit tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable or deemed applicable to Participant ("Tax-Related Items"), including, without limitation, in connection with any aspect of the RSU, including, but not limited to, the grant, vesting and settlement of the RSU, the subsequent sale of Shares acquired under the Plan and/or the receipt of any dividends on such Shares that the Administrator determines must be withheld. If Participant is a non-U.S. employee, the method of payment of Tax-Related Items may be restricted or prescribed by the Country-Specific Appendix.

(ii) The Company has the right (but not the obligation) to satisfy any Tax-Related Items by (A) withholding from proceeds of the sale of Shares acquired upon the settlement of the RSU through a sale arranged by the Company (on Participant's behalf pursuant to this authorization without further consent), (B) requiring Participant to pay cash, or (C) reducing the number of Shares otherwise deliverable to Participant; provided that if the Company permits Participant to pay cash to satisfy Tax-Related Items and Participant elects to satisfy Tax-Related Items through the payment of cash and fails to deliver cash on the vesting date, the Company has the right (but not the obligation) to satisfy such Tax-Related Items by withholding from proceeds of the sale of Shares acquired upon the settlement of the RSU through a sale arranged by the Company (on Participant's behalf pursuant to this authorization without further consent). The Administrator will have discretion to determine the method of satisfying Tax-Related Items.

(iii) The Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including the maximum rate applicable in Participant's jurisdiction. If Tax-Related Items are withheld in excess of Participant's actual tax liability, Participant may receive a refund of any over-withheld amount in cash (without any entitlement to the Common Stock equivalent) or, if not refunded, Participant may need to seek a refund from the local tax authorities. If the obligation for Tax-Related Items is satisfied by reducing the number of Shares otherwise deliverable to Participant, for tax purposes, Participant is deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

(iv) If Participant is subject to taxation in more than one jurisdiction, the Company and/or, if different, Participant's employer (the "Employer") or former employer (as applicable) may withhold or account for tax in more than one jurisdiction.

(v) Regardless of any action of the Company or the Employer, Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. Participant further acknowledges that the Company and the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs or the underlying Shares; and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result.

(b) Code Section 409A. This Section 8(b) may not apply if Participant is not a U.S. taxpayer.

(i) If the vesting of any portion of the RSUs is accelerated in connection with Participant's termination of status as a Service Provider (provided that such termination is a "separation from service" within the meaning of Code Section 409A) and if (x)

Participant is a “specified employee” within the meaning of Code Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated RSUs will result in the imposition of additional tax under Code Section 409A if paid to Participant on or within the 6-month period following Participant’s termination as a Service Provider, then the payment of such accelerated RSUs will not be made until the first day after the end of the 6-month period.

(ii) If the termination as a Service Provider is due to death, the delay under Section 8(b)(i) will not apply. If Participant dies following his or her termination as a Service Provider, the delay under Section 8(b)(i) will be disregarded and the RSUs will be paid in Shares to Participant’s estate as soon as practicable following his or her death.

(iii) All payments and benefits under this Restricted Stock Unit Grant Agreement are intended to be exempt from, or comply with, the requirements of Code Section 409A so that none of the RSUs or Shares issuable upon the vesting of RSUs will be subject to the additional tax imposed under Code Section 409A and the Company and Participant intend that any ambiguities be interpreted so that the RSUs are exempt from or comply with Code Section 409A.

(iv) Each payment under this Agreement is intended to be a separate payment as described in Treasury Regulations Section 1.409A-2(b)(2).

9. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until Shares have been issued and recorded on the records of the Company or its transfer agents or registrars.

10. Acknowledgements and Agreements. Participant’s acceptance of this Agreement indicates that:

(a) PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF THESE RSUS IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AND THAT BEING HIRED, AND GRANTED THESE RSUS WILL NOT RESULT IN VESTING.

(b) PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THESE RSUS AND THIS AGREEMENT DO NOT CREATE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND WILL NOT INTERFERE IN ANY WAY WITH PARTICIPANT’S RIGHT OR THE RIGHT OF THE COMPANY OR THE EMPLOYER (OR ENTITY TO WHICH HE OR SHE IS PROVIDING SERVICES) TO TERMINATE PARTICIPANT’S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

(c) Participant agrees that this Agreement and its incorporated documents reflect all agreements on its subject matters and that he or she is not accepting this Agreement based on any promises, representations, or inducements other than those reflected in this Agreement.

(d) Participant agrees that delivery of any documents related to the Plan or Awards under the Plan, including the Plan, this Agreement, the Plan’s prospectus and any reports of the Company provided generally to the Company’s stockholders, may be made by electronic delivery. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company. Participant acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to Participant by contacting the Company in writing in accordance with Section 13. Participant further

acknowledges that Participant will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, Participant understands that Participant must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. Participant may revoke his or her consent to the electronic delivery of documents or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address in accordance with Section 13. Finally, Participant understands that he or she is not required to consent to electronic delivery of documents.

(e) Participant accepts that all good faith decisions or interpretations of the Administrator regarding the Plan and Awards under the Plan are binding, conclusive and final.

(f) Participant agrees that the Plan is established voluntarily by the Company, it is discretionary in nature, and may be amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan.

(g) Participant agrees that the grant of RSUs is exceptional, voluntary and occasional and does not create any contractual or other right to receive any or the same number of RSUs, or benefits in lieu of RSUs, even if any or a certain number of RSUs have been granted in the past.

(h) Participant agrees that all decisions regarding future Awards, if any, will be at the sole discretion of the Company.

(i) Participant agrees that he or she is voluntarily participating in the Plan.

(j) Participant agrees that the RSUs and any Shares acquired under the Plan, and the income from and value of same, are not intended to replace any pension rights or compensation.

(k) Participant agrees that the RSUs and any Shares acquired under the Plan, and the income from and value of same, are not part of normal or expected compensation for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits or similar mandatory payments.

(l) Participant agrees that unless otherwise agreed with the Company, the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of a Parent or Subsidiary.

(m) Participant agrees that the future value of the Shares underlying the RSUs is unknown, indeterminable, and cannot be predicted with certainty.

(n) [Reserved.]

(o) Participant agrees that any right to vest in the RSUs under the Plan will terminate as of the date described in the previous paragraph and will not be extended by any notice period (*e.g.*, Participant's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws (including common law, if applicable) in the jurisdiction where Participant is a Service Provider or under Participant's engagement agreement, if any, unless Participant is providing bona fide services during such time).

(p) Participant agrees that the Administrator has the exclusive discretion to determine when Participant is no longer actively providing services for purposes of his or her RSUs (including whether Participant may still be considered to be providing services while on a leave of absence).

(q) None of the Company, the Employer, or any Parent or Subsidiary will be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar ("USD") that may affect the value of the RSUs or of any amounts due to Participant pursuant to the settlement of the RSUs or the subsequent sale of any Shares acquired upon settlement.

(r) Participant has read and agrees to the Data Privacy Provisions of Section 12 of this Agreement.

(s) Participant agrees that no claim or entitlement to compensation or damages, including pro-rated compensation or damages, shall arise from forfeiture of the RSUs resulting from the termination of Participant's status as a Service Provider (regardless of the reason for such termination and whether or not the termination is later found to be invalid or in breach of employment laws in the jurisdiction where Participant is a Service Provider or the terms of Participant's engagement agreement, if any).

11. No Advice Regarding Grant. Neither the Company nor any member of the Company Group is providing any tax, legal or financial advice, and neither the Company nor any member of the Company Group is making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan. Nothing stated in this Agreement or the Plan is intended or written to be used, and cannot be used, for the purpose of avoiding taxpayer or other penalties.

12. Data Privacy.

(a) ***Declaration of Consent.*** Participant hereby agrees with the data processing practices described herein and explicitly and unambiguously consents to the collection, processing, use and transfer, in electronic or other form, of Participant's personal data as described in this Agreement by and among the Company and its subsidiaries, and affiliates and the transfer of such personal data to the recipients mentioned below, including recipients located in countries which may not have a similar level of protection from the perspective of Participant's country's data protection laws.

(b) ***Data Collection and Usage.*** The Company and the Employer will collect, process and use certain personal information about Participant, including, but not limited to, Participant's name, address and telephone number, email address, date of birth, social security, insurance number, passport or other identification number (e.g., resident registration number), salary, nationality, residency, status (e.g. marital, immigration), job title, any shares of stock or directorships held in the Company or the Company Group, details of all restricted stock units or any other entitlement to stock awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor (collectively "Data"), for the exclusive purposes of implementing, administering and managing the Plan. The legal basis, where required, for the processing of Data is Participant's consent. Where required under applicable law, Data may also be disclosed to certain securities or other regulatory authorities where the Company's securities are listed or traded or regulatory filings are made and the legal basis, where required, for such disclosure are the applicable laws.

(c) ***Stock Plan Administration Service Providers.*** The Company transfers Data to E*Trade Financial Services, Inc. and certain of its affiliates ("E*Trade"), an independent stock plan service provider which is assisting the Company with the implementation, administration and management of the Plan. Participant may be asked to agree on separate terms and data processing practices with E*Trade, with such agreement being a condition of the ability to participate in the Plan.

(d) **Other Service Provider Data Recipients.** *The Company also may transfer Data to other third party service providers, if necessary to ensure compliance with applicable tax, exchange control, securities and labor law. Such third party service providers may include the Company's legal counsel. Participant understands that his or her Data may need to be transferred to such providers to ensure compliance with applicable law and/or tax requirements, and Participant hereby explicitly consents to such transfer.*

(e) **International Data Transfers.** *The Company, E*Trade and its other service providers described above under (d) are located in the United States. Participant understands and acknowledges that the United States is not subject to an unlimited adequacy finding by the European Commission and that Participant's Data may not have an equivalent level of protection as compared to Participant's country of residence. The Company's legal basis, where required, for the transfer of Data is Participant's consent.*

(f) **Data Retention.** *The Company will hold and use the Data only as long as is necessary to implement, administer and manage Participant's participation in the Plan, or as required to comply with any applicable legal or regulatory obligations, including under tax and securities laws.*

(g) **Data Subject Rights.** *Participant understands that data subject rights vary depending on applicable law and that, depending on where he or she is based and subject to the conditions set out under applicable law, Participant may have the rights to (i) request access or copies of Data the Company processes, (ii) rectification of incorrect Data, (iii) deletion of Data, (iv) restrictions on processing of Data, (v) portability of Data, (vi) lodge complaints with competent authorities in Participant's jurisdiction and/or (vii) receive a list with the names and addresses of any potential and actual recipients of Data. To receive clarification regarding these rights or to exercise these rights, Participant understands that he or she can contact his or her local human resources representative.*

(h) **Voluntariness and Consequences of Consent Denial or Withdrawal.** *Participation in the Plan is voluntary and Participant is providing the explicit consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke his or her consent, his or her engagement as a Service Provider with the Employer will not be affected; the only consequence of refusing or withdrawing Participant's consent is that the Company would not be able to grant or process Participant restricted stock units or other equity awards or administer or maintain such awards.*

(i) **Alternative Basis for Data Processing and Transfer.** *Participant understands that the Company may rely on a different legal basis for the processing or transfer of Data in the future and/or request that Participant provide another data privacy consent form. If applicable and upon request of the Company, Participant agrees to provide an executed acknowledgement or data privacy consent form to the Employer or the Company (or any other acknowledgements, agreements or consents that may be required by the Employer or the Company) that the Company and/or the Employer may deem necessary to obtain under the data privacy laws and regulations in Participant's country, either now or in the future. Participant understands that he or she will not be able to participate in the Plan if he or she fails to execute*

any such acknowledgement, agreement or consent requested by the Company and/or the Employer.

13. Address for Notices. Any notice to be given under the terms of this Agreement to the Company will be addressed in care of Attn: Stock Administration, at Juniper Networks, Inc., 1133 Innovation Way, Sunnyvale, California 94089; to Participant will be provided to the physical or electronic mail address maintained for Participant in the Company's records; or in either case, at such other address as the Company or Participant, as the case may be, may hereafter designate in writing.

14. No Effect on Employment. Participant's employment with the Company or the Employer is not affected by this grant of RSUs. Accordingly, the terms of Participant's employment with the Company or the Employer will be determined from time to time by the Company or the Employer, and the Company or the Employer will have the right, which is hereby expressly reserved, to terminate or change the terms of the employment of Participant at any time for any reason whatsoever, with or without good cause or notice.

15. Grant is Not Transferable. Except to the limited extent provided in Section 7, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.

16. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

17. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the 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 Shares to Participant (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

18. Plan Governs. This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.

19. Administrator Authority. The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any RSUs have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. Neither the Administrator nor any member of the Company Group will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

20. Country-Specific Appendix. The RSUs are subject to any additional terms and conditions for Participant's country set forth in the Country-Specific Appendix. If Participant relocates to a country included in the Country-Specific Appendix, the additional terms and conditions for that country will apply to Participant to the extent the Company determines that applying such terms and conditions is necessary or advisable for legal or administrative reasons.

21. Agreement Severable. In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

22. Modifications to this Agreement. The Plan and this Agreement constitute the entire understanding of the parties on the subjects covered. Participant expressly warrants that he or she is not accepting this Agreement in reliance on any promises, representations, or inducements other than those contained herein. Modifications to this Agreement or the Plan can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Agreement, the Company reserves the right to revise this Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Code Section 409A or to otherwise avoid imposition of any additional tax or income recognition under Code Section 409A in connection to these RSUs, or to comply with other Applicable Laws.

23. Notice of Governing Law; Venue. This grant of RSUs shall be governed by, and construed in accordance with, the laws of the State of California without regard to principles of conflict of laws. The parties further agree that any legal action, suit or proceeding arising from or related to this Agreement shall be instituted exclusively in the courts of California or the federal courts for the United States for the Northern District of California and no other courts. The parties consent to the personal jurisdiction of such courts over them, waive all objections to the contrary, and waive any and all objections to the exclusive location of legal proceedings in California or the federal courts for the United States for the Northern District of California (including, without limitation, any objection based on cost, convenience or location of relevant persons). The parties further agree that there shall be a conclusive presumption that this Agreement has a significant, material and reasonable relationship to the State of California.

24. Insider Trading/Market Abuse Laws. Depending on Participant's country, the broker's country or the country in which Shares are listed, Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including the United States and Participant's country or E*Trade's or any other stock plan service provider's country, which may affect his or her ability to accept, acquire, sell or attempt to sell, or otherwise dispose of Shares, rights to Shares (e.g., RSUs) or rights linked to the value of Shares during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before possessing inside information. Furthermore, Participant may be prohibited from (i) disclosing insider information to any third party (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them otherwise to buy or sell securities, including third parties who are fellow employees. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant is responsible for ensuring compliance with any applicable restrictions and should consult his or her personal legal advisor on this matter.

25. Foreign Asset/Account Reporting Information. Participant acknowledges that his or her country may have certain foreign asset and/or account reporting requirements which may affect Participant's ability to acquire or hold Shares under the Plan or cash received from

participating in the Plan (including from any dividends received or sale proceeds arising from the sale of Shares) in a brokerage or bank account outside Participant's country. Participant may be required to report such accounts, assets or related transactions to the tax or other authorities in his or her country. Participant also may be required to repatriate sale proceeds or other funds received as a result of his or her participation in the Plan to Participant's country through a designated bank or broker and/or within a certain time after receipt. In addition, Participant may be subject to tax payment and/or reporting obligations in connection with any income realized under the Plan and/or from the sale of Shares. Participant acknowledges that he or she is responsible for ensuring compliance with any applicable requirements, and that Participant should consult his or her personal legal advisor on this matter.

26. Language. Participant acknowledges that he or she is proficient in the English language, or has consulted with an advisor who is sufficiently proficient in English, so as to enable Participant to understand the provisions of this Agreement and the Plan. Further, if Participant has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different from the English version, the English version will control.

27. Waiver. Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by Participant or any other participant in the Plan.

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Exhibit B

COUNTRY-SPECIFIC APPENDIX TO RESTRICTED STOCK UNIT AGREEMENT

JUNIPER NETWORKS, INC.
2015 EQUITY INCENTIVE PLAN
NOTICE OF GRANT OF PERFORMANCE SHARES

Unless otherwise defined herein, the terms defined in the Juniper Networks, Inc. 2015 Equity Incentive Plan, as amended and restated (the “Plan”) shall have the same defined meanings in this Notice of Grant of Performance Shares (the “Notice of Grant”), the Performance Share Agreement set forth in Exhibit A, the performance vesting terms set forth in Exhibit B, any additional terms and conditions for your country included in the Country-Specific Appendix attached hereto as Exhibit C (the “Appendix”) and any other exhibits to these documents (collectively, this “Agreement”).

Name (“Participant”): [Insert Name]

Effective [Insert Grant Date], Juniper Networks, Inc. (the “Company”) hereby grants you an Award (this “Award”) of Performance Shares, subject to the terms and conditions of the Plan and this Agreement, as follows:

[Grant ID:] [_____]

Maximum number of Performance Shares ([_____] % of total target number):

Total target number: [_____]

[Annual target amount:]

Each such Performance Share is equivalent to one Share of Common Stock of the Company for purposes of determining the number of Shares subject to this Award. None of the Performance Shares will be issued (nor will you have the rights of a stockholder with respect to the underlying Shares) until the vesting conditions described in Exhibit B are satisfied, subject to your remaining a Service Provider through such applicable vesting dates.

You acknowledge and agree that this Agreement and the vesting schedule for this Award do not constitute an express or implied promise of continued employment or engagement as a Service Provider for the vesting period, for any period, or at all, and shall not interfere with your right or the Company’s or, if different, your employer’s right to terminate your relationship as a Service Provider at any time, with or without cause.

Your electronic or written signature below, or electronic acceptance (including deemed acceptance, if applicable) of this Agreement, in each case, indicates your acceptance of and agreement with the terms and conditions of this Award, as set forth in this Agreement, including the exhibits and the Plan, and your acknowledgment that this Agreement and the Plan constitute your entire agreement with respect to this Award and may not be modified adversely to your interest except by means of a writing agreed by the Company and you. If you do not notify the Company at stock-admin@juniper.net that you choose to decline this Award within 45 days of the grant date of this Award, you will be deemed to have accepted this Agreement and the terms and conditions of the Plan and this Agreement.

Exhibit A

PERFORMANCE SHARE AGREEMENT

1. Grant. The Company hereby grants to Participant an award of Performance Shares (“Performance Shares”), as set forth in the Notice of Grant, subject to all of the terms and conditions in this Agreement, including any additional terms and conditions for Participant’s country included in the Country-Specific Appendix attached hereto as Exhibit C and the Plan, which is incorporated herein by reference.

2. Company’s Obligation to Pay. Each Performance Share represents the right to receive a Share on the vesting date. Unless and until the Performance Shares vest in the manner set forth in Sections 3 or 4, Participant will have no right to payment with respect to such Performance Shares. Prior to actual distribution of Shares pursuant to any vested Performance Shares, such Performance Shares will represent an unfunded and unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. Any Performance Shares that vest in accordance with Sections 3 or 4 will be paid to Participant (or in the event of Participant’s death, to his or her estate) in whole Shares, subject to Participant satisfying any obligations for Tax-Related Items (as defined in Section 8). Subject to the provisions of Sections 4 and 8, vested Performance Shares will be paid as soon as practicable after vesting, but in each such case within the period 60 days following the vesting date. In no event will Participant be permitted, directly or indirectly, to specify the taxable year of the payment of any Performance Shares payable under this Agreement.

3. Vesting Schedule. Subject to Section 4, to Plan Sections 16 and 17 and to any other relevant Plan provisions, the Performance Shares awarded by this Agreement will vest in Participant according to the vesting schedule specified in Exhibit B to the Notice of Grant.

4. Administrator Discretion. The Administrator, in its discretion, may accelerate the vesting of any portion of the Performance Shares at any time, subject to the terms of the Plan. In that case, the Performance Shares will be vested as of the date and to the extent specified by the Administrator and will be paid as provided in Section 2 above. The payment of Shares vesting pursuant to this Section 4 will be paid at a time or in a manner that is exempt from, or complies with, Code Section 409A.

5. [Reserved.]

6. Forfeiture upon Termination as Service Provider. Any Performance Shares that have not vested as of the time Participant’s termination as a Service Provider will immediately cease vesting and revert to the Plan following Participant’s termination, subject to Applicable Laws. For purposes of the Performance Shares, Participant’s engagement as a Service Provider will be considered terminated as of the date Participant ceases to actively provide services to the Company or any member of the Company Group (regardless of the reason for such termination and whether or not the termination is later found to be invalid or in breach of employment laws in the jurisdiction where Participant is a Service Provider or the terms of Participant’s engagement agreement, if any).

7. Payments after Death. Any distribution or delivery to be made to Participant under this Agreement will, if Participant is then deceased, be made to the administrator or executor of Participant’s estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the

Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

8. Tax Obligations.

(a) Tax Withholding.

(i) No Shares issuable on a vesting date will be issued to Participant until satisfactory arrangements (as determined by the Administrator) have been made by Participant for the payment of income, employment, social insurance, National Insurance Contributions, payroll tax, fringe benefit tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable or deemed applicable to Participant ("Tax-Related Items"), including, without limitation, in connection with any aspect of the Performance Shares, including, but not limited to, the grant, vesting and settlement of the Performance Shares, the subsequent sale of Shares acquired under the Plan and/or the receipt of any dividends on such Shares that the Administrator determines must be withheld. If Participant is a non-U.S. employee, the method of payment of Tax-Related Items may be restricted or prescribed by the Country-Specific Appendix.

(ii) The Company has the right (but not the obligation) to satisfy any Tax-Related Items by (A) withholding from proceeds of the sale of Shares acquired upon the settlement of the Performance Shares through a sale arranged by the Company (on Participant's behalf pursuant to this authorization without further consent), (B) requiring Participant to pay cash, or (C) reducing the number of Shares otherwise deliverable to Participant; provided that if the Company permits Participant to pay cash to satisfy Tax-Related Items and Participant elects to satisfy Tax-Related Items through the payment of cash and fails to deliver cash on the vesting date, the Company has the right (but not the obligation) to satisfy such Tax-Related Items by withholding from proceeds of the sale of Shares acquired upon the settlement of the Performance Shares through a sale arranged by the Company (on Participant's behalf pursuant to this authorization without further consent). The Administrator will have discretion to determine the method of satisfying Tax-Related Items.

(iii) The Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including the maximum rate applicable in Participant's jurisdiction. If Tax-Related Items are withheld in excess of Participant's actual tax liability, Participant may receive a refund of any over-withheld amount in cash (without any entitlement to the Common Stock equivalent) or, if not refunded, Participant may need to seek a refund from the local tax authorities. If the obligation for Tax-Related Items is satisfied by reducing the number of Shares otherwise deliverable to Participant, for tax purposes, Participant is deemed to have been issued the full number of Shares subject to the vested Performance Shares, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

(iv) If Participant is subject to taxation in more than one jurisdiction, the Company and/or, if different, Participant's employer (the "Employer") or former employer (as applicable) may withhold or account for tax in more than one jurisdiction.

(v) Regardless of any action of the Company or the Employer, Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. Participant further acknowledges that the Company and the Employer (1) make no representations or undertakings regarding the treatment of any Tax-

Related Items in connection with any aspect of the Performance Shares or the underlying Shares; and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Performance Shares to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result.

(b) Code Section 409A. This Section 8(b) may not apply if Participant is not a U.S. taxpayer.

(i) If the vesting of any portion of the Performance Shares is accelerated in connection with Participant's termination of status as a Service Provider (provided that such termination is a "separation from service" within the meaning of Code Section 409A) and if (x) Participant is a "specified employee" within the meaning of Code Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Performance Shares will result in the imposition of additional tax under Code Section 409A if paid to Participant on or within the 6-month period following Participant's termination as a Service Provider, then the payment of such accelerated Performance Shares will not be made until the first day after the end of the 6-month period.

(ii) If the termination as a Service Provider is due to death, the delay under Section 8(b)(i) will not apply. If Participant dies following his or her termination as a Service Provider, the delay under Section 8(b)(i) will be disregarded and the Performance Shares will be paid in Shares to Participant's estate as soon as practicable following his or her death.

(iii) All payments and benefits under this Performance Share Agreement are intended to be exempt from, or comply with, the requirements of Code Section 409A so that none of the Performance Shares or Shares issuable upon the vesting of Performance Shares will be subject to the additional tax imposed under Code Section 409A and the Company and Participant intend that any ambiguities be interpreted so that the Performance Shares are exempt from or comply with Code Section 409A.

(iv) Each payment under this Agreement is intended to be a separate payment as described in Treasury Regulations Section 1.409A-2(b)(2).

9. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until Shares have been issued and recorded on the records of the Company or its transfer agents or registrars.

10. Acknowledgements and Agreements. Participant's acceptance of this Agreement indicates that:

(a) PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF THESE PERFORMANCE SHARES IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AND THAT BEING HIRED AND GRANTED THESE PERFORMANCE SHARES WILL NOT RESULT IN VESTING.

(b) PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THESE PERFORMANCE SHARES AND THIS AGREEMENT DO NOT CREATE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND WILL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY OR THE EMPLOYER (OR ENTITY TO WHICH HE OR SHE IS PROVIDING

SERVICES) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

(c) Participant agrees that this Agreement and its incorporated documents reflect all agreements on its subject matters and that he or she is not accepting this Agreement based on any promises, representations, or inducements other than those reflected in this Agreement.

(d) Participant agrees that delivery of any documents related to the Plan or Awards under the Plan, including the Plan, this Agreement, the Plan's prospectus and any reports of the Company provided generally to the Company's stockholders, may be made by electronic delivery. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company. Participant acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to Participant by contacting the Company in writing in accordance with Section 13. Participant further acknowledges that Participant will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, Participant understands that Participant must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. Participant may revoke his or her consent to the electronic delivery of documents or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address in accordance with Section 13. Finally, Participant understands that he or she is not required to consent to electronic delivery of documents.

(e) Participant accepts that all good faith decisions or interpretations of the Administrator regarding the Plan and Awards under the Plan are binding, conclusive and final.

(f) Participant agrees that the Plan is established voluntarily by the Company, it is discretionary in nature, and may be amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan.

(g) Participant agrees that the grant of Performance Shares is exceptional, voluntary and occasional and does not create any contractual or other right to receive any or the same number of Performance Shares, or benefits in lieu of Performance Shares, even if any or a certain number of Performance Shares have been granted in the past.

(h) Participant agrees that all decisions regarding future Awards, if any, will be at the sole discretion of the Company.

(i) Participant agrees that he or she is voluntarily participating in the Plan.

(j) Participant agrees that the Performance Shares and any Shares acquired under the Plan, and the income from and value of same, are not intended to replace any pension rights or compensation.

(k) Participant agrees that the Performance Shares and any Shares acquired under the Plan, and the income from and value of same, are not part of normal or expected compensation for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits or similar mandatory payments.

(l) Participant agrees that unless otherwise agreed with the Company, the Performance Shares and the Shares subject to the Performance Shares, and the income from and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of a Parent or Subsidiary.

(m) Participant agrees that the future value of the Shares underlying the Performance Shares is unknown, indeterminable, and cannot be predicted with certainty.

(n) [Reserved.]

(o) Participant agrees that any right to vest in the Performance Shares under the Plan will terminate as of the date described in the previous paragraph and will not be extended by any notice period (e.g., Participant's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws (including common law, if applicable) in the jurisdiction where Participant is a Service Provider or under Participant's engagement agreement, if any, unless Participant is providing bona fide services during such time).

(p) Participant agrees that the Administrator has the exclusive discretion to determine when Participant is no longer actively providing services for purposes of his or her Performance Shares (including whether Participant may still be considered to be providing services while on a leave of absence).

(q) None of the Company, the Employer, or any Parent or Subsidiary will be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar ("USD") that may affect the value of the Performance Shares or of any amounts due to Participant pursuant to the settlement of the Performance Shares or the subsequent sale of any Shares acquired upon settlement.

(r) Participant has read and agrees to the Data Privacy Provisions of Section 12 of this Agreement.

(s) Participant agrees that no claim or entitlement to compensation or damages, including pro-rated compensation or damages, shall arise from forfeiture of the Performance Shares resulting from the termination of Participant's status as a Service Provider (regardless of the reason for such termination and whether or not the termination is later found to be invalid or in breach of employment laws in the jurisdiction where Participant is a Service Provider or the terms of Participant's engagement agreement, if any).

11. No Advice Regarding Grant. Neither the Company nor any member of the Company Group is providing any tax, legal or financial advice, and neither the Company nor any member of the Company Group is making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan. Nothing stated in this Agreement or the Plan is intended or written to be used, and cannot be used, for the purpose of avoiding taxpayer or other penalties.

12. Data Privacy.

(a) ***Declaration of Consent. Participant hereby agrees with the data processing practices described herein and explicitly and unambiguously consents to the collection, processing, use and transfer, in electronic or other form, of Participant's personal data as described in this Agreement by and among the Company, its Subsidiaries, and affiliates, and the transfer of such personal data to the recipients mentioned below, including recipients located in countries which may not have a similar level of protection from the perspective of Participant's country's data protection laws.***

(b) ***Data Collection and Usage. The Company and the Employer will collect, process and use certain personal information about Participant, including, but not limited to, Participant's name, address and telephone number, email address, date of birth, social security, insurance number, passport or other identification number (e.g., resident registration number), salary, nationality, residency, status (e.g. marital, immigration), job title,***

any shares of stock or directorships held in the Company or the Company Group, details of all Performance Shares or any other entitlement to stock awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor (collectively "Data"), for the exclusive purposes of implementing, administering and managing the Plan. The legal basis, where required, for the processing of Data is Participant's consent. Where required under applicable law, Data may also be disclosed to certain securities or other regulatory authorities where the Company's securities are listed or traded or regulatory filings are made and the legal basis, where required, for such disclosure are the applicable laws.

(c) Stock Plan Administration Service Providers. The Company transfers Data to E*Trade Financial Services, Inc. and certain of its affiliates ("E*Trade"), an independent stock plan service provider which is assisting the Company with the implementation, administration and management of the Plan. Participant may be asked to agree on separate terms and data processing practices with E*Trade, with such agreement being a condition of the ability to participate in the Plan.

(d) Other Service Provider Data Recipients. The Company also may transfer Data to other third party service providers, if necessary to ensure compliance with applicable tax, exchange control, securities and labor law. Such third party service providers may include the Company's legal counsel. Participant understands that his or her Data may need to be transferred to such providers to ensure compliance with applicable law and/or tax requirements, and Participant hereby explicitly consents to such transfer.

(e) International Data Transfers. The Company, E*Trade and its other service providers described above under (d) are located in the United States. Participant understands and acknowledges that the United States is not subject to an unlimited adequacy finding by the European Commission and that Participant's Data may not have an equivalent level of protection as compared to Participant's country of residence. The Company's legal basis, where required, for the transfer of Data is Participant's consent.

(f) Data Retention. The Company will hold and use the Data only as long as is necessary to implement, administer and manage Participant's participation in the Plan, or as required to comply with any applicable legal or regulatory obligations, including under tax and securities laws.

(g) Data Subject Rights. Participant understands that data subject rights vary depending on applicable law and that, depending on where he or she is based and subject to the conditions set out under applicable law, Participant may have the rights to (i) request access or copies of Data the Company processes, (ii) rectification of incorrect Data, (iii) deletion of Data, (iv) restrictions on processing of Data, (v) portability of Data, (vi) lodge complaints with competent authorities in Participant's jurisdiction and/or (vii) receive a list with the names and addresses of any potential and actual recipients of Data. To receive clarification regarding these rights or to exercise these rights, Participant understands that he or she can contact his or her local human resources representative.

(h) Voluntariness and Consequences of Consent Denial or Withdrawal. Participation in the Plan is voluntary and Participant is providing the explicit consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke his or her consent, his or her engagement as a Service Provider with the Employer will not be affected; the only consequence of refusing or withdrawing Participant's consent is that the Company would not be able to grant or process Participant Performance Shares or other equity awards or administer or maintain such awards.

(i) Alternative Basis for Data Processing and Transfer. Participant understands that the Company may rely on a different legal basis for the processing or transfer of Data in the future and/or request that Participant provide another data privacy

consent form. If applicable and upon request of the Company, Participant agrees to provide an executed acknowledgement or data privacy consent form to the Employer or the Company (or any other acknowledgements, agreements or consents that may be required by the Employer or the Company) that the Company and/or the Employer may deem necessary to obtain under the data privacy laws and regulations in Participant's country, either now or in the future. Participant understands that he or she will not be able to participate in the Plan if he or she fails to execute any such acknowledgement, agreement or consent requested by the Company and/or the Employer.

13. Address for Notices. Any notice to be given under the terms of this Agreement to the Company will be addressed in care of Attn: Stock Administration, at Juniper Networks, Inc., 1133 Innovation Way, Sunnyvale, California 94089; to Participant will be provided to the physical or electronic mail address maintained for Participant in the Company's records; or in either case, at such other address as the Company or Participant, as the case may be, may hereafter designate in writing.

14. No Effect on Employment. Participant's employment with the Company or the Employer is not affected by this grant of Performance Shares. Accordingly, the terms of Participant's employment with the Company or the Employer will be determined from time to time by the Company or the Employer, and the Company or the Employer will have the right, which is hereby expressly reserved, to terminate or change the terms of the employment of Participant at any time for any reason whatsoever, with or without good cause or notice.

15. Grant is Not Transferable. Except to the limited extent provided in Section 7, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.

16. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

17. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the 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 Shares to Participant (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

18. Plan Governs. This Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan will govern.

19. Administrator Authority. The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules

(including, but not limited to, the determination of whether or not any Performance Shares have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. Neither the Administrator nor any member of the Company Group will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

20. Country-Specific Appendix. The Performance Shares are subject to any additional terms and conditions for Participant's country set forth in the Country-Specific Appendix. If Participant relocates to a country included in the Country-Specific Appendix, the additional terms and conditions for that country will apply to Participant to the extent the Company determines that applying such terms and conditions is necessary or advisable for legal or administrative reasons.

21. Agreement Severable. In the event that any provision in this Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

22. Modifications to the Agreement. The Plan and this Agreement constitute the entire understanding of the parties on the subjects covered. Participant expressly warrants that he or she is not accepting this Agreement in reliance on any promises, representations, or inducements other than those contained herein. Modifications to this Agreement or the Plan can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Agreement, the Company reserves the right to revise this Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Code Section 409A or to otherwise avoid imposition of any additional tax or income recognition under Code Section 409A in connection to these Performance Shares, or to comply with other Applicable Laws.

23. Notice of Governing Law; Venue. This grant of Performance Shares shall be governed by, and construed in accordance with, the laws of the State of California without regard to principles of conflict of laws. The parties further agree that any legal action, suit or proceeding arising from or related to this Agreement shall be instituted exclusively in the courts of California or the federal courts for the United States for the Northern District of California and no other courts. The parties consent to the personal jurisdiction of such courts over them, waive all objections to the contrary, and waive any and all objections to the exclusive location of legal proceedings in California or the federal courts for the United States for the Northern District of California (including, without limitation, any objection based on cost, convenience or location of relevant persons). The parties further agree that there shall be a conclusive presumption that this Agreement has a significant, material and reasonable relationship to the State of California.

24. Insider Trading/Market Abuse Laws. Depending on Participant's country, the broker's country or the country in which Shares are listed, Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including the United States, Participant's country or E*Trade's or any other stock plan service provider's country, which may affect his or her ability to accept, acquire, sell or attempt to sell, or otherwise dispose of Shares, rights to Shares (e.g., Performance Shares) or rights linked to the value of Shares during such times as Participant is considered to have "inside information" regarding the

Company (as defined by the laws or regulations in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before possessing inside information. Furthermore, Participant may be prohibited from (i) disclosing insider information to any third party (other than on a “need to know” basis) and (ii) “tipping” third parties or causing them otherwise to buy or sell securities, including third parties who are fellow employees.. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant is responsible for ensuring compliance with any applicable restrictions and should consult his or her personal legal advisor on this matter.

25. Foreign Asset/Account Reporting Information. Participant acknowledges that his or her country may have certain foreign asset and/or account reporting requirements which may affect Participant’s ability to acquire or hold Shares under the Plan or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of Shares) in a brokerage or bank account outside Participant’s country. Participant may be required to report such accounts, assets or related transactions to the tax or other authorities in his or her country. Participant also may be required to repatriate sale proceeds or other funds received as a result of his or her participation in the Plan to Participant’s country through a designated bank or broker and/or within a certain time after receipt. In addition, Participant may be subject to tax payment and/or reporting obligations in connection with any income realized under the Plan and/or from the sale of Shares. Participant acknowledges that he or she is responsible for ensuring compliance with any applicable requirements, and that Participant should consult his or her personal legal advisor on this matter.

26. Language. Participant acknowledges that he or she is proficient in the English language, or has consulted with an advisor who is sufficiently proficient in English, so as to enable Participant to understand the provisions of this Agreement and the Plan. Further, if Participant has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different from the English version, the English version will control.

27. Waiver. Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by Participant or any other participant in the Plan.

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Exhibit B

PERFORMANCE SHARE VESTING TERMS

<Insert vesting schedule>

Exhibit C

**COUNTRY-SPECIFIC APPENDIX
TO PERFORMANCE SHARE AGREEMENT**

U.S. \$500,000,000

CREDIT AGREEMENT

Dated as of April 25, 2019

Among

JUNIPER NETWORKS, INC.
as Borrower

and

THE INITIAL LENDERS NAMED HEREIN
as Initial Lenders

and

CITIBANK, N.A.
as Administrative Agent

BANK OF AMERICA, N.A.
as Syndication Agent

CITIBANK, N.A.
and
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED
as Joint Lead Arrangers and Joint Bookrunners

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CREDIT AGREEMENT

Dated as of April 25, 2019

JUNIPER NETWORKS, INC., a Delaware corporation (the “Borrower”), the banks, financial institutions and other institutional lenders (the “Initial Lenders”) listed on Schedule I hereto, and CITIBANK, N.A. (“Citibank”), as administrative agent (the “Agent”) for the Lenders (as hereinafter defined), agree as follows:

ARTICLE I

DEFINITIONS AND ACCOUNTING TERMS

SECTION 1.01. Certain Defined Terms. As used in this Agreement, the following terms shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined):

“Administrative Questionnaire” means an Administrative Questionnaire in a form supplied by the Agent.

“Advance” means an advance by a Lender to the Borrower as part of a Borrowing and refers to a Base Rate Advance or a Eurocurrency Rate Advance (each of which shall be a “Type” of Advance).

“Affiliate” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“Agent’s Account” means (a) in the case of Advances denominated in Dollars, the account of the Agent maintained by the Agent at Citibank at its office at 1615 Brett Road, Building #3, New Castle, Delaware 19720, Account No. 36852248, Attention: Bank Loan Syndications, (b) in the case of Advances denominated in any Committed Currency, the account of the Agent designated in writing from time to time by the Agent to the Borrower and the Lenders for such purpose and (c) in any such case, such other account of the Agent as is designated in writing from time to time by the Agent to the Borrower and the Lenders for such purpose.

“Anti-Corruption Laws” means all laws, rules, and regulations of any jurisdiction applicable to the Borrower or its Subsidiaries from time to time concerning or relating to bribery, money laundering or corruption.

“Applicable Lending Office” means, as to any Lender, the office or offices of such Lender described as such in such Lender’s Administrative Questionnaire, or such other office or offices as a Lender may from time to time notify the Borrower and the Agent, which office may include any Affiliate of such Lender or any domestic or foreign branch of such Lender or such Affiliate. Unless the context otherwise requires each reference to a Lender shall include its Applicable Lending Office.

“Applicable Margin” means as of any date, a percentage per annum determined by reference to the Public Debt Rating in effect on such date as set forth below:

Public Debt Rating S&P/Moody’s/Fitch	Applicable Margin for Base Rate Advances	Applicable Margin for Eurocurrency Rate Advances
<u>Level 1</u> A- / A3 /A- or above	0.000%	0.910%
<u>Level 2</u> BBB+ / Baa1 / BBB+	0.000%	1.000%
<u>Level 3</u> BBB / Baa2 / BBB	0.100%	1.100%
<u>Level 4</u> BBB- / Baa3 / BBB-	0.175%	1.175%
<u>Level 5</u> Below Level 4	0.375%	1.375%

“Applicable Percentage” means, as of any date a percentage per annum determined by reference to the Public Debt Rating in effect on such date as set forth below:

Public Debt Rating S&P/Moody’s/Fitch	Applicable Percentage
<u>Level 1</u> A- / A3 /A- or above	0.090%
<u>Level 2</u> BBB+ / Baa1 / BBB+	0.125%
<u>Level 3</u> BBB / Baa2 / BBB	0.150%
<u>Level 4</u> BBB- / Baa3 / BBB-	0.200%
<u>Level 5</u> Below Level 4	0.250%

“Approved Fund” means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“Arrangers” means Citibank, N.A. and Merrill Lynch, Pierce, Fenner & Smith Incorporated (or any other registered broker-dealer wholly-owned by Bank of America Corporation to which all or substantially all of Bank of America Corporation’s or any of its subsidiaries’ investment banking, commercial lending services or related businesses may be transferred following the date of this Agreement).

“Assignment and Assumption” means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required by Section 8.07), and accepted by the Agent, in substantially the form of Exhibit C or any other form approved by the Agent.

“Assuming Lender” has the meaning specified in Section 2.19(c).

“Assumption Agreement” has the meaning specified in Section 2.19(c)(i)(B).

“Bail-In Action” has the meaning specified in Section 8.17.

“Base Rate” means a fluctuating interest rate per annum in effect from time to time, which rate per annum shall at all times be equal to the highest of:

(a) the rate of interest announced publicly by Citibank in New York, New York, from time to time, as Citibank’s base rate;

(b) ½ of one percent per annum above the Federal Funds Rate; and

(c) the ICE Benchmark Administration Settlement Rate (or the successor thereto if the ICE Benchmark Administration is no longer making such rates available) as the London interbank offered rate for deposits in Dollars (“LIBOR”) for a period of one month (“One Month LIBOR”) plus 1.00% (for the avoidance of doubt, the One Month LIBOR for any day shall be based on the rate appearing on Reuters LIBOR01 Page (or other commercially available source providing such quotations as designated by the Agent from time to time) at approximately 11:00 a.m. London time on such day); provided that if One Month LIBOR shall be less than zero, such rate shall be deemed zero for purposes of this Agreement.

“Base Rate Advance” means an Advance denominated in Dollars that bears interest as provided in Section 2.06(a)(i).

“Beneficial Ownership Certification” means a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.

“Beneficial Ownership Regulation” means 31 C.F.R. § 1010.230.

“Borrowing” means a borrowing consisting of simultaneous Advances of the same Type made by each of the Lenders.

“Borrowing Minimum” means, in respect of Advances denominated in Dollars, \$10,000,000, in respect of Advances denominated in Sterling, £10,000,000 and, in respect of Advances denominated in Euros, €10,000,000.

“Borrowing Multiple” means, in respect of Advances denominated in Dollars, \$1,000,000 in respect of Advances denominated in Sterling, £1,000,000 and, in respect of Advances denominated in Euros, €1,000,000.

“Business Day” means a day of the year on which banks are not required or authorized by law to close in New York City and, if the applicable Business Day relates to any Eurocurrency Rate Advances, on which dealings are carried on in the London interbank market and banks are open for business in London and in the country of issue of the currency of such Eurocurrency Rate Advance (or, in the case of an Advance denominated in Euro, a TARGET2 Day).

“Change in Law” means the occurrence, after the date of this Agreement, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law”, regardless of the date enacted, adopted or issued.

“Code” means the Internal Revenue Code of 1986, as amended.

“Commitment” means as to any Lender (a) the Dollar amount set forth opposite such Lender’s name on Schedule I hereto as such Lender’s “Commitment”, (b) if such Lender has become a Lender hereunder pursuant to an Assumption Agreement, the Dollar amount set forth in such Assumption Agreement or (c) if such Lender has entered into an Assignment and Assumption, the Dollar amount set forth for such Lender in the Register maintained by the Agent pursuant to Section 8.07(c), as such amount may be reduced pursuant to Section 2.04 or increased pursuant to Section 2.19.

“Commitment Date” has the meaning specified in Section 2.19(b).

“Commitment Increase” has the meaning specified in Section 2.19(a).

“Committed Currencies” means lawful currency of the United Kingdom of Great Britain and Northern Ireland and Euros.

“Connection Income Taxes” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“Consolidated” refers to the consolidation of accounts in accordance with GAAP.

“Control” means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. For the avoidance of doubt, no Person which owns less than 20% of the voting equity interests of another Person shall be deemed to control such other Person; provided that the ownership of voting equity interests equal or exceeding 20% shall not by itself imply the ability to Control. “Controlling” and “Controlled” have meanings correlative thereto.

“Convert”, “Conversion” and “Converted” each refers to a conversion of Advances of one Type into Advances of the other Type pursuant to Section 2.07 or 2.08.

“Covenant Debt” means Debt of the Borrower and its Subsidiaries of the types described in clauses (a), (c), (e) and, to the extent that the amount thereof exceeds \$50,000,000, clause (f) of the definition thereof.

“Current Termination Date” has the meaning provided in Section 2.20(a).

“Declining Lender” has the meaning provided in Section 2.20(b).

“Debt” of any Person means, without duplication, (a) all indebtedness of such Person for borrowed money, (b) all obligations of such Person for the deferred purchase price of property or services (other than accounts payable and intercompany balances incurred in the ordinary course of such Person’s business and earn-outs and contractual indemnity obligations in connection with acquisitions), (c) all obligations of such Person evidenced by notes, bonds, debentures or other similar instruments, (d) all obligations of such Person created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (even though the rights and remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property), (e) all obligations of such Person as lessee under leases that have been or should be, in accordance with GAAP, recorded as finance leases, (f) all obligations, contingent or otherwise, of such Person in respect of bankers acceptances, letters of credit or similar extensions of credit, (g) all net obligations of such Person in respect of Hedge Agreements (determined as of any date as the amount such Person would be required to pay to its counterparty in accordance with the terms thereof as if terminated on such date of determination), (h) all Debt of others referred to in clauses (a) through (g) above or clause (i) below (collectively, “Guaranteed Debt”) guaranteed directly or indirectly in any manner by such Person, or in effect guaranteed directly or indirectly by such Person through an agreement (1) to pay or purchase such Guaranteed Debt or to advance or supply funds for the payment or purchase of such Guaranteed Debt, (2) to purchase, sell or lease (as lessee or lessor) property, or to purchase or sell services, primarily for the purpose of enabling the debtor to make payment of such Guaranteed Debt or to assure the holder of such Guaranteed Debt against loss, (3) to supply funds to or in any other manner invest in the debtor (including any agreement to pay for property or services irrespective of whether such property is received or such services are rendered) or (4) otherwise to assure a creditor against loss, and (i) all Debt referred to in clauses (a) through (h) above (including Guaranteed Debt) secured by (or for which the holder of such Debt has an existing right, contingent or otherwise, to be secured by) any Lien on property (including, without limitation, accounts and contract rights) owned by such Person, even though such Person has not assumed or become liable for the payment of such Debt.

The amount of Debt of any Person for purposes of clause (i) above shall (unless such Debt has been assumed by such Person) be deemed to be equal to the lesser of (i) the aggregate unpaid amount of such Debt and (ii) the fair market value of the property encumbered thereby as determined by such Person in good faith. The amount of any Guaranteed Debt shall be deemed to be an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by the guaranteeing Person in good faith.

“Debtor Relief Laws” means the Bankruptcy Code of the United States of America, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief laws of the United States or other applicable jurisdictions from time to time in effect.

“Default” means any Event of Default or any event that would constitute an Event of Default but for the requirement that notice be given or time elapse or both.

“Defaulting Lender” means at any time, subject to Section 2.18(b), (i) any Lender that has failed for three or more Business Days to comply with its obligations under this Agreement to make an Advance or make any other payment due hereunder (each, a “funding obligation”), unless such Lender has notified the Agent and the Borrower in writing that such failure is the result of such Lender’s determination that one or more conditions precedent to funding has not been satisfied (which conditions precedent, together with the applicable default, if any, will be specifically identified in such writing), (ii) any Lender that has notified the Agent or the Borrower in writing, or has stated publicly, that it does not intend to comply with its funding obligations hereunder, unless such writing or statement states that such position is based on such Lender’s determination that one or more conditions precedent to funding cannot be satisfied (which conditions precedent, together with the applicable default, if any, will be specifically identified in such writing or public statement), (iii) any Lender that has defaulted on its funding obligations under other loan agreements or credit agreements generally under which it has commitments to extend credit or that has notified, or whose Parent Company has notified, the Agent or the Borrower in writing, or has stated publicly, that it does not intend to comply with its funding obligations under loan agreements or credit agreements generally, (iv) any Lender that has, for three or more Business Days after written request of the Agent or the Borrower, failed to confirm in writing to the Agent and the Borrower that it will comply with its prospective funding obligations hereunder (provided that such Lender will cease to be a Defaulting Lender pursuant to this clause (iv) upon the Agent’s and the Borrower’s receipt of such written confirmation), or (v) any Lender with respect to which a Lender Insolvency Event has occurred and is continuing with respect to such Lender or its Parent Company; provided that a Lender Insolvency Event shall not be deemed to occur with respect to a Lender or its Parent Company solely as a result of the acquisition or maintenance of an ownership interest in such Lender or Parent Company by a Governmental Authority or instrumentality thereof where such action does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Agent that a Lender is a Defaulting Lender under any of clauses (i) through (v) above will be conclusive and binding absent manifest error, and such Lender will be deemed to be a Defaulting Lender (subject to Section 2.18(b)) upon notification of such determination by the Agent to the Borrower and the Lenders.

“Disclosed Litigation” has the meaning specified in Section 3.01(b).

“Disclosure Letter” means the Disclosure Letter, dated the Effective Date, duly executed and delivered by the Borrower to the Agent and the Lenders at the time this Agreement is executed and delivered.

“Dollars” and the “\$” sign each means lawful currency of the United States of America.

“EBITDA” means, for any measurement period, Consolidated net income for such period plus, without duplication and to the extent reflected as a charge in the statement of such Consolidated net income for such period, the sum of (a) income tax expense, (b) Interest Expense, (c) depreciation and amortization expense, (d) amortization of intangibles (including, but not limited to, goodwill), (e) any extraordinary charges or losses determined in accordance with GAAP, (f) non-cash stock option and other equity-based compensation expenses and payroll tax expense related to stock option and other equity-based compensation expenses, (g) any other non-

cash charges, non-cash expenses or non-cash losses of the Borrower or any subsidiaries for such period (excluding any such charge, expense or loss incurred in the ordinary course of business that constitutes an accrual of, or a reserve for, cash charges for any future period); provided, however that cash payments made in such period or in any future period in respect of such non-cash charges, expenses or losses (excluding any such charge, expense or loss incurred in the ordinary course of business that constitutes an accrual of, or a reserve for, cash charges for any future period) shall be subtracted from Consolidated net income in calculating EBITDA in the period when such payments are made, (h) losses with respect to equity investments, (i) transition, integration and similar fees, charges and expenses related acquisitions or dispositions, (j) cash restructuring charges, (k) charges related to payments or settlements of legal claims, (l) charges with respect to retroactive effects of certain tax settlements, (m) significant effects of tax legislation and judicial or administrative interpretation of tax regulations, (n) expenses with respect to non-routine shareholder activities, provided that the aggregate amount of cash add-backs permitted under clauses (i), (j), (k), (l), (m) and (n) above shall not exceed, in any measurement period, 10% of EBITDA (calculated without giving effect to such cash add-backs permitted by clauses (i), (j), (k), (l), (m) and (n) above), and minus, to the extent included in the statement of such Consolidated net income for such period, the sum of (i) interest income, (ii) any extraordinary income or gains determined in accordance with GAAP, (iii) gains with respect to equity investments, and (iv) any other non-cash income (excluding any items that represent the reversal of any accrual of, or cash reserve for, anticipated cash charges in any prior period that are described in the parenthetical to clause (g) above), all as determined on a Consolidated basis.

“Effective Date” has the meaning specified in Section 3.01.

“Eligible Assignee” means any Person that meets the requirements to be an assignee under Section 8.07(b)(iii), (v) and (vi) (subject to such consents, if any, as may be required under Section 8.07(b)(iii)).

“Environmental Action” means any action, suit, demand, demand letter, claim, notice of non-compliance or violation, notice of liability or potential liability, investigation, proceeding, consent order or consent agreement relating in any way to any Environmental Law, Environmental Permit or Hazardous Materials or arising from alleged injury or threat of injury to health, safety or the environment, including, without limitation, (a) by any governmental or regulatory authority for enforcement, cleanup, removal, response, remedial or other actions or damages and (b) by any governmental or regulatory authority or any third party for damages, contribution, indemnification, cost recovery, compensation or injunctive relief.

“Environmental Law” means any federal, state, local or foreign statute, law, ordinance, rule, regulation, code, order, judgment, decree or judicial or agency interpretation, policy or guidance relating to pollution or protection of the environment, health, safety or natural resources, including, without limitation, those relating to the use, handling, transportation, treatment, storage, disposal, release or discharge of Hazardous Materials.

“Environmental Permit” means any permit, approval, identification number, license or other authorization required under any Environmental Law.

“Equivalent” means, at any date of determination thereof, in Dollars of any Committed Currency or in any Committed Currency of Dollars on any date, means the spot rate of exchange that appears at 11:00 A.M. (London time), on the display page applicable to the relevant currency

on the Oanda website on such date; provided that if there shall at any time no longer exist such a page on such website, the spot rate of exchange shall be determined by reference to another similar rate publishing service selected by the Agent.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended from time to time, and the regulations promulgated and rulings issued thereunder.

“ERISA Affiliate” means any Person that for purposes of Title IV of ERISA is a member of the Borrower’s controlled group, or under common control with the Borrower, within the meaning of Section 414 of the Internal Revenue Code.

“ERISA Event” means (a) (i) the occurrence of a reportable event, within the meaning of Section 4043 of ERISA, with respect to any Plan unless the 30-day notice requirement with respect to such event has been waived by the PBGC, or (ii) the requirements of Section 4043(b) of ERISA are met with respect to a contributing sponsor, as defined in Section 4001(a)(13) of ERISA, of a Plan, and an event described in paragraph (9), (10), (11), (12) or (13) of Section 4043(c) of ERISA is reasonably expected to occur with respect to such Plan within the following 30 days; (b) the application for a minimum funding waiver with respect to a Plan; (c) the provision by the administrator of any Plan of a notice of intent to terminate such Plan pursuant to Section 4041(a)(2) of ERISA (including any such notice with respect to a plan amendment referred to in Section 4041(e) of ERISA); (d) the cessation of operations at a facility of the Borrower or any ERISA Affiliate in the circumstances described in Section 4062(e) of ERISA; (e) the withdrawal by the Borrower or any ERISA Affiliate from a Multiple Employer Plan during a plan year for which it was a substantial employer, as defined in Section 4001(a)(2) of ERISA; (f) the conditions for the imposition of a lien under Section 302(f) of ERISA shall have been met with respect to any Plan; (g) a determination that any Plan is in “at risk” status (within the meaning of Section 303 of ERISA); or (h) the institution by the PBGC of proceedings to terminate a Plan pursuant to Section 4042 of ERISA, or the occurrence of any event or condition described in Section 4042 of ERISA that constitutes grounds for the termination of, or the appointment of a trustee to administer, a Plan.

“EURIBO Rate” means, for any Interest Period, the rate appearing on Reuters EURIBOR01 Page (or on any successor or substitute page of Reuters, or any successor to or substitute for Reuters, providing rate quotations comparable to those currently provided on such page of Reuters, as determined by the Agent from time to time for purposes of providing quotations of interest rates applicable to deposits in Euro by reference to the Banking Federation of the European Union Settlement Rates for deposits in Euro) at approximately 10:00 a.m., London time, two Business Days prior to the commencement of such Interest Period, as the rate for deposits in Euro with a maturity comparable to such Interest Period; provided that if the EURIBO Rate shall be less than zero, such rate shall be deemed zero for purposes of this Agreement.

“Euro” means the lawful currency of the European Union as constituted by the Treaty of Rome which established the European Community, as such treaty may be amended from time to time and as referred to in the EMU legislation.

“Eurocurrency Liabilities” has the meaning assigned to that term in Regulation D of the Board of Governors of the Federal Reserve System, as in effect from time to time.

“Eurocurrency Rate” means, for any Interest Period for each Eurocurrency Rate Advance comprising part of the same Borrowing, an interest rate per annum equal to the the rate per annum obtained by dividing (a) (i) for Dollars or any Committed Currency other than Euro, the rate per annum (rounded upward to the nearest whole multiple of 1/16 of 1% per annum) appearing on Reuters LIBOR01 Page (or any successor page) as the London interbank offered rate for deposits in Dollars or the applicable Committed Currency at approximately 11:00 A.M. (London time) two Business Days prior to the first day of such Interest Period for a term comparable to such Interest Period or (ii) for Euro, the EURIBO Rate by (b) a percentage equal to 100% minus the Eurocurrency Rate Reserve Percentage for such Interest Period; provided that if the Eurocurrency Rate shall be less than zero, such rate shall be deemed zero for purposes of this Agreement.

“Eurocurrency Rate Advance” means an Advance denominated in Dollars or a Committed Currency that bears interest as provided in Section 2.06(a)(ii).

“Eurocurrency Rate Reserve Percentage” for any Interest Period for all Eurocurrency Rate Advances comprising part of the same Borrowing means the reserve percentage applicable two Business Days before the first day of such Interest Period under regulations issued from time to time by the Board of Governors of the Federal Reserve System (or any successor) for determining the maximum reserve requirement (including, without limitation, any emergency, supplemental or other marginal reserve requirement) for a member bank of the Federal Reserve System in New York City with respect to liabilities or assets consisting of or including Eurocurrency Liabilities (or with respect to any other category of liabilities that includes deposits by reference to which the interest rate on Eurocurrency Rate Advances is determined) having a term equal to such Interest Period.

“Events of Default” has the meaning specified in Section 6.01.

“Excluded Taxes” means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in an advance or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Advance or Commitment (other than pursuant to an assignment request by the Borrower under Section 2.17(b)) or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.13, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Section 2.13(f) and (d) any U.S. federal withholding Taxes imposed under FATCA.

“Extended Termination Date” has the meaning provided in Section 2.20(a).

“FATCA” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official

interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the Code.

“Federal Funds Rate” means, for any period, a fluctuating interest rate per annum equal for each day during such period to the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System arranged by Federal funds brokers, as published for such day (or, if such day is not a Business Day, for the next preceding Business Day) by the Federal Reserve Bank of New York, or, if such rate is not so published for any day that is a Business Day, the average of the quotations for such day on such transactions received by the Agent from three Federal funds brokers of recognized standing selected by it; provided that if the Federal Funds Rate shall be less than zero, such rate shall be deemed zero for purposes of this Agreement.

“Fitch” means Fitch Ratings Inc.

“Foreign Lender” means a Lender that is not a U.S. Person.

“Fund” means any Person (other than a natural Person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its activities.

“GAAP” has the meaning specified in Section 1.03.

“Governmental Authority” means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

“Hazardous Materials” means (a) petroleum and petroleum products, byproducts or breakdown products, radioactive materials, asbestos-containing materials, polychlorinated biphenyls and radon gas and (b) any other chemicals, materials or substances designated, classified or regulated as hazardous or toxic or as a pollutant or contaminant under any Environmental Law.

“Hedge Agreements” means interest rate swap, cap or collar agreements, interest rate future or option contracts, currency swap agreements, currency future or option contracts and other similar agreements.

“Immaterial Subsidiary” means any Subsidiary of the Borrower having assets with a book value of \$25,000,000 or less.

“Increase Date” has the meaning specified in Section 2.19(a).

“Increase Leverage Notice” has the meaning specified in Section 5.03(a).

“Increasing Lender” has the meaning specified in Section 2.19(b).

“Indemnified Taxes” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of the Borrower under this Agreement and (b) to the extent not otherwise described in (a), Other Taxes.

“Information” has the meaning specified in Section 8.08.

“Information Memorandum” means the information memorandum dated March 29, 2019 used by the Agent in connection with the syndication of the Commitments.

“Interest Coverage Ratio” means, as of any date of determination, the ratio of (a) Consolidated EBITDA of the Borrower and its Subsidiaries for the most recently completed four consecutive fiscal quarters of the Borrower ending on or prior to such date to (b) Consolidated Interest Expense of the Borrower and its Subsidiaries for the most recently completed four consecutive fiscal quarters of the Borrower ending on or prior to such date.

“Interest Expense” means, for any period, total interest expense, amortization or write-off of debt discount and debt issuance costs and commissions, discounts and other fees and charges associated with Consolidated Debt of the Borrower and its Subsidiaries allocable to such period in accordance with GAAP.

“Interest Period” means, for each Eurocurrency Rate Advance comprising part of the same Borrowing, the period commencing on the date of such Eurocurrency Rate Advance or the date of the Conversion of any Base Rate Advance into such Eurocurrency Rate Advance and ending on the last day of the period selected by the Borrower pursuant to the provisions below and, thereafter, each subsequent period commencing on the last day of the immediately preceding Interest Period and ending on the last day of the period selected by the Borrower pursuant to the provisions below. The duration of each such Interest Period shall be one, two, three or six months as the Borrower may, upon notice received by the Agent not later than 11:00 A.M. (New York City time) on the third Business Day prior to the first day of such Interest Period, select; provided, however, that:

(a) the Borrower may not select any Interest Period that ends after the latest Extended Termination Date;

(b) Interest Periods commencing on the same date for Eurocurrency Rate Advances comprising part of the same Borrowing shall be of the same duration;

(c) whenever the last day of any Interest Period would otherwise occur on a day other than a Business Day, the last day of such Interest Period shall be extended to occur on the next succeeding Business Day, provided, however, that, if such extension would cause the last day of such Interest Period to occur in the next following calendar month, the last day of such Interest Period shall occur on the next preceding Business Day; and

(d) whenever the first day of any Interest Period occurs on a day of an initial calendar month for which there is no numerically corresponding day in the calendar month that succeeds such initial calendar month by the number of months equal to the number of months in such Interest Period, such Interest Period shall end on the last Business Day of such succeeding calendar month.

“IRS” means the United States Internal Revenue Service.

“Lender Insolvency Event” means that (a) a Lender or its Parent Company is generally unable to pay its debts as they become due, or admits in writing its inability to pay its debts as they become due, or makes a general assignment for the benefit of its creditors, or (b) such Lender or its Parent Company has become the subject of a Bail-In Action or a proceeding under any Debtor Relief Law, or a receiver, trustee, conservator, intervenor or sequestrator or the like has been appointed for such Lender or its Parent Company, or such Lender or its Parent Company has taken any action in furtherance of or indicating its consent to or acquiescence in any such proceeding or appointment.

“Lenders” means each Initial Lender, each Assuming Lender that shall become a party hereto pursuant to Section 2.19 and each Person that shall become a party hereto pursuant to Section 8.07.

“Leverage Ratio” means, as of any date of determination, the ratio of (a) the amount equal to the Consolidated Covenant Debt on such date, to (b) Consolidated EBITDA of the Borrower and its Subsidiaries for the most recently completed four consecutive fiscal quarters of the Borrower ending on or prior to such date.

“LIBOR” has the meaning specified in the definition of Base Rate.

“Lien” means any lien, security interest or other charge or encumbrance of any kind, or any other type of preferential arrangement, including, without limitation, the lien or retained security title of a conditional vendor and any easement, right of way or other encumbrance on title to real property.

“Material Acquisition” means any acquisition of (a) equity interests in any Person if, after giving effect thereto, such Person will become a Subsidiary or (b) assets comprising all or substantially all the assets of (or all or substantially all the assets constituting a business unit, division, product line or line of business of) any Person; provided that the aggregate consideration therefor (including Debt assumed in connection therewith, all obligations in respect of deferred purchase price (including obligations under any purchase price adjustment but excluding earnout or similar payments) and all other consideration payable in connection therewith (including payment obligations in respect of noncompetition agreements or other arrangements representing acquisition consideration)) exceeds \$500,000,000.

“Material Adverse Change” means any material adverse change in the business, financial condition or operations of the Borrower and its Subsidiaries taken as a whole.

“Material Adverse Effect” means a material adverse effect on (a) the business, financial condition or operations of the Borrower and its Subsidiaries taken as a whole, (b) the rights and remedies of the Agent or any Lender under this Agreement or any Note or (c) the ability of the Borrower to perform its obligations under this Agreement or any Note.

“Moody’s” means Moody’s Investors Service, Inc.

“Multiemployer Plan” means a multiemployer plan, as defined in Section 4001(a)(3) of ERISA, to which the Borrower or any ERISA Affiliate is making or accruing an obligation to make contributions, or has within any of the preceding five plan years made or accrued an obligation to make contributions.

“Multiple Employer Plan” means a single employer plan, as defined in Section 4001(a)(15) of ERISA, that (a) is maintained for employees of the Borrower or any ERISA Affiliate and at least one Person other than the Borrower and the ERISA Affiliates or (b) was so maintained and in respect of which the Borrower or any ERISA Affiliate could have liability under Section 4064 or 4069 of ERISA in the event such plan has been or were to be terminated.

“Non-Approving Lender” means any Lender that does not approve any consent, waiver or amendment that (i) requires the approval of all affected Lenders in accordance with the terms of Section 8.01 and (ii) has been approved by the Required Lenders.

“Non-Defaulting Lender” means, at any time, each Lender that is not a Defaulting Lender at such time.

“Note” means a promissory note of the Borrower payable to any Lender, delivered pursuant to a request made under Section 2.15 in substantially the form of Exhibit A hereto.

“Notice of Borrowing” has the meaning specified in Section 2.02(a).

“Other Connection Taxes” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced this Agreement, or sold or assigned an interest in any Advance).

“Other Taxes” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, this Agreement, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.17(b)).

“Parent Company” means, with respect to a Lender, the bank holding company (as defined in Federal Reserve Board Regulation Y), if any, of such Lender, or if such Lender does not have a bank holding company, then any corporation, association, partnership or other business entity owning, beneficially or of record, directly or indirectly, a majority of the Voting Stock of such Lender.

“Participant” has the meaning specified in Section 8.07(d).

“Participant Register” has the meaning specified in Section 8.07(d).

“Patriot Act” means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. 107-56, signed into law October 26, 2001.

“Payment Office” means, for any Committed Currency, such office of Citibank as shall be from time to time selected by the Agent and notified by the Agent to the Borrower and the Lenders.

“PBGC” means the Pension Benefit Guaranty Corporation (or any successor).

“Permitted Liens” means such of the following as to which no enforcement, collection, execution, levy or foreclosure proceeding shall have been commenced: (a) Liens for taxes, assessments and governmental charges or levies to the extent not required to be paid under Section 5.01(b) hereof; (b) Liens imposed by law, such as materialmen’s, mechanics’, carriers’, workmen’s and repairmen’s Liens and other similar Liens arising in the ordinary course of business securing obligations that are not overdue for a period of more than 60 days; (c) pledges or deposits to secure obligations under workers’ compensation laws or similar legislation or to secure public or statutory obligations; (d) easements, rights of way and other encumbrances on title to real property that do not render title to the property encumbered thereby unmarketable or materially adversely affect the use of such property for its present purposes; (e) statutory, common law or customary contractual liens of depository institutions or institutions holding securities accounts (including rights of set-off or similar rights or remedies); (f) leases or subleases granted to others in the ordinary course of business which do not interfere in any material respect with the business operations of the Borrower and its Subsidiaries, taken as a

whole; (g) licenses and sublicenses of patents, trademarks, copyrights and other intellectual property rights granted by the Borrower or any of its Subsidiaries in the ordinary course of business; (h) Liens arising under repurchase agreements, reverse repurchase agreements, securities lending and borrowing agreements and similar transactions; and (i) any encumbrance or restriction with respect to the transfer of the Equity Interests in any joint venture or similar arrangements pursuant to the terms thereof.

“Person” means any natural Person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

“Plan” means a Single Employer Plan or a Multiple Employer Plan.

“Public Debt Rating” means, as of any date, the rating that has been most recently announced by either S&P, Moody’s or Fitch, as the case may be, for any class of non-credit enhanced long-term senior unsecured debt issued by the Borrower or, if any such rating agency shall have issued more than one such rating, the lowest such rating issued by such rating agency. For purposes of the foregoing, (a) if only one of S&P, Moody’s and Fitch shall have in effect a Public Debt Rating, the Applicable Margin and the Applicable Percentage shall be determined by reference to the available rating; (b) if none of S&P, Moody’s or Fitch shall have in effect a Public Debt Rating, the Applicable Margin and the Applicable Percentage will be set in accordance with Level 5 under the definition of “Applicable Margin” or “Applicable Percentage”, as the case may be; (c) if two rating are available, and such ratings shall fall within different levels, the Applicable Margin and the Applicable Percentage shall be based upon the higher rating unless such ratings differ by two or more levels, in which case the applicable level will be deemed to be one level below the higher of such levels; (d) if three ratings are available and such ratings shall fall within different levels and two of the three ratings are in the same level, the Applicable Margin and the Applicable Percentage shall be based upon the rating level of two of the ratings and, if the three ratings are in different levels, the Applicable Margin and the Applicable Percentage shall be based upon the rating level that is the middle of such ratings; and (e) if any rating established by S&P or Moody’s shall be changed, such change shall be effective as of the date on which such change is first announced publicly by the rating agency making such change; and (f) if S&P or Moody’s shall change the basis on which ratings are established, each reference to the Public Debt Rating announced by S&P or Moody’s, as the case may be, shall refer to the then equivalent rating by S&P or Moody’s, as the case may be.

“Recipient” means (a) the Agent and (b) any Lender, as applicable.

“Register” has the meaning specified in Section 8.07(c).

“Related Parties” means, with respect to any Person, such Person’s Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person’s Affiliates.

“Relevant Anniversary” has the meaning provided in Section 2.20(a).

“Required Lenders” means at any time Lenders owed at least a majority in interest of the then aggregate unpaid principal amount (based on the Equivalent in Dollars at such time) of the Advances owing to Lenders, or, if no such principal amount is then outstanding, Lenders having at least a majority in interest of the Commitments. The Advances and Commitments of any Defaulting Lender shall be disregarded in determining Required Lenders at any time.

“S&P” means S&P Ratings Group.

“Sanctioned Country” means, at any time, a country or territory which is the subject or target of any comprehensive territorial Sanctions.

“Sanctioned Person” means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or any Person in which such listed Person owns, directly or indirectly, a 50 percent or greater interest, (b) any Person located, organized or resident in a Sanctioned Country or (c) any Person controlled or more than 50 percent owned by any such Person described in clauses (a) and (b).

“Sanctions” means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty’s Treasury of the United Kingdom.

“Single Employer Plan” means a single employer plan, as defined in Section 4001(a)(15) of ERISA, that (a) is maintained for employees of the Borrower or any ERISA Affiliate and no Person other than the Borrower and the ERISA Affiliates or (b) was so maintained and in respect of which the Borrower or any ERISA Affiliate could have liability under Section 4069 of ERISA in the event such plan has been or were to be terminated.

“Subsidiary” of any Person means any corporation, partnership, joint venture, limited liability company, trust or estate of which (or in which) more than 50% of (a) the issued and outstanding capital stock having ordinary voting power to elect a majority of the Board of Directors of such corporation (irrespective of whether at the time capital stock of any other class or classes of such corporation shall or might have voting power upon the occurrence of any contingency), (b) the interest in the capital or profits of such limited liability company, partnership or joint venture or (c) the beneficial interest in such trust or estate is at the time directly or indirectly owned or controlled by such Person, by such Person and one or more of its other Subsidiaries or by one or more of such Person’s other Subsidiaries.

“TARGET2 Day” means any day on which the Trans-European Automated Real-time Gross Settlement Express Transfer (TARGET2) System (or, if such payment system ceases to be operative, such other payment system (if any) determined by the Agent to be a suitable replacement) is open for the settlement of payments in Euro.

“Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Termination Date” means the earlier of (a) April 25, 2024 (as the same may be extended pursuant to Section 2.20) and (b) the date of termination in whole of the Commitments pursuant to Section 2.04 or 6.01; provided, however, that the Termination Date of any Lender that is a Declining Lender to any requested extension pursuant to Section 2.20 shall be the Current Termination Date in effect immediately prior to the Relevant Anniversary for which such Lender is a Declining Lender for all purposes of this Agreement.

“Unused Commitment” means, with respect to each Lender at any time, (a) such Lender’s Commitment at such time minus (b) the aggregate principal amount of all Advances made by such Lender and outstanding at such time.

“U.S. Person” means any Person that is a “United States Person” as defined in Section 7701(a)(30) of the Code.

“U.S. Tax Compliance Certificate” has the meaning assigned to such term in Section 2.13(f).

“Withholding Agents” means the Borrower and the Agent.

“Voting Stock” means capital stock issued by a corporation, or equivalent interests in any other Person, the holders of which are ordinarily, in the absence of contingencies, entitled to vote for the election of directors (or persons performing similar functions) of such Person, even if the right so to vote has been suspended by the happening of such a contingency.

SECTION 1.02. Computation of Time Periods. In this Agreement in the computation of periods of time from a specified date to a later specified date, the word “from” means “from and including” and the words “to” and “until” each mean “to but excluding”.

SECTION 1.03. Accounting Terms. All accounting terms not specifically defined herein shall be construed in accordance with generally accepted accounting principles as in effect in the United States from time to time (“GAAP”), provided that (a) if there is any change in GAAP from such principles applied in the preparation of the audited financial statements referred to in Section 4.01(e) (“Initial GAAP”), that is material in respect of the calculation of compliance with the covenants set forth in Section 5.03, the Borrower shall give prompt notice of such change to the Agent and the Lenders, (b) if the Borrower notifies the Agent that the Borrower requests an amendment of any provision hereof to eliminate the effect of any change in GAAP (or the application thereof) from Initial GAAP (or if the Agent or the Required Lenders request an amendment of any provision hereof for such purpose), regardless of whether such notice is given before or after such change in GAAP (or the application thereof), then such provision shall be applied on the basis of generally accepted accounting principles as in effect and applied immediately before such change shall have become effective until such notice shall have been withdrawn or such provision is amended in accordance herewith. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made, without giving effect to any election under Statement of Financial Accounting Standards 133 and 159 (or any other Financial Accounting Standard having a similar result or effect) to value any Debt or other liabilities of the Borrower or any Subsidiary at “fair value”, as defined therein.

SECTION 1.04. Terms Generally; Other Interpretive Provisions. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless the context requires otherwise (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (b) any reference herein to any Person shall

be construed to include such Person's successors and assigns, (c) the words "herein," "hereof" and "hereunder," and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement, (e) any reference to any law or regulation herein shall, unless otherwise specified, refer to such law or regulation as amended, modified or supplemented from time to time, and (f) the words "asset" and "property" shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

Any reference herein to a merger, transfer, consolidation, amalgamation, assignment, sale, disposition or transfer, or similar term, shall be deemed to apply to a division of or by a limited liability company, or an allocation of assets to a series of a limited liability company (or the unwinding of such a division or allocation), as if it were a merger, transfer, consolidation, amalgamation, assignment, sale, disposition or transfer, or similar term, as applicable, to, of or with a separate Person. Any division of a limited liability company shall constitute a separate Person hereunder (and each division of any limited liability company that is a Subsidiary, joint venture or any other like term shall also constitute such a Person or entity).

Notwithstanding anything to the contrary contained herein, any Event of Default under this Agreement, other than any Event of Default which cannot be waived without the written consent of each Lender directly and adversely affected thereby, shall be deemed not to be "continuing" if the events, acts or conditions that gave rise to such Event of Default have been remedied or cured (including by payment, notice, taking any action or omitting to take any action) or have ceased to exist and the Borrower is otherwise in compliance with this Agreement; provided, that the foregoing shall not be applicable with respect to any Default or Event of Default if the Borrower knowingly fails to give timely notice to the Agent and the Lenders of such Default or Event of Default required to be given under Section 5.01(i)(iii).

ARTICLE II

AMOUNTS AND TERMS OF THE ADVANCES

SECTION 2.01. The Advances. Each Lender severally agrees, on the terms and conditions hereinafter set forth, to make Advances to the Borrower from time to time on any Business Day during the period from the Effective Date until the Termination Date applicable to such Lender in an amount (based in respect of any Advances to be denominated in a Committed Currency by reference to the Equivalent thereof in Dollars determined on the date of delivery of the applicable Notice of Borrowing) not to exceed such Lender's Unused Commitment. Each Borrowing shall be in an amount not less than the Borrowing Minimum or the Borrowing Multiple in excess thereof and shall consist of Advances of the same Type and in the same currency made on the same day by the Lenders ratably according to their respective Commitments. Within the limits of each Lender's Commitment, the Borrower may borrow under this Section 2.01, prepay pursuant to Section 2.09 and reborrow under this Section 2.01.

SECTION 2.02. Making the Advances. (a) Each Borrowing shall be made on notice, given not later than (x) 1:00 P.M. (New York City time) on the third Business Day prior to the date of the proposed Borrowing in the case of a Borrowing consisting of Eurocurrency Rate Advances denominated in Dollars, (y) 4:00 P.M. (London time) on the third Business Day prior to the date of the proposed Borrowing in the case of a Borrowing consisting of Eurocurrency Rate Advances denominated in any

Committed Currency, or (z) 1:00 P.M. (New York City time) on the date of the proposed Borrowing in the case of a Borrowing consisting of Base Rate Advances, by the Borrower to the Agent, which shall give to each Lender prompt notice thereof by telecopier or email. Each such notice of a Borrowing (a “Notice of Borrowing”) shall be by telephone, confirmed immediately in writing, or telecopier or email in substantially the form of Exhibit B hereto, specifying therein the requested (i) date of such Borrowing, (ii) Type of Advances comprising such Borrowing, (iii) aggregate amount of such Borrowing, and (iv) in the case of a Borrowing consisting of Eurocurrency Rate Advances, initial Interest Period and currency for each such Advance. Each Lender shall, before 3:00 P.M. (New York City time) on the date of such Borrowing, in the case of a Borrowing consisting of Advances denominated in Dollars, and before 11:00 A.M. (London time) on the date of such Borrowing, in the case of a Borrowing consisting of Eurocurrency Rate Advances denominated in any Committed Currency, make available for the account of its Applicable Lending Office to the Agent at the applicable Agent’s Account, in same day funds, such Lender’s ratable portion of such Borrowing. After the Agent’s receipt of such funds and upon fulfillment of the applicable conditions set forth in Article III, the Agent will make such funds available to the Borrower at the Agent’s address referred to in Section 8.02 or at the applicable Payment Office, as the case may be.

(b) Anything in subsection (a) above to the contrary notwithstanding, (i) the Borrower may not select Eurocurrency Rate Advances for any Borrowing if the aggregate amount of such Borrowing is less than the Borrowing Minimum or if the obligation of the Lenders to make Eurocurrency Rate Advances shall then be suspended pursuant to Section 2.07 or 2.11 and (ii) the Eurocurrency Rate Advances may not be outstanding as part of more than six separate Borrowings.

(c) Each Notice of Borrowing shall be irrevocable and binding on the Borrower. In the case of any Borrowing that the related Notice of Borrowing specifies is to be comprised of Eurocurrency Rate Advances, the Borrower shall indemnify each Lender against any loss, cost or expense incurred by such Lender as a result of any failure to fulfill on or before the date specified in such Notice of Borrowing for such Borrowing the applicable conditions set forth in Article III, including, without limitation, any loss (including loss of anticipated profits), cost or expense incurred by reason of the liquidation or reemployment of deposits or other funds acquired by such Lender to fund the Advance to be made by such Lender as part of such Borrowing when such Advance, as a result of such failure, is not made on such date.

(d) Unless the Agent shall have received notice from a Lender prior to the time of any Borrowing that such Lender will not make available to the Agent such Lender’s ratable portion of such Borrowing, the Agent may assume that such Lender has made such portion available to the Agent on the date of such Borrowing in accordance with subsection (a) of this Section 2.02, and the Agent may, in reliance upon such assumption, make available to the Borrower on such date a corresponding amount. If and to the extent that such Lender shall not have so made such ratable portion available to the Agent, such Lender and the Borrower severally agree to repay to the Agent forthwith on demand such corresponding amount together with interest thereon, for each day from the date such amount is made available to the Borrower until the date such amount is repaid to the Agent, at (i) in the case of the Borrower, the higher of (A) the interest rate applicable at the time to the Advances comprising such Borrowing and (B) the cost of funds incurred by the Agent in respect of such amount and (ii) in the case of such Lender (A) the Federal Funds Rate in the case of Advances denominated in Dollars or (B) the cost of funds incurred by the Agent in respect of such amount in the case of Advances denominated in Committed Currencies. If such Lender shall repay to the Agent such corresponding amount, such amount so repaid shall constitute such Lender’s Advance as part of such Borrowing for purposes of this Agreement.

(e) The failure of any Lender to make the Advance to be made by it as part of any Borrowing shall not relieve any other Lender of its obligation hereunder to make its Advance on the date of such Borrowing, but no Lender shall be responsible for the failure of any other Lender to make the Advance to be made by such other Lender on the date of any Borrowing.

SECTION 2.03. Fees. (a) Facility Fee. The Borrower agrees to pay to the Agent for the account of each Lender a facility fee on the aggregate amount of such Lender's Commitment from the date hereof in the case of each Initial Lender and from the effective date specified in the Assumption Agreement or in the Assignment and Assumption pursuant to which it became a Lender in the case of each other Lender until the Termination Date applicable to such Lender (or such later date on which the Advances made by such Lender have been paid in full) at a rate per annum equal to the Applicable Percentage in effect from time to time, payable in arrears quarterly on the last day of each March, June, September and December, commencing June 30, 2019, and on the latest Extended Termination Date (or such later date on which the Advances made by such Lender have been paid in full).

(b) Agent's Fees. The Borrower shall pay to the Agent for its own account such fees as may from time to time be agreed between the Borrower and the Agent.

SECTION 2.04. Termination or Reduction of the Commitments. The Borrower shall have the right, upon at least three Business Days' notice to the Agent, to terminate in whole or permanently reduce ratably in part the Unused Commitments of the Lenders, provided that each partial reduction shall be in the aggregate amount of \$10,000,000 or an integral multiple of \$1,000,000 in excess thereof. Any such notice may state that such notice is conditioned upon the occurrence of one or more events specified therein, in which case such notice may be revoked by the Borrower (by notice to the Agent on or prior to the specified date of termination or reduction) if such condition is not satisfied.

SECTION 2.05. Repayment of Advances. The Borrower shall repay to the Agent for the ratable account of each Lender on the Termination Date applicable to such Lender the aggregate principal amount of the Advances then outstanding.

SECTION 2.06. Interest on Advances. (a) Scheduled Interest. The Borrower shall pay interest on the unpaid principal amount of each Advance owing to each Lender from the date of such Advance until such principal amount shall be paid in full, at the following rates per annum:

(i) Base Rate Advances. During such periods as such Advance is a Base Rate Advance, a rate per annum equal at all times to the sum of (x) the Base Rate in effect from time to time plus (y) the Applicable Margin in effect from time to time, payable in arrears quarterly on the last day of each March, June, September and December during such periods and on the date such Base Rate Advance shall be Converted or paid in full.

(ii) Eurocurrency Rate Advances. During such periods as such Advance is a Eurocurrency Rate Advance, a rate per annum equal at all times during each Interest Period for such Advance to the sum of (x) the Eurocurrency Rate for such Interest Period for such Advance plus (y) the Applicable Margin in effect from time to time, payable in arrears on the last day of such Interest Period and, if such Interest Period has a duration of more than three months, on each day that occurs during such Interest Period every three months from the first day of such Interest Period and on the date such Eurocurrency Rate Advance shall be Converted or paid in full.

(b) Default Interest. Upon the occurrence and during the continuance of an Event of Default under Section 6.01(a), the Agent may, and upon the request of the Required Lenders shall, require

the Borrower to pay interest (“Default Interest”) on (i) the unpaid principal amount of each Advance owing to each Lender, payable in arrears on the dates referred to in clause (a)(i) or (a)(ii) above, at a rate per annum equal at all times to 2% per annum above the rate per annum required to be paid on such Advance pursuant to clause (a)(i) or (a)(ii) above and (ii) to the fullest extent permitted by law, the amount of any interest, fee or other amount payable hereunder that is not paid when due, from the date such amount shall be due until such amount shall be paid in full, payable in arrears on the date such amount shall be paid in full and on demand, at a rate per annum equal at all times to 2% per annum above the rate per annum required to be paid on Base Rate Advances pursuant to clause (a)(i) above; provided, however, that following acceleration of the Advances pursuant to Section 6.01, Default Interest shall accrue and be payable hereunder whether or not previously required by the Agent.

SECTION 2.07. Interest Rate Determination. (a) The Agent shall give prompt notice to the Borrower and the Lenders of the applicable interest rate determined by the Agent for purposes of Section 2.06(a)(i) or (ii).

(b) If, with respect to any Eurocurrency Rate Advances, the Required Lenders notify the Agent that (i) they are unable to obtain matching deposits in the London inter-bank market at or about 11:00 A.M. (London time) on the second Business Day before the making of a Borrowing in sufficient amounts to fund their respective Advances as a part of such Borrowing during its Interest Period or (ii) the Eurocurrency Rate for any Interest Period for such Advances will not adequately reflect the cost to such Required Lenders of making, funding or maintaining their respective Eurocurrency Rate Advances for such Interest Period, the Agent shall forthwith so notify the Borrower and the Lenders, whereupon (A) the Borrower will, on the last day of the then existing Interest Period therefor, (1) if such Eurocurrency Rate Advances are denominated in Dollars, either (x) prepay such Advances or (y) Convert such Advances into Base Rate Advances and (2) if such Eurocurrency Rate Advances are denominated in any Committed Currency, either (x) prepay such Advances or (y) exchange such Advances into an Equivalent amount of Dollars and Convert such Advances into Base Rate Advances and (B) the obligation of the Lenders to make, or to Convert Advances into, Eurocurrency Rate Advances shall be suspended until the Agent shall notify the Borrower and the Lenders that the circumstances causing such suspension no longer exist.

(c) If the Borrower shall fail to select the duration of any Interest Period for any Eurocurrency Rate Advances in accordance with the provisions contained in the definition of “Interest Period” in Section 1.01, the Agent will forthwith so notify the Borrower and the Lenders and such Advances will automatically, on the last day of the then existing Interest Period therefor, (i) if such Eurocurrency Rate Advances are denominated in Dollars, Convert into Base Rate Advances and (ii) if such Eurocurrency Rate Advances are denominated in a Committed Currency, be exchanged for an Equivalent amount of Dollars and Convert into Base Rate Advances.

(d) On the date on which the aggregate unpaid principal amount of Eurocurrency Rate Advances comprising any Borrowing shall be reduced, by payment or prepayment or otherwise, to less than the Borrowing Minimum, such Advances shall automatically (i) if such Eurocurrency Rate Advances are denominated in Dollars, Convert into Base Rate Advances and (ii) if such Eurocurrency Rate Advances are denominated in a Committed Currency, be exchanged for an Equivalent amount of Dollars and Convert into Base Rate Advances.

(e) Upon the occurrence and during the continuance of any Event of Default, (i) each Eurocurrency Rate Advance will automatically, on the last day of the then existing Interest Period therefor, (A) if such Eurocurrency Rate Advances are denominated in Dollars, be Converted into Base

Rate Advances and (B) if such Eurocurrency Rate Advances are denominated in any Committed Currency, be exchanged for an Equivalent amount of Dollars and be Converted into Base Rate Advances and (ii) the obligation of the Lenders to make, or to Convert Advances into, Eurocurrency Rate Advances shall be suspended.

(f) If Reuters LIBOR01 Page or the EURIBOR01 Page, as applicable, is unavailable for any Eurocurrency Rate Advances,

(i) the Agent shall forthwith notify the Borrower and the Lenders that the interest rate cannot be determined for such Eurocurrency Rate Advances,

(ii) each such Advance will automatically, on the last day of the then existing Interest Period therefor, (A) if such Eurocurrency Rate Advance is denominated in Dollars, Convert into a Base Rate Advance and (B) if such Eurocurrency Rate Advance is denominated in any Committed Currency, be prepaid by the Borrower or be automatically exchanged for an Equivalent amount of Dollars and be Converted into a Base Rate Advance (or if such Advance is then a Base Rate Advance, will continue as a Base Rate Advance), and

(iii) the obligation of the Lenders to make Eurocurrency Rate Advances or to Convert Advances into Eurocurrency Rate Advances shall be suspended until the Agent shall notify the Borrower and the Lenders that the circumstances causing such suspension no longer exist.

(g) Notwithstanding anything to the contrary in this Agreement, if the Agent determines (which determination shall be conclusive absent manifest error), or the Borrower or the Required Lenders notify the Agent (with, in the case of the Required Lenders, a copy to the Borrower) that the Borrower or the Required Lenders have determined, that:

(i) adequate and reasonable means do not exist for ascertaining LIBOR for any requested Interest Period, including, without limitation, because the Eurocurrency Rate is not available or published on a current basis and such circumstances are unlikely to be temporary; or

(ii) the supervisor for the administrator of LIBOR or a Governmental Authority having jurisdiction over the Agent has made a public statement identifying a specific date after which LIBOR shall no longer be made available, or used for determining the interest rate of loans (such specific date, the "Scheduled Unavailability Date"),

then, after such determination by the Agent or receipt by the Agent of such notice, as applicable, the Agent and the Borrower shall endeavor to amend this Agreement to replace LIBOR with an alternate benchmark rate (including any mathematical or other adjustments to the benchmark (if any) incorporated therein) that has been broadly accepted by the syndicated loan market in the United States in lieu of LIBOR (any such proposed rate, a "LIBOR Successor Rate"), together with any proposed LIBOR Successor Rate Conforming Changes and, notwithstanding anything to the contrary in Section 8.01, any such amendment shall become effective at 5:00 p.m. (New York time) on the fifth Business Day after the Agent shall have posted such proposed amendment to all Lenders and the Borrower unless, prior to such time, Lenders comprising the Required Lenders have delivered to the Agent and the Borrower written notice that such Required Lenders do not accept such amendment.

If no LIBOR Successor Rate has been determined and the circumstances under clause (i) above exist or the Scheduled Unavailability Date has occurred, the obligation of the Lenders to make or maintain Eurocurrency Rate Advances shall be suspended (to the extent of the affected Eurocurrency Rate

Advances or Interest Periods). Upon receipt of such notice, the Borrower may revoke any pending request for a LIBOR Borrowing of, conversion to or continuation of Eurocurrency Rate Advances (to the extent of the affected Eurocurrency Rate Advances or Interest Periods) or, failing that, will be deemed to have converted such request into a request for a Borrowing of Base Rate Advances in the amount specified therein.

“LIBOR Successor Rate Conforming Changes” means, with respect to any proposed LIBOR Successor Rate, any conforming changes to the definition of Base Rate, Interest Period, timing and frequency of determining rates and making payments of interest and other administrative matters as may be appropriate, in the discretion of the Agent, to reflect the adoption of such LIBOR Successor Rate and to permit the administration thereof by the Agent in a manner substantially consistent with market practice (or, if the Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of such LIBOR Successor Rate exists, in such other manner of administration as the Agent determines in consultation with the Borrower).

SECTION 2.08. Optional Conversion of Advances. The Borrower may on any Business Day, upon notice given to the Agent not later than 11:00 A.M. (New York City time) on the third Business Day prior to the date of the proposed Conversion and subject to the provisions of Sections 2.07 and 2.11, Convert all or any portion of Advances denominated in Dollars of one Type comprising the same Borrowing into Advances denominated in Dollars of the other Type; provided, however, that any Conversion of Eurocurrency Rate Advances into Base Rate Advances shall be made only on the last day of an Interest Period for such Eurocurrency Rate Advances, any Conversion of Base Rate Advances into Eurocurrency Rate Advances shall be in an amount not less than the minimum amount specified in Section 2.02(c) and no Conversion of any Advances shall result in more separate Borrowings than permitted under Section 2.02(c). Each such notice of a Conversion shall, within the restrictions specified above, specify (i) the date of such Conversion, (ii) the Dollar denominated Advances to be Converted, and (iii) if such Conversion is into Eurocurrency Rate Advances, the duration of the initial Interest Period for each such Advance. Each notice of Conversion shall be irrevocable and binding on the Borrower.

SECTION 2.09. Prepayments of Advances. (a) Optional. The Borrower may, upon notice at least three Business Days’ prior to the date of such prepayment, in the case of Eurocurrency Rate Advances, and not later than 11:00 A.M. (New York City time) on the date of such prepayment, in the case of Base Rate Advances, to the Agent stating the proposed date and aggregate principal amount of the prepayment, and if such notice is given the Borrower shall, prepay the outstanding principal amount of the Advances comprising part of the same Borrowing in whole or ratably in part, together with accrued interest to the date of such prepayment on the principal amount prepaid; provided, however, that (x) each partial prepayment of Advances shall be in an aggregate principal amount of not less than the Borrowing Minimum or a Borrowing Multiple in excess thereof and (y) in the event of any such prepayment of a Eurocurrency Rate Advance, the Borrower shall be obligated to reimburse the Lenders in respect thereof pursuant to Section 8.04(f). Notwithstanding the foregoing, any such notice may state that such notice is conditioned upon the occurrence of one or more events specified therein, in which case such notice may be revoked by the Borrower (by notice to the Agent on or prior to the specified date of termination or reduction) if such condition is not satisfied, provided that any revocation of a notice of prepayment shall not relieve the Borrower of its obligations in respect thereof, if any, under Section 8.04(f).

(b) Mandatory. (i) If, on any date, the Agent notifies the Borrower that, on any interest payment date, the sum of (A) the aggregate principal amount of all Advances denominated in Dollars then outstanding plus (B) the Equivalent in Dollars (determined on the third Business Day prior to such interest payment date) of the aggregate principal amount of all Advances denominated in Committed Currencies then outstanding exceeds 103% of the aggregate Commitments of the Lenders on such date, the Borrower shall, as soon as practicable and in any event within two Business Days after receipt of such notice, prepay the

outstanding principal amount of the Advances in an aggregate amount sufficient to reduce such sum to an amount not to exceed 100% of the aggregate Commitments of the Lenders on such date. The Agent shall give prompt notice of any prepayment required under this Section 2.09(b)(i) to the Borrower and the Lenders, and shall provide prompt notice to the Borrower of any such notice of required prepayment received by it from any Lender.

(ii) Each prepayment made pursuant to this Section 2.09(b) shall be made together with any interest accrued to the date of such prepayment on the principal amounts prepaid and, in the case of any prepayment of a Eurocurrency Rate Advance on a date other than the last day of an Interest Period or at its maturity, any additional amounts which the Borrower shall be obligated to reimburse to the Lenders in respect thereof pursuant to Section 8.04(f). The Agent shall give prompt notice of any prepayment required under this Section 2.09(b) to the Borrower and the Lenders.

SECTION 2.10. Increased Costs. (a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender (except any reserve requirement reflected in the Eurocurrency Rate);

(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or the London interbank market any other condition, cost or expense (other than Taxes) affecting this Agreement or Eurocurrency Rate Advances made by such Lender;

and the result of any of the foregoing shall be to increase the cost to such Lender or such other Recipient of making, converting to, continuing or maintaining any Advance or of maintaining its obligation to make any such Advance, or to reduce the amount of any sum received or receivable by such Lender or other Recipient hereunder (whether of principal, interest or any other amount) then, upon request of such Lender or other Recipient, the Borrower will pay to such Lender or other Recipient, as the case may be, such additional amount or amounts as will compensate such Lender or other Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) Capital Adequacy. If any Lender determines that any Change in Law affecting such Lender or any lending office of such Lender or such Lender's holding company, if any, regarding capital or liquidity requirements, has or would have the effect of reducing the rate of return on such Lender's capital or on the capital of such Lender's holding company, if any, as a consequence of this Agreement, the Commitments of such Lender or the Advances made by such Lender to a level below that which such Lender or such Lender's holding company could have achieved but for such Change in Law (taking into consideration such Lender's policies and the policies of such Lender's holding company with respect to capital adequacy or liquidity), then from time to time the Borrower will pay to such Lender such additional amount or amounts as will compensate such Lender or such Lender's holding company for any such reduction suffered.

(c) Certificates for Reimbursement. A certificate of a Lender setting forth the amount or amounts necessary to compensate such Lender or its holding company as specified in paragraph (a) or (b) of this Section and delivered to the Borrower, shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 days after receipt thereof.

(d) Delay in Requests. Failure or delay on the part of any Lender to demand compensation pursuant to this Section shall not constitute a waiver of such Lender's right to demand such compensation; provided that the Borrower shall not be required to compensate a Lender pursuant to this Section for any increased costs incurred or reductions suffered more than nine months prior to the date that such Lender notifies the Borrower of the Change in Law giving rise to such increased costs or reductions, and of such Lender's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the nine-month period referred to above shall be extended to include the period of retroactive effect thereof).

SECTION 2.11. Illegality. Notwithstanding any other provision of this Agreement, if any Lender shall notify the Agent that the introduction of or any change in or in the interpretation of any law or regulation makes it unlawful, or any central bank or other governmental authority asserts that it is unlawful, for any Lender or its Applicable Lending Office to perform its obligations hereunder to make Eurocurrency Rate Advances in Dollars or any Committed Currency or to fund or maintain Eurocurrency Rate Advances in Dollars or any Committed Currency hereunder, (a) each Eurocurrency Rate Advance will automatically, upon such demand (i) if such Eurocurrency Rate Advance is denominated in Dollars, be Converted into a Base Rate Advance and (ii) if such Eurocurrency Rate Advance is denominated in any Committed Currency, be exchanged into an Equivalent amount of Dollars and be Converted into a Base Rate Advance and (b) the obligation of the Lenders to make Eurocurrency Rate Advances or to Convert Advances into Eurocurrency Rate Advances shall be suspended until the Agent shall notify the Borrower and the Lenders that the circumstances causing such suspension no longer exist.

SECTION 2.12. Payments and Computations. (a) The Borrower shall make each payment hereunder (except with respect to principal of, interest on, and other amounts relating to, Advances denominated in a Committed Currency), irrespective of any right of counterclaim or set-off, not later than 11:00 A.M. (New York City time) on the day when due in Dollars to the Agent at the applicable Agent's Account in same day funds. The Borrower shall make each payment hereunder with respect to principal of, interest on, and other amounts relating to, Advances denominated in a Committed Currency, irrespective of any right of counterclaim or set-off, not later than 11:00 A.M. (at the Payment Office for such Committed Currency) on the day when due in such Committed Currency to the Agent, by deposit of such funds to the applicable Agent's Account in same day funds. The Agent will promptly thereafter cause to be distributed like funds relating to the payment of principal or interest or fees ratably (other than amounts payable pursuant to Section 2.10, 2.13 or 8.04(f)) to the Lenders for the account of their respective Applicable Lending Offices, and like funds relating to the payment of any other amount payable to any Lender to such Lender for the account of its Applicable Lending Office, in each case to be applied in accordance with the terms of this Agreement. Upon any Assuming Lender becoming a Lender hereunder as a result of a Commitment Increase pursuant to Section 2.19 or an extension of the Termination Date in accordance with Section 2.20, and upon the Agent's receipt of such Lender's Assumption Agreement and recording of the information contained therein in the Register, from and after the applicable Increase Date, the Relevant Anniversary of the Current Termination Date, as the case may be, the Agent shall make all payments hereunder and under any Notes issued in connection therewith in respect of the interest assumed thereby to the Assuming Lender. Upon its acceptance of an Assignment and Assumption and recording of the information contained therein in the Register pursuant to

Section 8.07(c), from and after the effective date specified in such Assignment and Assumption, the Agent shall make all payments hereunder and under the Notes in respect of the interest assigned thereby to the Lender assignee thereunder, and the parties to such Assignment and Assumption shall make all appropriate adjustments in such payments for periods prior to such effective date directly between themselves.

(b) The Borrower hereby authorizes each Lender, if and to the extent payment owed to such Lender is not made when due hereunder or under the Note held by such Lender, to charge from time to time against any or all of the Borrower's accounts with such Lender any amount so due.

(c) All computations of interest based on Citibank's base rate shall be made by the Agent on the basis of a year of 365 or 366 days, as the case may be, and all computations of interest based on the Eurocurrency Rate, the Federal Funds Rate or One Month LIBOR and of fees shall be made by the Agent on the basis of a year of 360 days (or, in each case of Advances denominated in Committed Currencies where market practice differs, in accordance with market practice), in each case for the actual number of days (including the first day but excluding the last day) occurring in the period for which such interest or fees are payable. Each determination by the Agent of an interest rate hereunder shall be conclusive and binding for all purposes, absent manifest error.

(d) Whenever any payment hereunder or under the Notes shall be stated to be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day, and such extension of time shall in such case be included in the computation of payment of interest or fee, as the case may be; provided, however, that, if such extension would cause payment of interest on or principal of Eurocurrency Rate Advances to be made in the next following calendar month, such payment shall be made on the next preceding Business Day.

(e) Unless the Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Lenders hereunder that the Borrower will not make such payment in full, the Agent may assume that the Borrower has made such payment in full to the Agent on such date and the Agent may, in reliance upon such assumption, cause to be distributed to each Lender on such due date an amount equal to the amount then due such Lender. If and to the extent the Borrower shall not have so made such payment in full to the Agent, each Lender shall repay to the Agent forthwith on demand such amount distributed to such Lender together with interest thereon, for each day from the date such amount is distributed to such Lender until the date such Lender repays such amount to the Agent, at (i) the Federal Funds Rate in the case of Advances denominated in Dollars or (ii) the cost of funds incurred by the Agent in respect of such amount in the case of Advances denominated in Committed Currencies.

(f) To the extent that the Agent receives funds for application to the amounts owing by the Borrower under or in respect of this Agreement or any Note in currencies other than the currency or currencies required to enable the Agent to distribute funds to the Lenders in accordance with the terms of this Section 2.12, the Agent shall be entitled to convert or exchange such funds into Dollars or into a Committed Currency or from Dollars to a Committed Currency or from a Committed Currency to Dollars, as the case may be, to the extent necessary to enable the Agent to distribute such funds in accordance with the terms of this Section 2.12; provided that the Borrower and each of the Lenders hereby agree that the Agent shall not be liable or responsible for any loss, cost or expense suffered by the Borrower or such Lender as a result of any conversion or exchange of currencies affected pursuant to this Section 2.12(f) or as a result of the failure of the Agent to effect any such conversion or exchange; and provided further that the Borrower agrees to indemnify the Agent and each Lender, and hold the Agent and each Lender

harmless, for any and all losses, costs and expenses incurred by the Agent or any Lender for any conversion or exchange of currencies (or the failure to convert or exchange any currencies) in accordance with this Section 2.12(f).

SECTION 2.13. Taxes. (a) Payments Free of Taxes. Any and all payments by or on account of any obligation of the Borrower under this Agreement or any Note shall be made without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by the Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) Payment of Other Taxes by the Borrower. The Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the Agent timely reimburse it for the payment of, any Other Taxes.

(c) Indemnification by the Borrower. The Borrower shall indemnify each Recipient, within 30 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Agent), or by the Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) Indemnification by the Lenders. Each Lender shall severally indemnify the Agent, within 30 days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that the Borrower has not already indemnified the Agent for such Indemnified Taxes and without limiting the obligation of the Borrower to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 8.07(d) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Agent in connection with this Agreement or any Note, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Agent to set off and apply any and all amounts at any time owing to such Lender under this Agreement or any Note or otherwise payable by the Agent to the Lender from any other source against any amount due to the Agent under this paragraph (d).

(e) Evidence of Payments. As soon as practicable after any payment of Taxes by the Borrower to a Governmental Authority pursuant to this Section 2.13, the Borrower shall deliver to the Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Agent.

(f) Status of Lenders. (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under this Agreement or any Note shall deliver to the Borrower and the Agent, at the time or times reasonably requested by the Borrower or the Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Agent as will enable the Borrower or the Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 2.13(f) (ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Agent), whichever of the following is applicable:

(i) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under this Agreement or any Note, executed originals of IRS Form W-8BEN or W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under this Agreement or any Note, IRS Form W-8BEN or W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(ii) executed originals of IRS Form W-8ECI;

(iii) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit E-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed originals of IRS Form W-8BEN or W-8BEN-E; or

(iv) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit E-2 or Exhibit E-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit E-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Agent), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit the Borrower or the Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under this Agreement or any Note would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Agent as may be necessary for the Borrower and the Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(g) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.13 (including by the payment of additional amounts pursuant to this Section 2.13), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (g), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts giving rise to such refund had never been paid. This paragraph shall not

be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) Survival. Each party's obligations under this Section 2.13 shall survive the resignation or replacement of the Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under this Agreement or any Note.

SECTION 2.14. Sharing of Payments, Etc. If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of its Advances or other obligations hereunder resulting in such Lender receiving payment of a proportion of the aggregate amount of its Advances and accrued interest thereon or other such obligations greater than its pro rata share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the Agent of such fact, and (b) purchase (for cash at face value) participations in the Advances and such other obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Advances and other amounts owing them; provided that:

(i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this paragraph shall not be construed to apply to (x) any payment made by the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Advances to any assignee or participant, other than to the Borrower or any Subsidiary thereof (as to which the provisions of this paragraph shall apply).

The Borrower consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Borrower rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Borrower in the amount of such participation.

SECTION 2.15. Evidence of Debt. (a) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of the Borrower to such Lender resulting from each Advance owing to such Lender from time to time, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder in respect of Advances. The Borrower agrees that upon notice by any Lender to the Borrower (with a copy of such notice to the Agent) to the effect that a Note is required or appropriate in order for such Lender to evidence (whether for purposes of pledge, enforcement or otherwise) the Advances owing to, or to be made by, such Lender, the Borrower shall promptly execute and deliver to such Lender a Note payable to such Lender in a principal amount up to the Commitment of such Lender.

(b) The Register maintained by the Agent pursuant to Section 8.07(c) shall include a control account, and a subsidiary account for each Lender, in which accounts (taken together) shall be recorded (i) the date and amount of each Borrowing made hereunder, the Type of Advances comprising such Borrowing and, if appropriate, the Interest Period applicable thereto, (ii) the terms of each

Assumption Agreement and each Assignment and Assumption delivered to and accepted by it, (iii) the amount of any principal or interest due and payable or to become due and payable from the Borrower to each Lender hereunder and (iv) the amount of any sum received by the Agent from the Borrower hereunder and each Lender's share thereof.

(c) Entries made in good faith by the Agent in the Register pursuant to subsection (b) above, and by each Lender in its account or accounts pursuant to subsection (a) above, shall be prima facie evidence of the amount of principal and interest due and payable or to become due and payable from the Borrower to, in the case of the Register, each Lender and, in the case of such account or accounts, such Lender, under this Agreement, absent manifest error; provided, however, that the failure of the Agent or such Lender to make an entry, or any finding that an entry is incorrect, in the Register or such account or accounts shall not limit or otherwise affect the obligations of the Borrower under this Agreement.

SECTION 2.16. Use of Proceeds. The proceeds of the Advances shall be available (and the Borrower agrees that it shall use such proceeds) solely for general corporate purposes of the Borrower and its Subsidiaries, including acquisitions and repurchases of stock.

SECTION 2.17. Mitigation Obligations; Replacement of Lenders.

(a) Designation of a Different Lending Office. If any Lender requests compensation under Section 2.10, or requires the Borrower to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.13, then such Lender shall (at the request of the Borrower) use reasonable efforts to designate a different lending office for funding or booking its Advances hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 2.10 or 2.13, as the case may be, in the future, and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) Replacement of Lenders. If any Lender requests compensation under Section 2.10, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.13 and, in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 2.17(a), or if any Lender is a Defaulting Lender, a Non-Consenting Lender or a Declining Lender, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 8.07), all of its interests, rights (other than its existing rights to payments pursuant to Section 2.10 or Section 2.13) and obligations under this Agreement to an Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that:

(i) the Borrower shall have paid to the Agent the assignment fee (if any) specified in Section 8.07;

(ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Advances, accrued interest thereon, accrued fees and all other amounts payable to it hereunder (including any amounts under Section 8.04(f)) from the assignee

(to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(iii) in the case of any such assignment resulting from a claim for compensation under Section 2.10 or payments required to be made pursuant to Section 2.13, such assignment will result in a reduction in such compensation or payments thereafter;

(iv) such assignment does not conflict with applicable law; and

(v) in the case of any assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

SECTION 2.18. Defaulting Lenders.

(a) Defaulting Lender Adjustments. Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as such Lender is no longer a Defaulting Lender, to the extent permitted by applicable law:

(i) Waivers and Amendments. Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in the definition of Required Lenders.

(ii) Defaulting Lender Waterfall. Any payment of principal, interest, fees or other amounts received by the Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article VI or otherwise) or received by the Agent from a Defaulting Lender pursuant to Section 8.05 shall be applied at such time or times as may be determined by the Agent as follows: *first*, to the payment of any amounts owing by such Defaulting Lender to the Agent hereunder; *second*, as the Borrower may request (so long as no Default exists), to the funding of any Advance in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Agent; *third*, if so determined by the Agent and the Borrower, to be held in a deposit account and released pro rata in order to satisfy such Defaulting Lender's potential future funding obligations with respect to Advances under this Agreement; *fourth*, to the payment of any amounts owing to the Lenders as a result of any judgment of a court of competent jurisdiction obtained by any against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *fifth*, so long as no Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and *sixth*, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; provided that if (x) such payment is a payment of the principal amount of any Advances in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Advances were made at a time when the conditions set forth in Section 3.02 were satisfied or waived,

such payment shall be applied solely to pay the Advances of all Non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Advances of such Defaulting Lender until such time as all Advances and funded by the Lenders pro rata in accordance with the Commitments. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(iii) Certain Fees. Each Defaulting Lender shall be entitled to receive a facility fee for any period during which that Lender is a Defaulting Lender only to extent allocable to the outstanding principal amount of the Advances funded by it.

(b) Defaulting Lender Cure. If the Borrower and the Agent agree in writing that a Lender is no longer a Defaulting Lender, the Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice and subject to any conditions set forth therein, that Lender will, to the extent applicable, purchase at par that portion of outstanding Advances of the other Lenders or take such other actions as the Agent may determine to be necessary to cause the Advances to be held pro rata by the Lenders in accordance with the Commitments, whereupon such Lender will cease to be a Defaulting Lender; provided that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and provided, further, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Non-Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

SECTION 2.19. Increase in the Aggregate Commitments. (a) The Borrower may, at any time but in any event not more than once in any calendar year prior to the latest Extended Termination Date, by notice to the Agent, request that the aggregate amount of the Commitment be increased by an amount of \$25,000,000 or an integral multiple thereof (each a "Commitment Increase") to be effective as of a date that is at least 90 days prior to the latest Extended Termination Date (the "Increase Date") as specified in the related notice to the Agent; provided, however that in no event shall the aggregate amount of the Commitments at any time exceed \$700,000,000.

(b) The Agent shall promptly notify the Lenders and one or more Eligible Assignees as have been identified by the Borrower of a request by the Borrower for a Commitment Increase, which notice shall include (i) the proposed amount of such requested Commitment Increase, (ii) the proposed Increase Date and (iii) the date by which Lenders and such Eligible Assignees wishing to participate in the Commitment Increase must commit to an increase in the amount of their respective Commitments (the "Commitment Date"). Each Lender that is willing to participate in such requested Commitment Increase (each an "Increasing Lender") and any such Eligible Assignee shall, in its sole discretion, give written notice to the Agent on or prior to the Commitment Date of the amount by which it is willing to increase its Commitment. If the Lenders and such Eligible Assignees notify the Agent that they are willing to increase the amount of their respective Commitments by an aggregate amount that exceeds the amount of the requested Commitment Increase, the requested Commitment Increase shall be allocated among the Lenders willing to participate therein and such Eligible Assignees in such amounts as are agreed between the Borrower and the Agent.; provided, however, that the Commitment of each such Eligible Assignee shall be in an amount of \$10,000,000 or an integral multiple thereof.

(c) On each Increase Date, each Eligible Assignee that accepts an offer to participate in a requested Commitment Increase in accordance with Section 2.19(b) (each such Eligible Assignee,

and each Lender that shall become a Lender hereunder in accordance with Section 2.20, an “Assuming Lender”) shall become a Lender party to this Agreement as of such Increase Date and the Commitment of each Increasing Lender for such requested Commitment Increase shall be so increased by such amount (or by the amount allocated to such Lender pursuant to the last sentence of Section 2.19(b)) as of such Increase Date; provided, however, that (i) the Agent shall have received on or before such Increase Date the following, each dated such date:

(A) certified copies of resolutions of the Board of Directors of the Borrower (or any committee of such Board having the power to approve such Commitment Increase) approving the Commitment Increase and the corresponding modifications to this Agreement and (B) an opinion of counsel for the Borrower (which may be in-house counsel), in form and substance reasonably acceptable to the Agent;

(B) an assumption agreement from each Assuming Lender, if any, in form and substance satisfactory to the Borrower and the Agent (each an “Assumption Agreement”), duly executed by such Eligible Assignee, the Agent and the Borrower; and

(C) confirmation from each Increasing Lender of the increase in the amount of its Commitment in a writing satisfactory to the Borrower and the Agent; and

(ii) on the date of request for a Commitment Increase and on the applicable Increase Date the following statements shall be true (and the giving of the request for Commitment Increase shall constitute a representation and warranty by the Borrower that on the date of such request and on such Increase Date such statements are true):

(A) no Default shall have occurred and be continuing on such date and after giving effect to such Commitment Increase; and

(B) the representations and warranties contained in Section 4.01 are true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) on and as of such date of, before and after giving effect to, such Commitment Increase and to the application of the proceeds therefrom, as though made on and as of such date (except (x) to the extent such representations and warranties specifically relate to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) on and as of such earlier date and (y) the date referred to in the last sentence of Section 4.01(e) shall be deemed to be the date of the most recent audited financial statements delivered in accordance with Section 5.01(i)(ii)), before and after giving effect to such Commitment Increase and to the application of the proceeds therefrom.

On each Increase Date, upon fulfillment of the conditions set forth in this Section 2.19(c), the Agent shall notify the Lenders (including, without limitation, each Assuming Lender) and the Borrower, on or before

1:00 P.M. (New York City time), by telecopier or email, of the occurrence of the Commitment Increase to be effected on such Increase Date and shall record in the Register the relevant information with respect to each Increasing Lender and each Assuming Lender on such date. Each Increasing Lender and each Assuming Lender shall, before 2:00 P.M. (New York City time) on the Increase Date, purchase at par that portion of outstanding Advances of the other Lenders or take such other actions as the Agent may determine to be necessary to cause the Advances to be funded and held on a pro rata basis by the Lenders).

SECTION 2.20. Extension of Termination Date .

(a) Requests for Extension. The Borrower may, by notice to the Agent (who shall promptly notify the Lenders) no earlier than 60 days and no later than 30 days prior to either or both of the first two anniversaries of the Effective Date (each, a “Relevant Anniversary”), to request that the Termination Date then in effect (the “Current Termination Date”) be extended to the date one year after such Current Termination Date (such extended date, an “Extended Termination Date”).

(b) Lender Elections to Extend. Each Lender acting in its sole and individual discretion will use its reasonable efforts to notify the Agent at least 15 days before the Relevant Anniversary whether it agrees to participate in such extension. Any Lender that does not so notify the Agent that it agrees to such extension at least 10 days before the Relevant Anniversary (each, a “Declining Lender”) shall continue to be a Lender with a Commitment until the earlier of the Current Termination Date or until such Lender is replaced pursuant to clause (c) of this Section 2.20 (but shall not have any Commitment during any extended period to which it has not agreed). The Agent shall notify the Borrower not later than 10 days prior to the Relevant Anniversary of the decision of the Lenders regarding the Borrower’s request for an extension of the Termination Date.

(c) Assuming Lenders. The Borrower shall have the right to replace, effective as of the Relevant Anniversary or the Current Termination Date, each Declining Lender with, and add as “Lenders” under this Agreement, one or more Assuming Lenders with the approval of the Agent (not to be unreasonably withheld or delayed), each of which Assuming Lenders shall have entered into an Assumption Agreement pursuant to which such Assuming Lender shall undertake a Commitment (if any such Assuming Lender is a Lender, its Commitment shall be in addition to such Lender’s Commitment hereunder), and such Assuming Lender shall become a “Lender” for all purposes of this Agreement on the Relevant Anniversary or the Current Termination Date, as the case may be.

(e) Minimum Extension Requirement. If and only if the total of the Commitments of the Lenders that have so agreed to extend the Termination Date, taking into account any Commitment increases pursuant to clause (c) of this Section 2.20, shall be more than 50% of the aggregate amount of the Commitments in effect immediately prior to the Relevant Anniversary, the Current Termination Date shall be extended, effective as of the Relevant Anniversary, to the Extended Termination Date; provided that, if such Commitments shall be less than 100% of the aggregate amount of the Commitments in effect immediately prior to the Relevant Anniversary, the Borrower shall have the right to rescind the request to so extend the Current Termination Date. The Borrower agrees to pay in full all amounts owing hereunder to each Declining Lender on the Relevant Anniversary or the Current Termination Date, as the case may be, on which such Declining Lender is replaced as a Lender pursuant to clause (c) of this Section 2.20.

(f) Conditions to Effectiveness of Extensions. Notwithstanding the foregoing, each extension of the Termination Date hereunder pursuant to this Section 2.20 shall be effective only if:

(i) no Default has occurred and is continuing as of the Relevant Anniversary;

(ii) all representations and warranties contained in Section 4.01 are true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) on and as of the date of the Relevant Anniversary (except (x) to the extent such representations and warranties specifically relate to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) on and as of such earlier date and (y) the date referred to in the last sentence of Section 4.01(e) shall be deemed to be the date of the most recent audited financial statements delivered in accordance with Section 5.01(i)(ii)); and

(iii) if on the Relevant Anniversary or the Current Termination Date there are Advances outstanding, appropriate adjustments shall be made among the Lenders to cause the outstanding Advances to be held ratably by all Lenders in accordance with their respective Commitments as of each such date.

ARTICLE III

CONDITIONS TO EFFECTIVENESS AND LENDING

SECTION 3.01. Conditions Precedent to Effectiveness of Section 2.01. Section 2.01 of this Agreement shall become effective on and as of the first date (the "Effective Date") on which the following conditions precedent have been satisfied:

(a) There shall have occurred no Material Adverse Change since December 31, 2018.

(b) There shall exist no action, suit, investigation, litigation or proceeding affecting the Borrower or any of its Subsidiaries pending or, to the Borrower's knowledge, threatened in writing before any court, governmental agency or arbitrator that (i) could be reasonably likely to have a Material Adverse Effect other than the matters disclosed in the Borrower's filings with the Securities and Exchange Commission prior to the date hereof (the "Disclosed Litigation") or (ii) purports to affect the legality, validity or enforceability of this Agreement or any Note or the consummation of the transactions contemplated hereby, and there shall have been no adverse change in the status, or financial effect on the Borrower or any of its Subsidiaries, of the Disclosed Litigation.

(c) All governmental and third party consents and approvals necessary in connection with the transactions contemplated hereby shall have been obtained (without the imposition of any conditions that are not acceptable to the Lenders) and shall remain in effect, and no law or regulation shall be applicable in the reasonable judgment of the Lenders that restrains, prevents or imposes materially adverse conditions upon the transactions contemplated hereby.

(d) The Borrower shall have paid all accrued fees and expenses of the Agent and the Lenders (including the accrued fees and expenses of counsel to the Agent) that have been invoiced to the Borrower at least one Business Day prior to the Effective Date.

(e) On the Effective Date, the following statements shall be true and the Agent shall have received for the account of each Lender a certificate signed by a duly authorized officer of the Borrower, dated the Effective Date, stating that:

- (i) The representations and warranties contained in Section 4.01 are correct on and as of the Effective Date, and
- (ii) No event has occurred and is continuing that constitutes a Default.

(f) The Agent shall have received on or before the Effective Date the following, each dated such day, in form and substance satisfactory to the Agent and (except for the Notes) in sufficient copies for each Lender:

- (i) A Note for each Lender requesting the same pursuant to Section 2.15.

- (ii) Certified copies of the resolutions of the Board of Directors of the Borrower (or a committee thereof) approving this Agreement and the Notes, and of all documents evidencing other necessary corporate action and governmental approvals, if any, with respect to this Agreement and the Notes.

- (iii) A certificate of the Secretary or an Assistant Secretary of the Borrower certifying the names and true signatures of the officers of the Borrower authorized to sign this Agreement and the Notes and the other documents to be delivered hereunder.

- (iv) Such documents and certifications as the Agent may reasonably require to evidence that the Borrower is duly organized or formed, and that the Borrower is validly existing, in good standing and qualified to engage in business in the State of Delaware.

- (iv) A favorable opinion of Orrick, Herrington & Sutcliffe LLP, counsel for the Borrower, substantially in the form of Exhibit D hereto and as to such other matters as any Lender through the Agent may reasonably request.

- (v) A favorable opinion of Shearman & Sterling LLP, counsel for the Agent, in form and substance satisfactory to the Agent.

(h) The Borrower shall have delivered all information reasonably requested by any Lender in respect of “know your customer” or similar identification procedures and, at least five days prior to the Effective Date, if the Borrower qualifies as a “legal entity customer” under the Beneficial Ownership Regulation, it shall deliver, to each Lender that so requests, a Beneficial Ownership Certification in relation to the Borrower.

(i) The Borrower shall have terminated the commitments, and paid all amounts outstanding, under the Credit Agreement dated as of June 27, 2014 among the Borrower, the lenders parties thereto and Citibank, N.A., as administrative agent, and each of the Lenders that are parties to such credit agreement hereby waives, by execution of this Agreement, any requirement that notice of such termination or payment be made in advance thereof.

SECTION 3.02. Conditions Precedent to Each Borrowing. The obligation of each Lender to make an Advance on the occasion of each Borrowing shall be subject to the conditions precedent that the Effective Date shall have occurred and on the date of such Borrowing the following statements shall be true (and each of the giving of the applicable Notice of Borrowing and the acceptance by the Borrower of the proceeds of such Borrowing shall constitute a representation and warranty by the Borrower that on the date of such Borrowing such statements are true):

(a) the representations and warranties contained in Section 4.01 (except the representations set forth in the last sentence of subsection (e) thereof and in subsection (f)(i) thereof) are true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) on and as of such date, before and after giving effect to such Borrowing and to the application of the proceeds therefrom, as though made on and as of such date (except to the extent such representations and warranties specifically relate to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) on and as of such earlier date), and

(b) no event has occurred and is continuing, or would result from such Borrowing or from the application of the proceeds therefrom, that constitutes a Default.

SECTION 3.03. Determinations Under Section 3.01. For purposes of determining compliance with the conditions specified in Section 3.01, the Borrower and the Agent may presume that each Lender shall have consented to, approved or accepted or to be satisfied with each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to the Lenders unless an officer of the Agent responsible for the transactions contemplated by this Agreement shall have received notice from such Lender prior to the Effective Date, specifying its objection thereto, in which case conditions precedent to the Effective Date shall be deemed satisfied. The Agent shall promptly notify the Lenders of the occurrence of the Effective Date.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES

SECTION 4.01. Representations and Warranties of the Borrower. The Borrower represents and warrants as follows:

(a) The Borrower is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware.

(b) The execution, delivery and performance by the Borrower of this Agreement and the Notes to be delivered by it, and the consummation of the transactions contemplated hereby, are within the Borrower's corporate powers, have been duly authorized by all necessary corporate action, and do not contravene (i) the Borrower's charter or by-laws or (ii) law or any material contractual restriction binding on the Borrower, in each case under this clause (ii), other than any such contravention which could not be reasonably likely to have a Material Adverse Effect.

(c) No authorization or approval or other action by, and no notice to or filing with, any governmental authority or regulatory body or any other third party is required for the due execution, delivery and performance by the Borrower of this Agreement or the Notes to be delivered by it.

(d) This Agreement has been, and each of the Notes to be delivered by it when delivered hereunder will have been, duly executed and delivered by the Borrower. This Agreement is, and each of the Notes when delivered hereunder will be, the legal, valid and binding obligation of the Borrower enforceable against the Borrower in accordance with their respective terms except to the extent that the enforceability thereof may be limited by applicable

bankruptcy, insolvency, moratorium and other laws affecting creditors' rights generally and by equitable principles (regardless of whether enforcement is sought in equity or at law).

(e) The Consolidated balance sheet of the Borrower and its Subsidiaries as at December 31, 2018, and the related Consolidated statements of income and cash flows of the Borrower and its Subsidiaries for the fiscal year then ended, accompanied by an opinion of Ernst & Young LLP, independent public accountants, copies of which have been furnished to each Lender, fairly present in all material respects the Consolidated financial condition of the Borrower and its Subsidiaries as at such date and the Consolidated results of the operations of the Borrower and its Subsidiaries for the period ended on such date, all in accordance with generally accepted accounting principles consistently applied. Since December 31, 2018, there has been no Material Adverse Change.

(f) There is no pending or threatened action, suit, investigation, litigation or proceeding, including, without limitation, any Environmental Action, affecting the Borrower or any of its Subsidiaries before any court, governmental agency or arbitrator that (i) could be reasonably likely to have a Material Adverse Effect (other than the Disclosed Litigation) and there has been no adverse change in the status, or financial effect on the Borrower or any of its Subsidiaries, of the Disclosed Litigation or (ii) purports to affect the legality, validity or enforceability of this Agreement or any Note or the consummation of the transactions contemplated hereby.

(g) The Borrower is not engaged in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulation U issued by the Board of Governors of the Federal Reserve System), and no proceeds of any Advance will be used to purchase or carry any margin stock or to extend credit to others for the purpose of purchasing or carrying any margin stock in a manner that would violate Regulation U.

(h) The Borrower is not an "investment company", or a company "controlled" by an "investment company", within the meaning of the Investment Company Act of 1940, as amended.

(i) Neither the Information Memorandum nor any other information, exhibit or report furnished by or on behalf of the Borrower to the Agent or any Lender in connection with the negotiation and syndication of this Agreement or pursuant to the terms of this Agreement, when taken together with the Borrower's filings with the Securities and Exchange Commission, contained when furnished any untrue statement of a material fact or omitted to state a material fact necessary to make the statements made therein not misleading.

(j) The Borrower has implemented, maintains in effect and enforces policies and procedures that it believes are reasonably designed to promote compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions and the Borrower and its Subsidiaries are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects. None of the Borrower or any Subsidiary or, to the knowledge of the Borrower, any of their respective directors, officers, employees or agents that will act in any capacity in connection with or benefit from the credit facility established hereby, is, or is controlled by, a Sanctioned Person.

ARTICLE V

COVENANTS OF THE BORROWER

SECTION 5.01. Affirmative Covenants. So long as any Advance shall remain unpaid or any Lender shall have any Commitment hereunder, the Borrower will:

(a) Compliance with Laws, Etc. (i) Comply, and cause each of its Subsidiaries to comply, in all material respects, with all applicable laws, rules, regulations and orders, such compliance to include, without limitation, compliance in all material respects with ERISA, Environmental Laws and the Patriot Act, except in such instances the failure to comply therewith could not reasonably be expected to have a Material Adverse Effect.

(ii) Maintain in effect and enforce policies and procedures that it believes are reasonably designed to promote compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

(b) Payment of Taxes, Etc. Pay and discharge, and cause each of its Subsidiaries (other than Immaterial Subsidiaries) to pay and discharge, before the same shall become delinquent, (i) all material taxes, assessments and governmental charges or levies imposed upon it or upon its property and (ii) all material lawful claims, that, in the cases of clauses (i) and (ii), if unpaid, might by law become a Lien upon its property that would be prohibited under Section 5.02(a); provided, however, that neither the Borrower nor any of its Subsidiaries shall be required to pay or discharge any such tax, assessment, charge or claim that is being contested in good faith and by proper proceedings and as to which appropriate reserves are being maintained in accordance with GAAP.

(c) Maintenance of Insurance. Maintain, and cause each of its Subsidiaries (other than Immaterial Subsidiaries) to maintain, insurance with responsible and reputable insurance companies or associations in such amounts and covering such risks as is usually carried by companies engaged in similar businesses and owning similar properties in the same general areas in which the Borrower or such Subsidiary operates.

(d) Preservation of Corporate Existence, Etc. Preserve and maintain, and cause each of its Subsidiaries (other than Immaterial Subsidiaries) to preserve and maintain, its corporate existence and, except to the extent failure to do so could not reasonably be expected to have a Material Adverse Effect, preserve and maintain its rights (charter and statutory) and franchises; provided, however, that the Borrower and its Subsidiaries may consummate any merger, consolidation, conveyance, transfer, lease, disposition, liquidation or dissolution permitted under Section 5.02(b), and provided further that neither the Borrower nor any of its Subsidiaries shall be required to preserve any right or franchise if the Board of Directors (or any committee thereof or any similar governing body) of the Borrower or such Subsidiary shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Borrower or such Subsidiary, as the case may be, and that the loss thereof is not disadvantageous in any material respect to the Borrower, such Subsidiary or the Lenders.

(e) Visitation Rights. At any reasonable time and from time to time upon reasonable notice, permit the Agent or any of the Lenders or any agents or representatives thereof, to examine and make copies of and abstracts from the records and books of account of, and visit the properties of, the Borrower and any of its Subsidiaries, and to discuss the affairs, finances and

accounts of the Borrower and any of its Subsidiaries with any of their officers or directors and with their independent certified public accountants; provided that so long as no Event of Default has occurred and is continuing, the Agent and the Lenders shall not exercise their visitation rights under this Section 5.01(e) more than twice per fiscal year and such visitations shall be coordinated through the Agent. Notwithstanding anything to the contrary in this Section 5.01(e), neither the Borrower nor any of its Subsidiaries will be required to disclose, permit the inspection, examination or making of extracts, or discussion of, any document, information or other matter (i) while no Event of Default exists, that constitutes non-financial trade secrets or non-financial proprietary information, (ii) in respect of which disclosure to Agent or any Lender (or its respective designated representative) is then prohibited by applicable law or any agreement binding on the Borrower or any of its Subsidiaries or (iii) is subject to attorney-client or similar privilege or constitutes attorney work product.

(f) Keeping of Books. Keep, and cause each of its Subsidiaries to keep, proper books of record and account, that are sufficient to permit the preparation of consolidated financial statements in accordance with generally accepted accounting principles in effect from time to time.

(g) Maintenance of Properties, Etc. Maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, all of its properties that are used or useful in the conduct of its business in good working order and condition, ordinary wear and tear excepted, in each case except where the failure to do so would not have a Material Adverse Effect.

(h) Transactions with Affiliates. Conduct, and cause each of its Subsidiaries to conduct, all transactions otherwise permitted under this Agreement with any of their Affiliates on terms that are fair and reasonable and no less favorable to the Borrower or such Subsidiary than it would obtain in a comparable arm's-length transaction with a Person not an Affiliate; provided that the foregoing restrictions shall not apply to (i) any transaction between the Borrower and any of its Subsidiaries or between any such Subsidiaries, (ii) reasonable and customary fees (including reimbursement of out-of-pocket expenses) paid to members of the board of directors (or similar governing body) of the Borrower or its Subsidiaries, and (iii) indemnification agreements or arrangements, compensation arrangements and benefit plans for officers and other employees of the Borrower and its Subsidiaries entered into or maintained or established in the ordinary course of business (provided that, for purposes of clauses (i), (ii) and (iii) of this proviso, the 50% threshold in the defined term "Subsidiary" shall be deemed to be 40%).

(i) Reporting Requirements. Furnish to the Lenders:

(i) as soon as available and in any event within 45 days after the end of each of the first three quarters of each fiscal year of the Borrower, the Consolidated balance sheet of the Borrower and its Subsidiaries as of the end of such quarter and Consolidated statements of income and cash flows of the Borrower and its Subsidiaries for the period commencing at the end of the previous fiscal year and ending with the end of such quarter, duly certified (subject to year-end audit adjustments and the absence of footnotes) by a responsible financial officer of the Borrower as having been prepared in accordance with generally accepted accounting principles and certificates of the a officer of the Borrower as to compliance with the terms of this Agreement and setting forth in reasonable detail the calculations necessary to demonstrate compliance with Section 5.03, provided that in the event of any change in generally accepted accounting principles used

in the preparation of such financial statements, the Borrower shall also provide, if necessary for the determination of compliance with Section 5.03, a statement of reconciliation conforming such financial statements to GAAP;

(ii) as soon as available and in any event within 90 days after the end of each fiscal year of the Borrower, a copy of the annual audit report for such year for the Borrower and its Subsidiaries, containing the Consolidated balance sheet of the Borrower and its Subsidiaries as of the end of such fiscal year and Consolidated statements of income and cash flows of the Borrower and its Subsidiaries for such fiscal year, in each case accompanied by an opinion acceptable to the Required Lenders by Ernst & Young LLP or other nationally recognized independent public accountants and certificates of a responsible financial officer of the Borrower as to compliance with the terms of this Agreement and setting forth in reasonable detail the calculations necessary to demonstrate compliance with Section 5.03, provided that in the event of any change in generally accepted accounting principles used in the preparation of such financial statements, the Borrower shall also provide, if necessary for the determination of compliance with Section 5.03, a statement of reconciliation conforming such financial statements to GAAP;

(iii) as soon as possible and in any event within five days after the occurrence of each Default continuing on the date of such statement, a statement of a responsible financial officer of the Borrower setting forth details of such Default and the action that the Borrower has taken and proposes to take with respect thereto;

(iv) promptly after the sending or filing thereof, copies of all reports that the Borrower sends to any of its securityholders, and copies of all reports and registration statements that the Borrower or any Subsidiary files with the Securities and Exchange Commission or any national securities exchange;

(v) promptly after the commencement thereof, notice of all actions and proceedings before any court, governmental agency or arbitrator affecting the Borrower or any of its Subsidiaries of the type described in Section 4.01(f); and

(vi) such other information respecting the financial condition of the Borrower or any of its Subsidiaries or respecting information required by regulatory authorities under applicable “know-your-customer” rules and regulations (including the Beneficial Ownership Regulation) as any Lender through the Agent may from time to time reasonably request.

Documents required to be delivered pursuant to clauses (i), (ii), (iv) and (v) of this Section 5.01(i) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which such documents are filed for public availability on the Securities and Exchange Commission’s Electronic Data Gathering and Retrieval System; provided that the Borrower shall upon request provide to the Agent by electronic mail electronic versions (i.e., soft copies or links to access such documents) of such documents.

SECTION 5.02. Negative Covenants. So long as any Advance shall remain unpaid or any Lender shall have any Commitment hereunder, the Borrower will not:

(a) Liens, Etc. Create or suffer to exist, or permit any of its Subsidiaries to create or suffer to exist, any Lien on or with respect to any of its properties, whether now owned or hereafter acquired, or assign, or permit any of its Subsidiaries to assign, any right to receive income, other than:

(i) Permitted Liens,

(ii) purchase money Liens (including in connection with finance leases) upon or in any real property or equipment (including any accessions, additions, parts, replacements, fixtures, improvements and attachments thereto and the proceeds thereof, and customary cash security deposits) acquired, leased or held by the Borrower or any Subsidiary to secure the purchase price or lease of such property or equipment or to secure Debt incurred solely for the purpose of financing the acquisition of such property or equipment, or Liens existing on such property or equipment at the time of its acquisition (other than any such Liens created in contemplation of such acquisition that were not incurred to finance the acquisition of such property) or extensions, renewals or replacements of any of the foregoing for the same or a lesser amount, provided, however, that no such Lien shall extend to or cover any properties of any character other than the real property or equipment being acquired, leased or held (and any accessions, addition, parts, replacements, fixtures, improvements and attachments thereto and the proceeds thereof, and customary cash security deposits), and no such extension, renewal or replacement shall extend to or cover any properties not theretofore subject to the Lien being extended, renewed or replaced (and any accessions, additions, parts, replacements, fixtures, improvements and attachments thereto and the proceeds thereof, and customary cash security deposits),

(iii) the Liens existing on the Effective Date and described on Schedule 5.02(a) to the Disclosure Letter,

(iv) Liens on property of a Person existing at the time such Person is merged into or consolidated with the Borrower or any Subsidiary of the Borrower or becomes a Subsidiary of the Borrower; provided that such Liens were not created in contemplation of such merger, consolidation or acquisition and do not extend to any assets other than those of the Person (and its Subsidiaries) so merged into or consolidated with the Borrower or such Subsidiary or acquired by the Borrower or such Subsidiary,

(v) other Liens securing Debt in an aggregate principal amount or other obligations in an amount not to exceed, together with Debt or other obligations incurred under Section 5.02(e)(iv), at any time outstanding the greater of \$750,000,000 and 7.5% of Consolidated total assets, and

(vi) the replacement, extension or renewal of any Lien permitted by clause (iii) or (iv) above upon or in the same property theretofore subject thereto or the replacement, extension or renewal (without increase in the amount or change in any direct or contingent obligor) of the Debt secured thereby.

(b) Mergers, Etc. Merge or consolidate with or into, or permit any of its Subsidiaries to merge or consolidate with or into, or convey, transfer, lease or otherwise dispose or permit any of its Subsidiaries to convey, transfer, lease or otherwise dispose of (whether in one transaction or in a series of transactions) all or substantially all of the assets (whether now owned or hereafter acquired) of the Borrower and its Subsidiaries, on a consolidated basis, to, any Person, except that any Subsidiary of the Borrower may merge or consolidate with or into, or dispose of assets (including by way of liquidation or dissolution) to, any other Subsidiary of the Borrower, and except that any Subsidiary of the Borrower may merge into or dispose of assets (including by way of liquidation or dissolution) to

the Borrower, provided, in each case, that no Default shall have occurred and be continuing at the time of such proposed transaction or would result therefrom.

(c) Accounting Changes. Make or permit, or permit any of its Subsidiaries to make or permit, any change in accounting policies or reporting practices, except as required or permitted by generally accepted accounting principles.

(d) Change in Nature of Business. Make, or permit any of its Subsidiaries to make, any material change in the nature of its business as carried on at the date hereof, it being understood that the foregoing shall not restrict the Borrower and its Subsidiaries from carrying on any business that is related, ancillary or complementary thereto or a reasonable extension thereof.

(e) Subsidiary Debt. Permit any of its Subsidiaries to create or suffer to exist any Debt other than:

(i) Debt owed to the Borrower or to a wholly owned Subsidiary of the Borrower,

(ii) Debt existing or available for draw on the Effective Date and described on Schedule 5.02(e) to the Disclosure Letter (the "Existing Debt"), and any Debt extending the maturity of, or refunding or refinancing, in whole or in part, the Existing Debt, provided that the principal amount of such Existing Debt shall not be increased above the principal amount thereof outstanding and/or the amount available for draw immediately prior to such extension, refunding or refinancing (except by an amount equal to a reasonable premium or other reasonable amount paid, and fees and expenses reasonably incurred, in connection with such refinancing), and the direct and contingent obligors therefor shall not be changed, as a result of or in connection with such extension, refunding or refinancing,

(iii) Debt secured by Liens permitted by Section 5.02(a)(ii) or Section 5.02(a)(iv),

(iv) other Debt aggregating for all of the Borrower's Subsidiaries, together with Debt secured by Liens permitted under Section 5.02(a)(v), an amount not to exceed at any one time outstanding at any time outstanding the greater of \$750,000,000 and 7.5% of Consolidated total assets,

(v) indorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business,

(vi) guaranties of any Debt of the Borrower or Debt otherwise permitted under this Section 5.02(e),

(vii) Debt of a Person that becomes a Subsidiary after the date of this Agreement ("Acquired Debt"); provided that such Debt exists at the time such Person becomes a Subsidiary and is not created in contemplation of or in connection with such Person becoming a Subsidiary; and provided, further, and any Debt extending the maturity of, or refunding or refinancing, in whole or in part, the Acquired Debt, provided that the principal amount of such Acquired Debt shall not be increased above the principal amount thereof outstanding and/or the amount available for draw immediately prior to such extension, refunding or refinancing, and the direct and contingent obligors therefor shall not be changed, as a result of or in connection with such extension, refunding or refinancing,

(viii) Debt arising under Hedge Agreements entered into in the normal course of business and not for speculative purposes, and

(ix) Debt as an account party in respect of trade or standby letters of credit, bank guarantees or bankers' acceptances in an aggregate amount not to exceed \$30,000,000 at any time outstanding.

(f) Use of Proceeds. Directly use, or permit any Subsidiary to directly use, or knowingly indirectly use, or permit any Subsidiary to knowingly indirectly use, the proceeds of any Borrowing (i) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in material violation of any Anti-Corruption Laws, (ii) for the purpose of financing any activities, business or transaction of or with, at the time of such financing, any Sanctioned Person or a Person controlled by a Sanctioned Person, or in any Sanctioned Country other than as otherwise permitted under applicable law, rule, regulation or in accordance with any applicable permit or exemption or (iii) in any manner that would result in the violation of any Sanctions applicable to any party hereto.

SECTION 5.03. Financial Covenants. So long as any Advance shall remain unpaid or any Lender shall have any Commitment hereunder, the Borrower will:

(a) Leverage Ratio. Maintain, as at the end of each fiscal quarter of the Borrower, a Leverage Ratio of not greater than 3.0:1.0; provided that, upon written notice (such notice, an "Increase Leverage Notice") to the Agent from the Borrower (which the Agent shall promptly provide to the Lenders) that a Material Acquisition has been consummated, the Borrower will be permitted to maintain a Leverage Ratio of not greater than 3.5 to 1.0 as of the last day of the fiscal quarter in which such acquisition is consummated and each of the immediately succeeding three fiscal quarters; provided, further, that after the effectiveness of such an Increase Leverage Notice, the Borrower shall maintain a Leverage Ratio of 3.0 to 1.0 or less as of the last day of not fewer than two fiscal quarters before a subsequent Increase Leverage Notice may be delivered to the Agent in accordance with this Section 5.03(a).

(b) Interest Coverage Ratio. Maintain, as at the end of each fiscal quarter of the Borrower, an Interest Coverage Ratio of at least 3.0:1.0.

ARTICLE VI

EVENTS OF DEFAULT

SECTION 6.01. Events of Default. If any of the following events ("Events of Default") shall occur and be continuing:

(a) The Borrower shall fail to pay any principal of any Advance when the same becomes due and payable; or the Borrower shall fail to pay any interest on any Advance or make any other payment of fees or other amounts payable under this Agreement or any Note within five Business Days after the same becomes due and payable; or

(b) Any representation or warranty made by the Borrower herein or by the Borrower (or any of its officers) in connection with this Agreement shall prove to have been incorrect in any material respect when made; or

(c) (i) The Borrower shall fail to perform or observe any term, covenant or agreement contained in Section 5.01(d), (e), (h) or (i)(i) – (iii), 5.02 or 5.03, or (ii) the Borrower shall fail to

perform or observe any other term, covenant or agreement contained in this Agreement on its part to be performed or observed if such failure shall remain unremedied for 30 days after written notice thereof shall have been given to the Borrower by the Agent or any Lender; or

(d) The Borrower or any of its Subsidiaries shall fail to pay any principal of or premium or interest on any Debt that is outstanding in a principal or net amount of at least \$100,000,000 in the aggregate (but excluding Debt outstanding hereunder) of the Borrower or such Subsidiary (as the case may be), when the same becomes due and payable (whether by scheduled maturity, required prepayment, acceleration, demand or otherwise), and such failure shall continue after the applicable grace period, if any, specified in the agreement or instrument relating to such Debt; or any other event shall occur or condition shall exist under any agreement or instrument relating to any such Debt and shall continue after the applicable grace period, if any, specified in such agreement or instrument, if the effect of such event or condition is to accelerate, or to permit the acceleration of, the maturity of such Debt; or any such Debt shall be declared to be due and payable, or required to be prepaid or redeemed (other than by a regularly scheduled required prepayment or redemption), purchased or defeased, or an offer to prepay, redeem, purchase or defease such Debt shall be required to be made, in each case prior to the stated maturity thereof; provided, that this clause (d) shall not apply to (x) any prepayment, redemption, or repurchase, or an offer to prepay, redeem or repurchase, secured Debt, resulting from a disposition, condemnation, insured loss or similar event relating to the property securing such Debt or (y) any redemption, repurchase, conversion or settlement (or offer with respect thereto) with respect to any Debt pursuant to its terms unless such redemption, repurchase, conversion or settlement (or offer with respect thereto) results from an event of the type that constitutes an Event of Default (excluding this clause (d)); or

(e) The Borrower or any of its Subsidiaries (other than an Immaterial Subsidiary) shall generally not pay its debts as such debts become due, or shall admit in writing its inability to pay its debts generally, or shall make a general assignment for the benefit of creditors; or any proceeding shall be instituted by or against the Borrower or any of its Subsidiaries (other than an Immaterial Subsidiary) seeking to adjudicate it a bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief, or composition of it or its debts under any law relating to bankruptcy, insolvency or reorganization or relief of debtors, or seeking the entry of an order for relief or the appointment of a receiver, trustee, custodian or other similar official for it or for any substantial part of its property and, in the case of any such proceeding instituted against it (but not instituted by it), either such proceeding shall remain undismissed or unstayed for a period of 60 days, or any of the actions sought in such proceeding (including, without limitation, the entry of an order for relief against, or the appointment of a receiver, trustee, custodian or other similar official for, it or for any substantial part of its property) shall occur; or the Borrower or any of its Subsidiaries (other than an Immaterial Subsidiary) shall take any corporate action to authorize any of the actions set forth above in this subsection (e); or

(f) Judgments or orders for the payment of money in excess of \$100,000,000 in the aggregate shall be rendered against the Borrower or any of its Subsidiaries and either (i) enforcement proceedings shall have been commenced by any creditor upon such judgment or order or (ii) there shall be any period of 30 consecutive days during which a stay of enforcement of such judgment or order, by reason of a pending appeal or otherwise, shall not be in effect; provided, however, that any such judgment or order shall not be an Event of Default under this Section 6.01(f) if and for so long as (i) the amount of such judgment or order is covered by a valid and binding policy of insurance between the defendant and the insurer covering payment thereof and (ii) such insurer, which shall be rated at least "A" by A.M. Best Company, has been notified of, and has not disputed the claim made for payment of, the amount of such judgment or order; or

(g) (i) Any Person or two or more Persons acting in concert shall have acquired beneficial ownership (within the meaning of Rule 13d-3 of the Securities and Exchange Commission under the Securities Exchange Act of 1934), directly or indirectly, of Voting Stock of the Borrower (or other securities convertible into such Voting Stock) representing 35% or more of the combined voting power of all Voting Stock of the Borrower; or (ii) during any period of 24 consecutive months, a majority of the members of the Board of Directors of the Borrower cease to be composed of individuals (x) who were members of the Board of Directors of the Borrower on the first day of such period, (y) whose election or nomination to the Board of Directors of the Borrower was approved by individuals referred to in clause (x) above constituting at the time of such election or nomination at least a majority of the Board of Directors of the Borrower or (z) whose election or nomination to the Board of Directors of the Borrower was approved by individuals referred to in clauses (x) and (y) above constituting at the time of such election or nomination at least a majority of the Board of Directors of the Borrower; or

(i) The Borrower or any of its ERISA Affiliates shall incur, or shall be reasonably likely to incur liability in excess of \$100,000,000 in the aggregate as a result of one or more of the following: (i) the occurrence of any ERISA Event; (ii) the partial or complete withdrawal of the Borrower or any of its ERISA Affiliates from a Multiemployer Plan; or (iii) the reorganization or termination of a Multiemployer Plan;

then, and in any such event, the Agent (i) shall at the request, or may with the consent, of the Required Lenders, by notice to the Borrower, declare the obligation of each Lender to make Advances to be terminated, whereupon the same shall forthwith terminate, and (ii) shall at the request, or may with the consent, of the Required Lenders, by notice to the Borrower, declare the Advances, all interest thereon and all other amounts payable under this Agreement to be forthwith due and payable, whereupon the Advances, all such interest and all such amounts shall become and be forthwith due and payable, without presentment, demand, protest or further notice of any kind, all of which are hereby expressly waived by the Borrower; provided, however, that in the event of an actual or deemed entry of an order for relief with respect to the Borrower under the Federal Bankruptcy Code, (A) the obligation of each Lender to make Advances shall automatically be terminated and (B) the Advances, all such interest and all such amounts shall automatically become and be due and payable, without presentment, demand, protest or any notice of any kind, all of which are hereby expressly waived by the Borrower.

ARTICLE VII

THE AGENT

SECTION 7.01. Authorization and Authority. Each of the Lenders hereby irrevocably appoints Citibank to act on its behalf as the Agent hereunder and authorizes the Agent to take such actions on its behalf and to exercise such powers as are delegated to the Agent by the terms hereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article are solely for the benefit of the Agent and the Lenders, and the Borrower shall not have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein (or any other similar term) with reference to the Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

SECTION 7.02. Rights as a Lender. The Person serving as the Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Agent, and the term “Lender” or “Lenders” shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, the Borrower or any Subsidiary or other Affiliate thereof as if such Person were not the Agent hereunder and without any duty to account therefor to the Lenders.

SECTION 7.03. Duties of Agent; Exculpatory Provisions. The Agent shall not have any duties or obligations except those expressly set forth herein, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, the Agent:

(i) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(ii) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby that the Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein); provided that the Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Agent to liability or that is contrary to this Agreement or applicable law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law; and

(iii) shall not, except as expressly set forth herein, have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as the Agent or any of its Affiliates in any capacity.

(b) The Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 8.01 and 6.01), or (ii) in the absence of its own gross negligence, bad faith or

willful misconduct as determined by a court of competent jurisdiction by final and nonappealable judgment. The Agent shall be deemed not to have knowledge of any Default unless and until notice describing such Default is given to the Agent in writing by the Borrower or a Lender.

(c) The Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement or any other agreement, instrument or document, or (v) the satisfaction of any condition set forth in Article III or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Agent.

SECTION 7.04. Reliance by Agent. Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of an Advance, that by its terms must be fulfilled to the satisfaction of a Lender, the Agent may presume that such condition is satisfactory to such Lender unless the Agent shall have received notice to the contrary from such Lender prior to the making of such Advance. The Agent may consult with legal counsel (who may be counsel for the Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

SECTION 7.05. Delegation of Duties. The Agent may perform any and all of its duties and exercise its rights and powers hereunder by or through any one or more sub-agents appointed by the Agent. The Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Article shall apply to any such sub-agent and to the Related Parties of the Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the Commitments as well as activities as Agent. The Agent shall not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Agent acted with gross negligence, bad faith or willful misconduct in the selection of such sub-agents.

SECTION 7.06. Resignation of Agent. (a) The Agent may at any time give notice of its resignation to the Lenders and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right, in consultation with the Borrower, to appoint a successor, which shall be a bank with an office in the United States, or an Affiliate of any such bank with an office in the United States. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days after the retiring Agent gives notice of its resignation (or such earlier day as shall be agreed by the Required Lenders) (the “Resignation Effective Date”), then the retiring Agent may (but shall not be obligated to), on behalf of the Lenders, appoint a successor Agent meeting the qualifications set forth above. Whether or not a successor has been appointed, such resignation shall become effective in accordance with such notice on the Resignation Effective Date.

(b) If the Person serving as Agent is a Defaulting Lender pursuant to clause (v) of the definition thereof, the Required Lenders may, to the extent permitted by applicable law, by notice in writing to the Borrower and such Person remove such Person as Agent and, in consultation with the Borrower, appoint a successor. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days (or such earlier day as shall be agreed by the Required Lenders) (the “Removal Effective Date”), then such removal shall nonetheless become effective in accordance with such notice on the Removal Effective Date.

(c) With effect from the Resignation Effective Date or the Removal Effective Date (as applicable) (1) the retiring or removed Agent shall be discharged from its duties and obligations hereunder and (2) except for any indemnity payments owed to the retiring or removed Agent, all payments, communications and determinations provided to be made by, to or through the Agent shall instead be made by or to each Lender directly, until such time, if any, as the Required Lenders appoint a successor Agent as provided for above. Upon the acceptance of a successor’s appointment as Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring or removed Agent (other than any rights to indemnity payments owed to the retiring or removed Agent), and the retiring or removed Agent shall be discharged from all of its duties and obligations hereunder. The fees payable by the Borrower to a successor Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Agent’s resignation or removal hereunder, the provisions of this Article and Section 8.04 shall continue in effect for the benefit of such retiring or removed Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring or removed Agent was acting as Agent.

SECTION 7.07. Non-Reliance on Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Agent or any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Agent or any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement or any related agreement or any document furnished hereunder.

SECTION 7.08. No Other Duties, etc. Anything herein to the contrary notwithstanding, none of the Bookrunners, Arrangers or Syndication Agent listed on the cover page hereof shall have any powers, duties or responsibilities under this Agreement, except in its capacity, as applicable, as the Agent or a Lender hereunder.

SECTION 7.09. Certain ERISA Matters.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Agent and not, for the avoidance of doubt, to or for the benefit of the Borrower, that at least one of the following is and will be true:

(i) such Lender is not using “plan assets” (within the meaning of Section 3(42) of ERISA or otherwise) of one or more Benefit Plans with respect to such Lender’s

entrance into, participation in, administration of and performance of the Advances, the Commitments or this Agreement,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Advances, the Commitments and this Agreement,

(ii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Advances, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Advances, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Advances, the Commitments and this Agreement, or

(iii) such other representation, warranty and covenant as may be agreed in writing between the Agent, in its sole discretion, and such Lender

(b) In addition, unless either (1) sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or (2) a Lender has provided another representation, warranty and covenant in accordance with sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Agent and not, for the avoidance of doubt, to or for the benefit of the Borrower, that the Agent is not a fiduciary with respect to the assets of such Lender involved in such Lender's entrance into, participation in, administration of and performance of the Advances, the Commitments and this Agreement (including in connection with the reservation or exercise of any rights by the Agent under this Agreement or any documents related hereto or thereto).

As used in this Section 7.09:

"**Benefit Plan**" means any of (a) an "employee benefit plan" (as defined in ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in and subject to Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such "employee benefit plan" or "plan".

"**PTE**" means a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

ARTICLE VIII

MISCELLANEOUS

SECTION 8.01. Amendments, Etc. Subject to Section 2.07(g), no amendment or waiver of any provision of this Agreement or the Notes, nor consent to any departure by the Borrower therefrom, shall in any event be effective unless the same shall be in writing and signed by the Required Lenders, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given; provided, however, that (a) no amendment, waiver or consent shall, unless in writing and signed by all the Lenders, do any of the following: (i) waive any of the conditions specified in Section 3.01, (ii) change the percentage of the Commitments or of the aggregate unpaid principal amount of the Advances, or the number of Lenders, that shall be required for the Lenders or any of them to take any action hereunder or change the definition of "Required Lenders" or (iii) amend this Section 8.01; and (b) no amendment, waiver or consent shall, unless in writing and signed by each Lender directly affected thereby, do any of the following: (i) increase or extend the Commitment of such Lender, (ii) reduce the principal of, or rate of interest on, the Advances or any fees or other amounts payable hereunder or (iii) postpone any date fixed for any payment of principal of, or interest on, the Advances or any fees or other amounts payable hereunder; and provided further that no amendment, waiver or consent shall, unless in writing and signed by the Agent in addition to the Lenders required above to take such action, affect the rights or duties of the Agent under this Agreement.

SECTION 8.02. Notices, Etc. (a) Notices Generally. Except in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in paragraph (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by facsimile as follows:

(i) if to the Borrower, to the Borrower at 1133 Innovation Way, Sunnyvale, California 94089, Attention of: Treasurer (email _____; Telephone No. 408-745-2000), with a copy to: General Counsel (email _____; Telephone No. 408-745-2000);

(ii) if to the Agent, to Citibank at Building #3, 1615 Brett Road, New Castle, Delaware 19720 Attention of Bank Loan Syndications (Facsimile No. (212) 994-0961);

(iii) if to a Lender, to it at its address (or facsimile number) set forth in its Administrative Questionnaire.

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next business day for the recipient). Notices delivered through electronic communications, to the extent provided in paragraph (b) below, shall be effective as provided in said paragraph (b).

(b) Electronic Communications. Notices and other communications to the Lenders hereunder may be delivered or furnished by electronic communication (including e-mail and Internet or intranet websites) pursuant to procedures approved by the Agent provided that the foregoing shall not apply to notices to any Lender pursuant to Article II if such Lender has notified the Agent that it is incapable of receiving notices under such Article by electronic communication. The Agent or the Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by

electronic communications pursuant to procedures approved by it; provided that approval of such procedures may be limited to particular notices or communications.

Unless the Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient, at its e-mail address as described in the foregoing clause (i), of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii) above, if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(c) Change of Address, etc. Any party hereto may change its address, email address or facsimile number for notices and other communications hereunder by notice to the other parties hereto.

(d) Platform.

(i) The Borrower agrees that the Agent may, but shall not be obligated to, make the Communications (as defined below) available to the Lenders by posting the Communications on Debt Domain, Intralinks, Syndtrak or a substantially similar electronic transmission system (the "Platform").

(ii) The Platform is provided "as is" and "as available." The Agent Parties (as defined below) do not warrant the adequacy of the Platform and expressly disclaim liability for errors or omissions in the Communications. No warranty of any kind, express, implied or statutory, including, without limitation, any warranty of merchantability, fitness for a particular purpose, non-infringement of third-party rights or freedom from viruses or other code defects, is made by any Agent Party in connection with the Communications or the Platform. In no event shall the Agent or any of its Related Parties (collectively, the "Agent Parties") have any liability to the Borrower, any Lender or any other Person or entity for damages of any kind, including, without limitation, direct or indirect, special, incidental or consequential damages, losses or expenses (whether in tort, contract or otherwise) arising out of the Borrower's or the Agent's transmission of communications through the Platform except to the extent caused by Agent's or any Agent Party's gross negligence or willful misconduct. "Communications" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of the Borrower pursuant to this Agreement or the transactions contemplated herein which is distributed to the Agent or any Lender by means of electronic communications pursuant to this Section, including through the Platform.

SECTION 8.03. No Waiver; Remedies. No failure on the part of any Lender or the Agent to exercise, and no delay in exercising, any right hereunder or under any Note shall operate as a waiver thereof; nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right. The remedies herein provided are cumulative and not exclusive of any remedies provided by law.

SECTION 8.04. Costs and Expenses. (a) Costs and Expenses. The Borrower shall pay (i) all reasonable and documented out-of-pocket expenses incurred by the Agent and its Affiliates (including the reasonable fees, charges and disbursements of a single counsel for the Agent), in connection with the syndication of the Commitments, the preparation, negotiation, execution, delivery and administration of this Agreement, or any amendments, modifications or waivers of the provisions hereof (whether or not the

transactions contemplated hereby shall be consummated), (ii) all documented out-of-pocket expenses incurred by the Agent or any Lender (including the fees, charges and disbursements of a single counsel for the Agent and the Lenders (and one additional counsel to each group of affected parties that are similarly situated, taken as a whole, for any conflict of interest and, if reasonably necessary, one local counsel in each relevant jurisdiction), in connection with the enforcement or protection of its rights (A) in connection with this Agreement, including its rights under this Section, or (B) in connection with the Advances made hereunder, including all such documented out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Advances.

(b) Indemnification by the Borrower. The Borrower shall indemnify the Agent (and any sub-agent thereof) and each Lender, and each Related Party of any of the foregoing Persons (each such Person being called an “Indemnitee”) against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and related expenses (including the fees, charges and disbursements of any counsel for any Indemnitee), incurred by any Indemnitee or asserted against any Indemnitee by any Person (including the Borrower) other than such Indemnitee and its Related Parties arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement or any agreement or instrument contemplated hereby, the performance by the parties hereto of their respective obligations hereunder or thereunder or the consummation of the transactions contemplated hereby, (ii) any Advance or the use or proposed use of the proceeds therefrom, (iii) any actual or alleged presence or Release of Hazardous Materials on or from any property owned or operated by the Borrower or any of its Subsidiaries, or any Environmental Liability related in any way to the Borrower or any of its Subsidiaries, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by the Borrower, and regardless of whether any Indemnitee is a party thereto; provided that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related expenses (x) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence, bad faith or willful misconduct of such Indemnitee, (y) result from a claim brought by the Borrower against an Indemnitee for material breach of such Indemnitee's obligations hereunder, if the Borrower has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction or (z) arise out of or are in connection with any claim not involving an act or omission of the Borrower or its Affiliates and result from a claim brought by any Indemnitee against any other Indemnitee (other than against the Agent or any Arranger in their respective capacities as such). This Section 8.04(b) shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(c) Reimbursement by Lenders. To the extent that the Borrower for any reason fails to indefeasibly pay any amount required under paragraph (a) or (b) of this Section to be paid by it to the Agent (or any sub-agent thereof) or any Related Party of any of the foregoing, each Lender severally agrees to pay to the Agent (or any such sub-agent) or such Related Party, as the case may be, such Lender's pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought based on each Lender's share of the aggregate principal amount of the Advances at such time) of such unpaid amount (including any such unpaid amount in respect of a claim asserted by such Lender); provided, further, that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Agent (or any such sub-agent) or against any Related Party of any of the foregoing acting for the Agent (or any such sub-agent), in connection with such capacity. The obligations of the Lenders under this paragraph (c) are subject to the provisions of Section 2.02(e).

(d) Waiver of Consequential Damages, Etc. To the fullest extent permitted by applicable law, the Borrower shall not assert, and hereby waives, any claim against any Indemnitee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement or any agreement or instrument contemplated hereby, the transactions contemplated hereby, any Advance, or the use of the proceeds thereof.

No Indemnitee referred to in paragraph (b) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the transactions contemplated hereby.

(e) Payments. All amounts due under this Section shall be payable promptly after demand therefor.

(f) Breakage. If any payment of principal of, or Conversion of, any Eurocurrency Rate Advance is made by the Borrower to or for the account of a Lender (i) other than on the last day of the Interest Period for such Advance, as a result of a payment or Conversion pursuant to Section 2.07, 2.09 or 2.11, acceleration of the maturity of the Advances pursuant to Section 6.01 or for any other reason, or by an Eligible Assignee to a Lender other than on the last day of the Interest Period for such Advance upon an assignment of rights and obligations under this Agreement pursuant to Section 8.07 as a result of a demand by the Borrower pursuant to Section 8.07(a) or (ii) as a result of a payment or Conversion pursuant to Section 2.07, 2.09 or 2.11, the Borrower shall, upon demand by such Lender setting forth in reasonable detail the calculation of the amounts demanded (with a copy of such demand to the Agent), pay to the Agent for the account of such Lender any amounts required to compensate such Lender for any additional losses, costs or expenses that it may reasonably incur as a result of such payment or Conversion. Such loss, cost or expense to any Lender shall be deemed to be the amount determined by such Lender to be the excess, if any, of (i) the amount of interest which would have accrued on the principal amount of such Eurocurrency Rate Advance had such event not occurred, at the Eurocurrency Rate that would have been applicable to such Eurocurrency Rate Advance, for the period from the date of such event to the last day of the then current Interest Period therefor, over (ii) the amount of interest which would accrue on such principal amount for such period at the interest rate which such Lender would bid were it to bid, at the commencement of such period, for deposits in Dollars or Committed Currency of a comparable amount and period from other banks in the Eurocurrency market. If the amount of the Committed Currency purchased by any Lender in the case of a Conversion or exchange of Advances in the case of Section 2.07 or 2.11 exceeds the sum required to satisfy such Lender's liability in respect of such Advances, such Lender agrees to remit to the Borrower such excess.

(g) Without prejudice to the survival of any other agreement of the Borrower hereunder, the agreements and obligations of the Borrower contained in Sections 2.10, 2.13 and 8.04 shall survive the payment in full of principal, interest and all other amounts payable hereunder.

SECTION 8.05. Right of Set-off. If an Event of Default shall have occurred and be continuing, each Lender and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held, and other obligations (in whatever currency) at any time owing, by such Lender or any such Affiliate, to or for the credit or the account of the Borrower against any and all of the obligations of the Borrower now or hereafter existing under this Agreement to such Lender or its Affiliates, irrespective of whether or not such Lender or Affiliate shall have made any demand under this Agreement and although such obligations of the Borrower may be contingent or unmatured or are owed to a branch, office or Affiliate of such Lender different from the branch, office or Affiliate holding such deposit or obligated on such indebtedness; provided that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Agent for further application in accordance with the provisions of Section 2.18 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Agent and the Lenders, and (y) the Defaulting Lender shall provide promptly to the Agent a statement describing in reasonable detail the Advances owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender and its Affiliates under this Section are in addition to other rights and

remedies (including other rights of setoff) that such Lender or its Affiliates may have. Each Lender agrees to notify the Borrower and the Agent promptly after any such setoff and application; provided that the failure to give such notice shall not affect the validity of such setoff and application.

SECTION 8.06. Binding Effect. This Agreement shall become effective (other than Section 2.01, which shall only become effective upon satisfaction of the conditions precedent set forth in Section 3.01) when it shall have been executed by the Borrower and the Agent and when the Agent shall have been notified by each Initial Lender that such Initial Lender has executed it and thereafter shall be binding upon and inure to the benefit of the Borrower, the Agent and each Lender and their respective successors and assigns, except that the Borrower shall not have the right to assign its rights hereunder or any interest herein without the prior written consent of each of the Lenders (and any other attempted assignment or transfer by any party hereto shall be null and void).

SECTION 8.07. Assignments and Participations. (a) Successors and Assigns Generally. No Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of paragraph (b) of this Section, (ii) by way of participation in accordance with the provisions of paragraph (d) of this Section, or (iii) by way of pledge or assignment of a security interest subject to the restrictions of paragraph (f) of this Section (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in paragraph (d) of this Section and, to the extent expressly contemplated hereby, the Related Parties of each of the Agent and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) Assignments by Lenders. Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment and the Advances at the time owing to it); provided that any such assignment shall be subject to the following conditions:

(i) Minimum Amounts.

(A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and/or the Advances at the time owing to or contemporaneous assignments to related Approved Funds that equal at least the amount specified in paragraph (b)(i)(B) of this Section in the aggregate or in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned; and

(B) in any case not described in paragraph (b)(i)(A) of this Section, the aggregate amount of the Commitment (which for this purpose includes Advances outstanding thereunder) or, if the applicable Commitment is not then in effect, the principal outstanding balance of the Advances of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Agent or, if "Trade Date" is specified in the Assignment and Assumption, as of the Trade Date) shall not be less than \$10,000,000 unless each of the Agent and, so long as no Event of Default has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed).

(ii) Proportionate Amounts. Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement with respect to the Advance or the Commitment assigned.

(iii) Required Consents. No consent shall be required for any assignment except to the extent required by paragraph (b)(i)(B) of this Section and, in addition:

(A) the consent of the Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (x) an Event of Default has occurred and is continuing at the time of such assignment, or (y) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund; provided that the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Agent within ten Business Days after having received notice thereof; and

(B) the consent of the Agent (such consent not to be unreasonably withheld or delayed) shall be required for any assignment to a Person that is not a Lender, an Affiliate of such Lender or an Approved Fund with respect to such Lender.

(iv) Assignment and Assumption. The parties to each assignment shall execute and deliver to the Agent an Assignment and Assumption, together with a processing and recordation fee of \$3,500; provided that the Agent may, in its sole discretion, elect to waive such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to the Agent an Administrative Questionnaire.

(v) No Assignment to Certain Persons. No such assignment shall be made to (A) the Borrower or any of the Borrower's Affiliates or Subsidiaries or (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B).

(vi) No Assignment to Natural Persons. No such assignment shall be made to a natural Person.

(vii) Certain Additional Payments. In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations, or other compensating actions, including funding, with the consent of the Borrower and the Agent, the applicable pro rata share of Advances previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (x) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Agent and each other Lender hereunder (and interest accrued thereon), and (y) acquire (and fund as appropriate) its full pro rata share of all Advances. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

Subject to acceptance and recording thereof by the Agent pursuant to paragraph (c) of this Section, from and after the effective date specified in each Assignment and Assumption, the assignee

thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) but shall continue to be entitled to the benefits of Sections 2.10 and 8.04 and remain liable under Section 8.04(e) with respect to facts and circumstances occurring prior to the effective date of such assignment; provided, that except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this paragraph shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (d) of this Section.

(c) Register. The Agent, acting solely for this purpose as an agent of the Borrower, shall maintain at one of its offices in the United States a copy of each Assignment and Assumption delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Advances owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(d) Participations. Any Lender may at any time, without the consent of, or notice to, the Borrower or the Agent, sell participations to any Person (other than a natural Person or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "Participant") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Commitment and/or the Advances owing to it); provided that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations, and (iii) the Borrower, the Agent and Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 8.04(d) with respect to any payments made by such Lender to its Participant(s).

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in 8.01(b) that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 2.10, 8.04(f) and 2.13 (subject to the requirements and limitations therein, including the requirements under Section 2.13(f) (it being understood that the documentation required under Section 2.13(f) shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section; provided that such Participant (A) agrees to be subject to the provisions of Sections 2.17 as if it were an assignee under paragraph (b) of this Section; and (B) shall not be entitled to receive any greater payment under Sections 2.10 or 2.13, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent the Borrower has approved such Participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to

use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 2.17 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 8.05 as though it were a Lender; provided that such Participant agrees to be subject to Section 2.14 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Advances or other obligations under this Agreement (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under this Agreement) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) and proposed Section 1.163-5 of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Agent (in its capacity as Agent) shall have no responsibility for maintaining a Participant Register.

(e) Certain Pledges. Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

SECTION 8.08. Confidentiality. Each of the Agent and the Lenders agrees to maintain the confidentiality of the Borrower Information (as defined below), and agrees that it shall only use such Borrower Information in connection with the transactions contemplated by this Agreement and not disclose such information other than (a) to its Affiliates and to its Related Parties (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential); (b) to the extent required or requested by any regulatory authority purporting to have jurisdiction over such Person or its Related Parties (including any self-regulatory authority, such as the National Association of Insurance Commissioners) (in which case the Agent and the Lenders agree to the extent not prohibited by applicable law, rule, regulation or order, to inform the Borrower promptly of the disclosure thereof and to the extent practicable, prior thereto; provided, however, that the disclosing party shall have no liability for the failure to provide such notice); (c) to the extent required by applicable laws or regulations or by any subpoena or similar legal process (in which case the Agent and the Lenders agree to the extent not prohibited by applicable law, rule, regulation or order, to inform the Borrower promptly of the disclosure thereof and to the extent practicable, prior thereto); (d) to any other party hereto; (e) in connection with the exercise of any remedies hereunder or any action or proceeding relating to this Agreement or the enforcement of rights hereunder or thereunder; (f) subject to an agreement for the benefit of the Borrower containing provisions substantially the same as those of this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights and obligations under this Agreement, or (ii) any actual or prospective party (or its Related Parties) to any swap, derivative or other transaction under which payments are to be made by reference to the Borrower and its obligations, this Agreement or payments hereunder or to any credit insurance provider relating to the Borrower and its obligations; (g) on a confidential basis to (i) any rating agency in connection with rating the Borrower or its Subsidiaries or this Agreement or (ii) the CUSIP Service Bureau or any similar agency in connection with the issuance and monitoring of CUSIP numbers with respect to this Agreement; (h) with the written consent of the Borrower; or (i) to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section, or (y) becomes

available to the Agent, any Lender or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower.

For purposes of this Section, “Information” means all information received from the Borrower or any of its Subsidiaries relating to the Borrower or any of its Subsidiaries or any of their respective businesses, other than any such information that is available to the Agent or any Lender on a nonconfidential basis prior to disclosure by the Borrower or any of its Subsidiaries. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

SECTION 8.09. Governing Law. This Agreement and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby shall be governed by, and construed in accordance with, the law of the State of New York.

SECTION 8.10. Execution in Counterparts. This Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Delivery of an executed counterpart of a signature page to this Agreement by telecopier or other electronic delivery shall be effective as delivery of a manually executed counterpart of this Agreement.

SECTION 8.11. Judgment. (a) If for the purposes of obtaining judgment in any court it is necessary to convert a sum due hereunder in Dollars into another currency, the parties hereto agree, to the fullest extent that they may effectively do so, that the rate of exchange used shall be that at which in accordance with normal banking procedures the Agent could purchase Dollars with such other currency at Citibank’s principal office in London at 11:00 A.M. (London time) on the Business Day preceding that on which final judgment is given.

(b) If for the purposes of obtaining judgment in any court it is necessary to convert a sum due hereunder in a Committed Currency into Dollars, the parties agree to the fullest extent that they may effectively do so, that the rate of exchange used shall be that at which in accordance with normal banking procedures the Agent could purchase such Committed Currency with Dollars at Citibank’s principal office in London at 11:00 A.M. (London time) on the Business Day preceding that on which final judgment is given.

(c) The obligation of the Borrower in respect of any sum due from it in any currency (the “Primary Currency”) to any Lender or the Agent hereunder shall, notwithstanding any judgment in any other currency, be discharged only to the extent that on the Business Day following receipt by such Lender or the Agent (as the case may be), of any sum adjudged to be so due in such other currency, such Lender or the Agent (as the case may be) may in accordance with normal banking procedures purchase the applicable Primary Currency with such other currency; if the amount of the applicable Primary Currency so purchased is less than such sum due to such Lender or the Agent (as the case may be) in the applicable Primary Currency, the Borrower agrees, as a separate obligation and notwithstanding any such judgment, to indemnify such Lender or the Agent (as the case may be) against such loss, and if the amount of the applicable Primary Currency so purchased exceeds such sum due to any Lender or the Agent (as the case may be) in the applicable Primary Currency, such Lender or the Agent (as the case may be) agrees to remit to the Borrower such excess.

SECTION 8.12. Jurisdiction, Etc. (a) Jurisdiction. The Borrower irrevocably and unconditionally agrees that it will not commence any action, litigation or proceeding of any kind or description, whether in law or equity, whether in contract or in tort or otherwise, against the Agent, any Lender, or any Related Party of the foregoing in any way relating to this Agreement or the transactions relating hereto or thereto, in any forum other than the courts of the State of New York sitting in New York County, and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, and each of the parties hereto irrevocably and unconditionally submits to the jurisdiction of such courts and agrees that all claims in respect of any such action, litigation or proceeding may be heard and determined in such New York State court or, to the fullest extent permitted by applicable law, in such federal court. Each of the parties hereto agrees that a final judgment in any such action, litigation or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement shall affect any right that the Agent or any Lender may otherwise have to bring any action or proceeding relating to this Agreement against the Borrower or its properties in the courts of any jurisdiction.

(b) Waiver of Venue. Each party hereto irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any objection that it may now or hereafter have to the laying of venue of any action or proceeding arising out of or relating to this Agreement in any court referred to in paragraph (b) of this Section. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(c) Service of Process. Each party hereto irrevocably consents to service of process in the manner provided for notices in Section 8.02. Nothing in this Agreement will affect the right of any party hereto to serve process in any other manner permitted by applicable law.

SECTION 8.13. Substitution of Currency. If a change in any Committed Currency occurs pursuant to any applicable law, rule or regulation of any governmental, monetary or multi-national authority, this Agreement (including, without limitation, the definition of Eurocurrency Rate) will be amended to the extent determined by the Agent (acting reasonably and in consultation with the Borrower) to be necessary to reflect the change in currency and to put the Lenders and the Borrower in the same position, so far as possible, that they would have been in if no change in such Committed Currency had occurred.

SECTION 8.14. Patriot Act Notice. Each Lender and the Agent (for itself and not on behalf of any Lender) hereby notifies the Borrower that pursuant to the requirements of the Patriot Act, it is required to obtain, verify and record information that identifies the Borrower, which information includes the name and address of the Borrower and other information that will allow such Lender or the Agent, as applicable, to identify the Borrower in accordance with the Patriot Act. The Borrower shall provide such information and take such actions as are reasonably requested by the Agent or any Lenders in order to assist the Agent and the Lenders in maintaining compliance with the Patriot Act.

SECTION 8.15. Other Relationships; No Fiduciary Duty. No relationship created hereunder shall in any way affect the ability of the Agent and each Lender to enter into or maintain business relationships with the Borrower or any Affiliate thereof beyond the relationships specifically contemplated by this Agreement. The Borrower agrees that in connection with all aspects of the transactions contemplated hereby and any communications in connection therewith, the Borrower, its Subsidiaries and their respective Affiliates, on the one hand, and the Agent, the Lenders and their respective Affiliates, on the other hand, will have a business relationship that does not create, by

implication or otherwise, any advisory, equitable or fiduciary duties on the part of the Agent, any Lender or any of their respective Affiliates, and no such duties will be deemed to have arisen in connection with any such transactions or communications. The Borrower also hereby agrees that none of the Agent, any Lender or any of their respective Affiliates have advised and are advising the Borrower as to any legal, accounting, regulatory or tax matters, and that the Borrower is consulting its own advisors concerning such matters to the extent it deems appropriate.

Section 8.16. Acknowledgement and Consent to Bail-In of EEA Financial Institutions. Notwithstanding anything to the contrary in this Agreement or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under this Agreement, to the extent such liability is unsecured, may be subject to the Write-Down and Conversion Powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

- (a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable:
 - (i) a reduction in full or in part or cancellation of any such liability;
 - (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement; or
 - (iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of any EEA Resolution Authority.

The following terms, as used herein, have the following meanings:

“Bail-In Action” means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

“Bail-In Legislation” means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

“EEA Financial Institution” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority” means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“EU Bail-In Legislation Schedule” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“Loan Market Association” means the London trade association, which is the self-described authoritative voice of the syndicated loan markets in Europe, the Middle East and Africa.

“Write-Down and Conversion Powers” means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

SECTION 8.17. Waiver of Jury Trial. Each party hereto hereby irrevocably 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 hereby (whether based on contract, tort or any other theory). Each party hereto (a) certifies that no representative, agent or attorney of any other person has represented, expressly or otherwise, that such other person 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 the Section.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officers thereunto duly authorized, as of the date first above written.

JUNIPER NETWORKS, INC.

By /s/ Ken Miller

Name: Ken Miller

Title: Executive Vice President and Chief Financial Officer

CITIBANK, N.A.,

as Agent and as a Lender

By /s/ Susan M. Olsen

Name: Susan M. Olsen

Title: Vice President

BANK OF AMERICA, N.A.

By /s/ Amanuel Assefa

Name: Amanuel Assefa

Title: Vice President

BARCLAYS BANK PLC

By /s/ Martin Corrigan

Name: Martin Corrigan

Title: Vice President

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH

By /s/ Whitney Gaston
Name: Whitney Gaston
Title: Authorized Signatory

By /s/ Komal Shah
Name: Komal Shah
Title: Authorized Signatory

HSBC BANK USA, NATIONAL ASSOCIATION

By /s/ Jess French
Name: Jeff French
Title: Managing Director

JPMORGAN CHASE BANK, N.A.

By /s/ Min Park
Name: Min Park
Title: Vice President

MIZUHO BANK, LTD.

By /s/ Donna DeMagistris
Name: Donna DeMagistris
Title: Authorized Signatory

WELLS FARGO BANK, NATIONAL ASSOCIATION

By /s/ Monica Trautwein
Name: Monica Trautwein
Title: Director

SCHEDULE I
JUNIPER NETWORKS, INC.
FIVE YEAR CREDIT AGREEMENT
COMMITMENTS

To be updated

<u>Name of Initial Lender</u>	<u>Commitment</u>
Citibank, N.A.	\$85,000,000
Bank of America, N.A.	\$85,000,000
Barclays Bank PLC	\$55,000,000
Credit Suisse AG, Cayman Islands Branch	\$55,000,000
HSBC Bank USA, National Association	\$55,000,000
JPMorgan Chase Bank, N.A.	\$55,000,000
Mizuho Bank, Ltd.	\$55,000,000
Wells Fargo Bank, National Association	\$55,000,000
Total:	\$500,000,000

EXHIBIT A - FORM OF
PROMISSORY NOTE

U.S.\$ _____ Dated: _____, 20__

FOR VALUE RECEIVED, the undersigned, Juniper Networks, Inc., a Delaware corporation (the "Borrower"), HEREBY PROMISES TO PAY to _____ or its registered assigns (the "Lender") for the account of its Applicable Lending Office on the Termination Date applicable to the Lender (each as defined in the Credit Agreement referred to below) the principal sum of U.S.\$[amount of the Lender's Commitment in figures] or, if less, the aggregate principal amount of the Advances made by the Lender to the Borrower pursuant to the Credit Agreement dated as of April 25, 2019 among the Borrower, the Lender and certain other lenders parties thereto, and Citibank, N.A., as Agent for the Lender and such other lenders (as amended or modified from time to time, the "Credit Agreement"; the terms defined therein being used herein as therein defined) outstanding on the Termination Date.

The Borrower promises to pay interest on the unpaid principal amount of each Advance from the date of such Advance until such principal amount is paid in full, at such interest rates, and payable at such times, as are specified in the Credit Agreement.

Both principal and interest in respect of each Advance (i) in Dollars are payable in lawful money of the United States of America to the Agent at its account maintained at 388 Greenwich Street, New York, New York 10013, in same day funds and (ii) in any Committed Currency are payable in such currency at the applicable Payment Office in same day funds. Each Advance owing to the Lender by the Borrower pursuant to the Credit Agreement, and all payments made on account of principal thereof, shall be recorded by the Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Promissory Note.

This Promissory Note is one of the Notes referred to in, and is entitled to the benefits of, the Credit Agreement. The Credit Agreement, among other things, (i) provides for the making of Advances by the Lender to the Borrower from time to time in an aggregate amount not to exceed at any time outstanding the Dollar amount first above mentioned, the indebtedness of the Borrower resulting from each such Advance being evidenced by this Promissory Note, (ii) contains provisions for determining the Dollar Equivalent of Advances denominated in Committed Currencies and (iii) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events and also for prepayments on account of principal hereof prior to the maturity hereof upon the terms and conditions therein specified.

JUNIPER NETWORKS, INC.

By_____
Title:

EXHIBIT B - FORM OF NOTICE OF
BORROWING

Citibank, N.A., as Agent
for the Lenders parties
to the Credit Agreement
referred to below
1615 Brett Road, Building #3
New Castle, Delaware 19720

[Date]

Attention: Bank Loan Syndications Department

Ladies and Gentlemen:

The undersigned, Juniper Networks, Inc., refers to the Credit Agreement, dated as of April 25, 2019 (as amended or modified from time to time, the "Credit Agreement", the terms defined therein being used herein as therein defined), among the undersigned, certain Lenders parties thereto and Citibank, N.A., as Agent for said Lenders, and hereby gives you notice, irrevocably, pursuant to Section 2.02 of the Credit Agreement that the undersigned hereby requests a Borrowing under the Credit Agreement, and in that connection sets forth below the information relating to such Borrowing (the "Proposed Borrowing") as required by Section 2.02(a) of the Credit Agreement:

- (i) The Business Day of the Proposed Borrowing is _____, 20__.
- (ii) The Type of Advances comprising the Proposed Borrowing is [Base Rate Advances] [Eurocurrency Rate Advances].
- (iii) The aggregate amount of the Proposed Borrowing is [\$_____][for a Borrowing in a Committed Currency, list currency and amount of Borrowing].
- [(iv) The initial Interest Period for each Eurocurrency Rate Advance made as part of the Proposed Borrowing is _____ month[s].]

The undersigned hereby certifies that the following statements are true on the date hereof, and will be true on the date of the Proposed Borrowing:

(A) the representations and warranties contained in Section 4.01 of the Credit Agreement (except the representations set forth in the last sentence of subsection (e) thereof and in subsection (f)(i) thereof) are true and correct in all material respects (or if qualified by materiality or Material Adverse Effect, in all respects), before and after giving effect to the Proposed Borrowing and to the application of the proceeds therefrom, as though made on and as of such date; and

(B) no event has occurred and is continuing, or would result from such Proposed Borrowing or from the application of the proceeds therefrom, that constitutes a Default.

Very truly yours,

JUNIPER NETWORKS, INC.

By_____
Title:

ASSIGNMENT AND ASSUMPTION

This Assignment and Assumption (the “Assignment and Assumption”) is dated as of the Effective Date set forth below and is entered into by and between [the][each] ¹ Assignor identified in item 1 below ([the][each, an] “Assignor”) and [the][each]² Assignee identified in item 2 below ([the][each, an] “Assignee”). [It is understood and agreed that the rights and obligations of [the Assignors][the Assignees]³ hereunder are several and not joint.]⁴ Capitalized terms used but not defined herein shall have the meanings given to them in the Credit Agreement identified below (as amended, the “Credit Agreement”), receipt of a copy of which is hereby acknowledged by [the][each] Assignee. The Standard Terms and Conditions set forth in Annex 1 attached hereto are hereby agreed to and incorporated herein by reference and made a part of this Assignment and Assumption as if set forth herein in full.

For an agreed consideration, [the][each] Assignor hereby irrevocably sells and assigns to [the Assignee][the respective Assignees], and [the][each] Assignee hereby irrevocably purchases and assumes from [the Assignor][the respective Assignors], subject to and in accordance with the Standard Terms and Conditions and the Credit Agreement, as of the Effective Date inserted by the Administrative Agent as contemplated below (i) all of [the Assignor’s][the respective Assignors’] rights and obligations in [its capacity as a Lender][their respective capacities as Lenders] under the Credit Agreement and any other documents or instruments delivered pursuant thereto to the extent related to the amount and percentage interest identified below of all of such outstanding rights and obligations of [the Assignor][the respective Assignors] under the respective facilities identified below (including without limitation any letters of credit, guarantees, and swingline loans included in such facilities), and (ii) to the extent permitted to be assigned under applicable law, all claims, suits, causes of action and any other right of [the Assignor (in its capacity as a Lender)][the respective Assignors (in their respective capacities as Lenders)] against any Person, whether known or unknown, arising under or in connection with the Credit Agreement, any other documents or instruments delivered pursuant thereto or the loan transactions governed thereby or in any way based on or related to any of the foregoing, including, but not limited to, contract claims, tort claims, malpractice claims, statutory claims and all other claims at law or in equity related to the rights and obligations sold and assigned pursuant to clause (i) above (the rights and obligations sold and assigned by [the][any] Assignor to [the][any] Assignee pursuant to clauses (i) and (ii) above being referred to herein collectively as [the][an] “Assigned Interest”). Each such sale and assignment is without recourse to [the][any] Assignor and, except as expressly provided in this Assignment and Assumption, without representation or warranty by [the][any] Assignor.

- 1 For bracketed language here and elsewhere in this form relating to the Assignor(s), if the assignment is from a single Assignor, choose the first bracketed language. If the assignment is from multiple Assignors, choose the second bracketed language.
- 2 For bracketed language here and elsewhere in this form relating to the Assignee(s), if the assignment is to a single Assignee, choose the first bracketed language. If the assignment is to multiple Assignees, choose the second bracketed language.
- 3 Select as appropriate.
- 4 Include bracketed language if there are either multiple Assignors or multiple Assignees.

1. Assignor[s]: _____

 [Assignor [is] [is not] a Defaulting Lender]

2. Assignee[s]: _____

 [for each Assignee, indicate [Affiliate][Approved Fund] of [identify Lender]

3. Borrower(s): Juniper Networks, Inc.

4. Administrative Agent: Citibank, N.A., as the administrative agent under the Credit Agreement

5. Credit Agreement: The Credit Agreement dated as of April 25, 2019 among Juniper Networks, Inc., the Lenders parties thereto, Citibank, N.A., as Administrative Agent, and the other agents parties thereto

6. Assigned Interest[s]:

Assignor[s] ⁵	Assignee[s] ⁶	Aggregate Amount of Commitment/Advances for all Lenders ⁷	Amount of Commitment/Advances Assigned ⁸	Percentage Assigned of Commitment/Advances ⁸	CUSIP Number
		\$	\$	%	
		\$	\$	%	
		\$	\$	%	

[7. Trade Date: _____]⁹

- 5 List each Assignor, as appropriate.
- 6 List each Assignor, as appropriate.
- 7 Amount to be adjusted by the counterparties to take into account any payments or prepayments made between the Trade Date and the Effective Date.
- 8 Set forth, to at least 9 decimals, as a percentage of the Commitment/Advances of all Lenders thereunder.
- 9 To be completed if the Assignor(s) and the Assignee(s) intend that the minimum assignment amount is to be determined as of the Trade Date.

Effective Date: _____, 20__ [TO BE INSERTED BY ADMINISTRATIVE AGENT AND WHICH SHALL BE THE EFFECTIVE DATE OF RECORDATION OF TRANSFER IN THE REGISTER THEREFOR.]

The terms set forth in this Assignment and Assumption are hereby agreed to:

ASSIGNOR[S]¹⁰

[NAME OF ASSIGNOR]

By: _____
Title:

[NAME OF ASSIGNOR]

By: _____
Title:

ASSIGNEE[S]¹¹

[NAME OF ASSIGNEE]

By: _____
Title:

[NAME OF ASSIGNEE]

By: _____
Title:

[Consented to and]¹² Accepted:

- 10 Add additional signature blocks as needed. Include both Fund/Pension Plan and manager making the trade (if applicable).
- 11 Add additional signature blocks as needed. Include both Fund/Pension Plan and manager making the trade (if applicable).
- 12 To be added only if the consent of the Administrative Agent is required by the terms of the Credit Agreement.

[NAME OF ADMINISTRATIVE AGENT], as
Administrative Agent

By: ___
Title:

[Consented to:]¹³
[NAME OF RELEVANT PARTY]

By: __
Title:

13 To be added only if the consent of the Borrower is required by the terms of the Credit Agreement.

STANDARD TERMS AND CONDITIONS FOR
ASSIGNMENT AND ASSUMPTION

1. Representations and Warranties.

1.1 Assignor[s]. [The][Each] Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of [the][the relevant] Assigned Interest, (ii) [the][such] Assigned Interest is free and clear of any lien, encumbrance or other adverse claim, (iii) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and (iv) it is [not] a Defaulting Lender; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the Credit Agreement, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Credit Agreement or any collateral thereunder, (iii) the financial condition of the Borrower, any of its Subsidiaries or Affiliates or any other Person obligated in respect of the Credit Agreement, or (iv) the performance or observance by the Borrower, any of its Subsidiaries or Affiliates or any other Person of any of their respective obligations under the Credit Agreement.

1.2. Assignee[s]. [The][Each] Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and to become a Lender under the Credit Agreement, (ii) it meets all the requirements to be an assignee under Section 8.07(b)(iii), (v) and (vi) of the Credit Agreement (subject to such consents, if any, as may be required under Section 8.07(b)(iii) of the Credit Agreement), (iii) from and after the Effective Date, it shall be bound by the provisions of the Credit Agreement as a Lender thereunder and, to the extent of [the][the relevant] Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by the Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire the Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the Credit Agreement, and has received or has been accorded the opportunity to receive copies of the most recent financial statements delivered pursuant to Section 5.01(h) thereof, as applicable, and such other documents and information as it deems appropriate to make its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest, (vi) it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest, and (vii) if it is a Foreign Lender attached to the Assignment and Assumption is any documentation required to be delivered by it pursuant to the terms of the Credit Agreement, duly completed and executed by [the][such] Assignee; and (b) agrees that (i) it will, independently and without reliance on the Administrative Agent, [the][any] Assignor or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Credit Agreement are required to be performed by it as a Lender.

2. Payments. From and after the Effective Date, the Administrative Agent shall make all payments in respect of [the][each] Assigned Interest (including payments of principal, interest, fees and other amounts) to [the][the relevant] Assignee whether such amounts have accrued prior to, on or

after the Effective Date. The Assignor[s] and the Assignee[s] shall make all appropriate adjustments in payments by the Administrative Agent for periods prior to the Effective Date or with respect to the making of this assignment directly between themselves. Notwithstanding the foregoing, the Administrative Agent shall make all payments of interest, fees or other amounts paid or payable in kind from and after the Effective Date to [the][the relevant] Assignee.

3. General Provisions. This Assignment and Assumption shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. This Assignment and Assumption may be executed in any number of counterparts, which together shall constitute one instrument. Delivery of an executed counterpart of a signature page of this Assignment and Assumption by telecopy or email shall be effective as delivery of a manually executed counterpart of this Assignment and Assumption. This Assignment and Assumption shall be governed by, and construed in accordance with, the law of the State of New York.

EXHIBIT D - FORM OF
OPINION OF COUNSEL
FOR THE BORROWER



EXHIBIT E-1

FORM OF
U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of April 25, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Juniper Networks, Inc., and each lender from time to time party thereto.

Pursuant to the provisions of Section 2.13 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Advance(s) (as well as any Note(s) evidencing such Advance(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Agent and the Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By: _____
Name:
Title:

Date: _____, 20__

EXHIBIT E-2

FORM OF
U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of April 25, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Juniper Networks, Inc., and each lender from time to time party thereto.

Pursuant to the provisions of Section 22.13 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

Date: _____, 20__

EXHIBIT E-3

FORM OF
U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of April 25, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Juniper Networks, Inc., and each lender from time to time party thereto.

Pursuant to the provisions of Section 2.13 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

Date: _____, 20__

EXHIBIT E-4

FORM OF
U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of April 25, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Juniper Networks, Inc., and each lender from time to time party thereto.

Pursuant to the provisions of Section 2.13 of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Advance(s) (as well as any Note(s) evidencing such Advance(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Advance(s) (as well as any Note(s) evidencing such Advance(s)), (iii) with respect to the extension of credit pursuant to this Credit Agreement, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By: _____
Name:
Title:

Date: _____, 20__

**AMENDMENT NO. 1 TO THE
CREDIT AGREEMENT**

Dated as of December 17, 2021

AMENDMENT NO. 1 TO THE CREDIT AGREEMENT among JUNIPER NETWORKS, INC., a Delaware corporation (the "Borrower"), the banks, financial institutions and other institutional lenders parties to the Credit Agreement referred to below (collectively, the "Lenders") and CITIBANK, N.A. ("Citibank"), as administrative agent (the "Agent") for the Lenders.

PRELIMINARY STATEMENTS:

- (1) The Borrower, the Lenders and the Agent have entered into a Credit Agreement dated as of April 25, 2019 (as amended, supplemented or otherwise modified through the date hereof, the "Credit Agreement"). Capitalized terms not otherwise defined in this Amendment have the same meanings as specified in the Credit Agreement.
- (2) Certain Advances under the Credit Agreement denominated in Sterling incur or are permitted to incur interest based on the London Interbank Offered Rate ("LIBOR") in accordance with the terms of the Credit Agreement; and
- (3) Applicable parties under the Credit Agreement have determined in accordance with the Credit Agreement that LIBOR for Sterling should be replaced with a successor rate in accordance with the Credit Agreement and, in connection therewith, the Agent has determined that certain conforming changes are necessary or advisable.
- (4) The Borrower and the Lenders have agreed to amend the Credit Agreement as hereinafter set forth.

SECTION 1. Amendments to Credit Agreement. The Credit Agreement is, effective as of the date hereof and subject to the satisfaction of the conditions precedent set forth in Section 3, hereby amended as follows:

- (a) Section 1.01 is amended by adding the following definitions in appropriate alphabetical order:

"SONIA" means, with respect to any applicable determination date (a "SONIA Rate Day"), a rate equal to the Sterling Overnight Index Average as administered by the SONIA Administrator, published on the fifth Business Day preceding such SONIA Rate Day on the SONIA Administrator's Website (or such other commercially available source providing such quotations as may be designated by the Agent from time to time); provided however that if such SONIA Rate Day is not a Business Day, SONIA means such rate that applied on the fifth Business Day preceding on the first Business Day immediately prior to such SONIA Rate Day. If by 5:00 pm (London time) on the second Business Day immediately following any determination date SONIA in respect of such SONIA Rate Day has not been published on the SONIA Administrator's Website and a Benchmark Transition Event with respect to SONIA has not occurred, then SONIA for such SONIA Rate Day will be as published in respect of the first preceding Business Day for which SONIA was published on the SONIA Administrator's Website; provided that SONIA determined pursuant to this sentence shall be utilized for no more than three (3) consecutive SONIA Rate Days. If SONIA is less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

“SONIA Adjustment” means 0.0326% per annum.

“SONIA Administrator” means the Bank of England (or any successor administrator of the Sterling Overnight Index Average).

“SONIA Administrator’s Website” means the Bank of England’s website, currently at <http://www.bankofengland.co.uk>, or any successor source for the Sterling Overnight Index Average identified as such by the SONIA Administrator from time to time.

“SONIA Advance” means an Advance denominated in Sterling that bears interest as provided in Section 2.06(a)(iii).

“Sterling” means the lawful currency of the United Kingdom of Great Britain and Northern Ireland.

(b) The definition of “Interest Period” in Section 1.01 is amended by deleting the phrase “one, two, three or six months” and substituting therefor the phrase “one, three or six months”.

(c) Section 1.01 is further amended by restating the definitions of “Advance” and “Business Day” in full to read as follows:

“Advance” means an advance by a Lender to the Borrower as part of a Borrowing and refers to a Base Rate Advance, a Eurocurrency Rate Advance or a SONIA Advance (each of which shall be a “Type” of Advance).

“Business Day” means a day of the year (a) on which banks are not required or authorized by law to close in New York City, (b) if the applicable Business Day relates to any Eurocurrency Rate Advances, on which dealings are carried on in the London interbank market and banks are open for business in London and in the country of issue of the currency of such Eurocurrency Rate Advance (or in the case of an Advance denominated in Euro, a TARGET2 Day) and (c) if the applicable Business Day relates to any SONIA Advances, on which banks are open for business in London.

(d) Section 2.02(a) is amended in full to read as follows:

SECTION 2.02. Making the Advances. (a) Each Borrowing shall be made on notice, given not later than (w) 1:00 P.M. (New York City time) on the third Business Day prior to the date of the proposed Borrowing in the case of a Borrowing consisting of Eurocurrency Rate Advances denominated in Dollars, (x) 4:00 P.M. (London time) on the third Business Day prior to the date of the proposed Borrowing in the case of a Borrowing consisting of Eurocurrency Rate Advances denominated in Euro, (y) 4:00 P.M. (London time) on the third Business Day prior to the date of the proposed Borrowing in the case of a Borrowing consisting of SONIA Advances or (z) 1:00 P.M. (New York City time) on the date of the proposed Borrowing in the case of a Borrowing consisting of Base Rate Advances, by the Borrower to the Agent, which shall give to each Lender prompt notice thereof by telecopier or email. Each such notice of a Borrowing (a “Notice of Borrowing”) shall be by telephone, confirmed immediately in writing, or telecopier or email in substantially the form of Exhibit B hereto, specifying therein the requested (i) date of such Borrowing, (ii) Type of Advances comprising such Borrowing, (iii) aggregate amount of such Borrowing, and (iv) in the case of a Borrowing consisting

of Eurocurrency Rate Advances, initial Interest Period and currency for each such Advance. Each Lender shall, before 3:00 P.M. (New York City time) on the date of such Borrowing, in the case of a Borrowing consisting of Advances denominated in Dollars, and before 11:00 A.M. (London time) on the date of such Borrowing, in the case of a Borrowing consisting of Eurocurrency Rate Advances denominated in any Committed Currency or consisting of SONIA Advances, make available for the account of its Applicable Lending Office to the Agent at the applicable Agent's Account, in same day funds, such Lender's ratable portion of such Borrowing. After the Agent's receipt of such funds and upon fulfillment of the applicable conditions set forth in Article III, the Agent will make such funds available to the Borrower at the Agent's address referred to in Section 8.02 or at the applicable Payment Office, as the case may be.

(e) Section 2.02 is further amended by adding at the end thereof a new subsection (f), to read as follows:

(f) With respect to any SONIA Advances, the Agent will have the right to make Conforming Changes from time to time and, notwithstanding anything to the contrary herein, any amendments implementing such Conforming Changes will become effective without any further action or consent of any other party to this Agreement; provided that, with respect to any such amendment effected, the Agent shall post each such amendment implementing such Conforming Changes to the Borrower and the Lenders reasonably promptly after such amendment becomes effective. "Conforming Changes" means any technical, administrative or operational changes (including changes to the definition of "Business Day," the timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, the applicability and length of lookback periods, the applicability of breakage provisions and other technical, administrative or operational matters) that the Agent decides may be appropriate to reflect the adoption and implementation of SONIA and to permit the administration thereof by the Agent in a manner substantially consistent with market practice (or, if the Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Agent determines that no market practice for the administration of SONIA exists, in such other manner of administration as the Agent decides is reasonably necessary in connection with the administration of this Agreement).

(f) Section 2.06(a) is amended by adding at the end thereof a new clause (iii), to read as follows:

(iii) SONIA Advances. If such Advance is a SONIA Advance, a rate per annum equal to SONIA in effect from time to time plus the SONIA Adjustment plus the Applicable Margin for Eurocurrency Rate Advances, payable in arrears on each date that is on the numerically corresponding day in the calendar month that is one month after the Borrowing of such Advance (or, if there is no such numerically corresponding day in such month, then the last day of such month) during the period such SONIA Advance remains outstanding and on the date such SONIA Advance shall be paid in full.

(g) Section 2.06(b) is amended by deleting the phrase "clause (a)(i) or (a)(ii) above" and substituting therefor the phrase clause (a)(i), (a)(ii) or (a)(iii) above" in each place such phrase appears.

(h) Section 2.07(b) is amended in full to read as follows:

(b) If the Required Lenders notify the Agent that (i) with respect to any Eurocurrency Rate Advances (A) they are unable to obtain matching deposits in the

London inter-bank market at or about 11:00 A.M. (London time) on the second Business Day before the making of a Borrowing in sufficient amounts to fund their respective Advances as a part of such Borrowing during its Interest Period, (B) with respect to any Eurocurrency Rate Advances, the Eurocurrency Rate for any Interest Period for such Advances will not adequately reflect the cost to such Required Lenders of making, funding or maintaining their respective Eurocurrency Rate Advances for such Interest Period, or (ii) with respect to any SONIA Advances, SONIA for such Advances will not adequately reflect the cost to such Required Lenders of making, funding or maintaining their respective SONIA Advances, of if the Agent determines that adequate and reasonable means do not exist for determining the applicable Eurocurrency Rate or SONIA on the applicable determination date for the applicable Advances, the Agent shall forthwith so notify the Borrower and the Lenders, whereupon (A) the Borrower will, on the last day of the then existing Interest Period for Eurocurrency Rate Advances, (1) if such Eurocurrency Rate Advances are denominated in Dollars, either (x) prepay such Advances or (y) Convert such Advances into Base Rate Advances and (2) if such Eurocurrency Rate Advances are denominated in any Committed Currency, either (x) prepay such Advances or (y) exchange such Advances into an Equivalent amount of Dollars and Convert such Advances into Base Rate Advances, (B) the Borrower will prepay such SONIA Advances and (C) the obligation of the Lenders to make, or to Convert Advances into, Eurocurrency Rate Advances or SONIA Advances, as applicable, shall be suspended until the Agent shall notify the Borrower and the Lenders that the circumstances causing such suspension no longer exist.

(i) Section 2.07(f) is deleted in full.

(j) Section 2.09(a) is amended ended by deleting the phrase “upon notice at least three Business Days’ prior to the date of such prepayment, in the case of Eurocurrency Rate Advances” and substituting therefor the phrase “upon notice at least three Business Days’ prior to the date of such prepayment, in the case of Eurocurrency Rate Advances or SONIA Advances.”

(k) Section 2.12(c) is amended in full to read as follows:

(c) All computations of interest based on Citibank’s base rate or SONIA shall be made by the Agent on the basis of a year of 365 or 366 days, as the case may be, and all computations of interest based on the Eurocurrency Rate, the Federal Funds Rate or One Month LIBOR and of fees shall be made by the Agent on the basis of a year of 360 days (or, in each case of Advances denominated in Committed Currencies where market practice differs, in accordance with market practice), in each case for the actual number of days (including the first day but excluding the last day) occurring in the period for which such interest or fees are payable. Each determination by the Agent of an interest rate hereunder shall be conclusive and binding for all purposes, absent manifest error.

(l) Section 2.07(g) is deleted in full.

(m) Article II is amended by adding thereto a new Section 2.21, to read as follows:

SECTION 2.21 Benchmark Replacement Setting . On March 5, 2021 the Financial Conduct Authority (“FCA”), the regulatory supervisor of USD LIBOR’s administrator (“IBA”), announced in a public statement the future cessation or loss of representativeness of overnight/Spot Next, 1-month, 3-month, 6-month and 12- month USD LIBOR tenor settings. Notwithstanding anything to the contrary herein:

(a) Replacing USD LIBOR. On the earlier of (i) the date that all Available Tenors of USD LIBOR have either permanently or indefinitely ceased to be provided by IBA or have been announced by the FCA pursuant to public statement or publication of information to be no longer representative and (ii) the Early Opt-in Effective Date, if the then-current Benchmark is USD LIBOR, the Benchmark Replacement will replace such Benchmark for all purposes hereunder in respect of any setting of such Benchmark on such day and all subsequent settings without any amendment to, or further action or consent of any other party to this Agreement. If the Benchmark Replacement is Daily Simple SOFR, all interest payments will be payable on a quarterly basis.

(b) Replacing Other and Future Benchmarks. Upon (i) the occurrence of a Benchmark Transition Event, the Benchmark Replacement will replace such Benchmark for all purposes hereunder in respect of any such Benchmark setting at or after 5:00 p.m. on the fifth (5th) Business Day after the date notice of such Benchmark Replacement is provided to the Lenders without any amendment to, or further action or consent of any other party to, this Agreement so long as the Agent has not received, by such time, written notice of objection to such Benchmark Replacement from Lenders comprising the Required Lenders or (ii) an Early Opt-in Effective Date with respect to an Other Rate Early Opt-in Election, the Benchmark Replacement will replace such Benchmark for all purposes hereunder in respect of any setting of such Benchmark on such day and all subsequent settings without any amendment to, or further action or consent of any other party to this Agreement. At any time that the administrator of any then-current Benchmark has permanently or indefinitely ceased to provide such Benchmark or such Benchmark has been announced by the regulatory supervisor for the administrator or the administrator of such Benchmark pursuant to public statement or publication of information to be no longer representative and will not be restored, (i) with respect to amounts denominated in Dollars, the Borrower may revoke any request for a borrowing of, conversion to or continuation of Advances to be made, converted or continued that would bear interest by reference to such Benchmark until the Borrower's receipt of notice from the Agent that a Benchmark Replacement has replaced such Benchmark, and, failing that, the Borrower will be deemed to have converted any such request into a request for a borrowing of or conversion to Base Rate Advances and (ii) with respect to amounts denominated in any currency other than Dollars, the obligation of the Lenders to make or maintain Advances referencing such Benchmark in the affected currency shall be suspended (to the extent of the affected amounts or Interest Periods (as applicable)) and any outstanding loans in such currency shall immediately or, in the case of a term rate at the end of the applicable Interest Period, be prepaid in full. During the period referenced in the foregoing sentence, if a component of the Base Rate is based upon the Benchmark, such component will not be used in any determination of the Base Rate.

(c) Benchmark Replacement Conforming Changes. In connection with the implementation and administration of any Benchmark Replacement, the Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.

(d) Notices; Standards for Decisions and Determinations. The Agent will promptly notify the Borrower and the Lenders of (i) the implementation of any Benchmark Replacement and (ii) the effectiveness of any Benchmark Replacement Conforming Changes. For the avoidance of doubt, any notice required to be delivered by the Agent as set forth in this Section 2.21 may be provided, at the option of the Agent (in its sole discretion), in one or more notices and may be delivered together with, or as part of any amendment which implements any Benchmark Replacement or Benchmark

Replacement Conforming Changes. Any determination, decision or election that may be made by the Agent or, if applicable, any Lender (or group of Lenders) pursuant to this Section, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section 2.21.

(e) Unavailability of Tenor of Benchmark. At any time (including in connection with the implementation of any Benchmark Replacement), (i) if any then-current Benchmark is a term rate (including Term SOFR, EURIBOR or USD LIBOR), then the Agent may remove any tenor of such Benchmark that is unavailable or non-representative for Benchmark (including Benchmark Replacement) settings and (ii) the Agent may reinstate any such previously removed tenor for Benchmark (including Benchmark Replacement) settings.

(f) Disclaimer. The Agent does not warrant or accept any responsibility for, and shall not have any liability with respect to (i) the administration, submission or any other matter related to the London interbank offered rate, SONIA or other rates in the definition of “Eurocurrency Rate” or with respect to any alternative or successor rate thereto, or replacement rate thereof (including, without limitation any Benchmark Replacement implemented hereunder), (ii) the composition or characteristics of any such Benchmark Replacement, including whether it is similar to, or produces the same value or economic equivalence to USD LIBOR, EURIBOR, SONIA or any other Benchmark or have the same volume or liquidity as did USD LIBOR, EURIBOR, SONIA or any other Benchmark, (iii) any actions or use of its discretion or other decisions or determinations made with respect to any matters covered by this Section 2.21 including, without limitation, whether or not a Benchmark Transition Event has occurred, the removal or lack thereof of unavailable or non-representative tenors, the implementation or lack thereof of any Benchmark Replacement Conforming Changes, the delivery or non-delivery of any notices required by clause (d) above or otherwise in accordance herewith, and (iv) the effect of any of the foregoing provisions of this Section 2.21.

(g) Certain Defined Terms.

As used in this Section 2.21:

“Available Tenor” means, as of any date of determination and with respect to any then-current Benchmark for any currency, as applicable, (x) if any then-current Benchmark is a term rate, any tenor for such Benchmark that is or may be used for determining the length of an Interest Period or (y) otherwise, any payment period for interest calculated with reference to such Benchmark, as applicable, pursuant to this Agreement as of such date.

“Benchmark” means, initially, (i) with respect to amounts denominated in Dollars, USD LIBOR, (ii) with respect to amounts denominated in Sterling, SONIA and (iii) with respect to any amounts denominated in Euro, EURIBOR; provided that if a replacement of an initial or subsequent Benchmark has occurred pursuant to this Section 2.21, then “Benchmark” means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate. Any reference to “Benchmark” shall include, as applicable, the published component used in the calculation thereof.

“Benchmark Replacement” means, for any Available Tenor:

(1) For purposes of clause (a) of this Section, the first alternative set forth below that can be determined by the Agent:

(a) the sum of: (i) Term SOFR and (ii) 0.11448% (11.448 basis points) for an Available Tenor of one-month's duration, 0.26161% (26.161 basis points) for an Available Tenor of three-months' duration, and 0.42826% (42.826 basis points) for an Available Tenor of six-months' duration; provided, that if any Available Tenor of USD LIBOR does not correspond to an Available Tenor of Term SOFR, the Benchmark Replacement for such Available Tenor of USD LIBOR shall be the closest corresponding Available Tenor (based on tenor) for Term SOFR and if such Available Tenor of USD LIBOR corresponds equally to two Available Tenors of Term SOFR, the corresponding tenor of Term SOFR with the shorter duration shall be applied, or

(b) the sum of: (i) Daily Simple SOFR and (ii) the spread adjustment selected or recommended by the Relevant Governmental Body for the replacement of the tenor of USD LIBOR with a SOFR-based rate having approximately the same length as the interest payment period specified in clause (a) of this Section (which spread adjustment, for the avoidance of doubt, shall be 0.26161% (26.161 basis points)); and

(2) For purposes of clause (b) of this Section, the sum of (a) the alternate benchmark rate and (b) an adjustment (which may be a positive or negative value or zero), in each case, that has been selected by the Agent and the Borrower as the replacement for such Available Tenor of such Benchmark giving due consideration to any evolving or then-prevailing market convention, including any applicable recommendations made by the Relevant Governmental Body, for syndicated credit facilities at such time denominated in the applicable currency in the U.S. syndicated loan market;

provided that, if the Benchmark Replacement as determined pursuant to clause (1) or (2) above would be less than the Floor, the Benchmark Replacement will be deemed to be the Floor for the purposes of this Agreement.

“Benchmark Replacement Conforming Changes” means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of “Base Rate,” the definition of “Business Day,” the definition of “Interest Period,” timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, the applicability and length of lookback periods, the applicability of breakage provisions, the formula for calculating any successor rates identified pursuant to the definition of “Benchmark Replacement”, the formula, methodology or convention for applying the successor Floor to the successor Benchmark Replacement and other technical, administrative or operational matters) that the Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Agent in a manner substantially consistent with market practice (or, if the Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Agent determines that no market practice for the administration of such Benchmark Replacement exists, in such other manner of administration as the Agent decides is reasonably necessary in connection with the administration of this Agreement).

“Benchmark Transition Event” means, with respect to any then-current Benchmark other than USD LIBOR, the occurrence of one or more of the following

events: a public statement or publication of information by or on behalf of the administrator of any then-current Benchmark, the regulatory supervisor for the administrator of such Benchmark, the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, the central bank for the currency applicable to such Benchmark, an insolvency official with jurisdiction over the administrator for such Benchmark, a resolution authority with jurisdiction over the administrator for such Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark, announcing or stating that (a) such administrator has ceased or will cease on a specified date to provide all Available Tenors of such Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark or (b) all Available Tenors of such Benchmark are or will no longer be representative of the underlying market and economic reality that such Benchmark is intended to measure and that representativeness will not be restored.

“Daily Simple SOFR” means, for any day, SOFR, with the conventions for this rate (which will include a lookback) being established by the Agent in accordance with the conventions for this rate recommended by the Relevant Governmental Body for determining “Daily Simple SOFR” for syndicated business loans; provided, that if the Agent decides that any such convention is not administratively feasible for the Agent, then the Agent may establish another convention in its reasonable discretion.

“Early Opt-in Effective Date” means, with respect to any Early Opt-in Election, the sixth (6th) Business Day after the date notice of such Early Opt-in Election is provided to the Lenders, so long as the Agent has not received, by 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the date notice of such Early Opt-in Election is provided to the Lenders, written notice of objection to such Early Opt-in Election from Lenders comprising the Required Lenders.

“Early Opt-in Election” means, if the then-current Benchmark is USD LIBOR or EURIBOR, the occurrence of the following:

(1) (a) with respect to Dollars, a notification by the Agent to (or the request by the Borrower to the Agent to notify) each of the other parties hereto that at least five currently outstanding Dollar denominated syndicated credit facilities in the U.S. syndicated loan market at such time contain (as a result of amendment or as originally executed) a SOFR-based rate (including SOFR, a term SOFR or any other rate based upon SOFR) as a benchmark rate (and such syndicated credit facilities are identified in such notice and are publicly available for review); or (b) with respect to a Non-Hardwired Currency, a notification by the Agent to (or the request by the Borrower to the Agent to notify) each of the other parties hereto that at least five currently outstanding syndicated credit facilities which include such Non-Hardwired Currency at such time in the U.S. syndicated loan market contain or are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace the then current Benchmark with respect to such Non-Hardwired Currency as a benchmark rate (and such syndicated credit facilities are identified in such notice and are publicly available for review), and

(2) in each case, the joint election by the Agent and the Borrower to trigger a fallback from the applicable Benchmark and the provision by the Agent of written notice of such election to the Lenders.

“EURIBOR” means the Euro interbank offered rate.

“Floor” means the benchmark rate floor, if any, provided in this Agreement initially (as of the execution of this Agreement, the modification, amendment or renewal of this Agreement or otherwise) with respect to the initial Benchmark for each currency provided for hereunder.

“Non-Hardwired Currencies” means all currencies other than Dollars.

“Other Rate Early Opt-in Election” means an Early Opt-in Election has occurred under clause (1)(b) and (2) of the definition of “Early Opt-in Election”.

“Relevant Governmental Body” means (a) with respect to a Benchmark Replacement in respect of Dollars, the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York, or any successor thereto. and (b) with respect to a Benchmark Replacement in respect of any Non-Hardwired Currency, (1) the central bank for the currency in which such amounts are denominated hereunder or any central bank or other supervisor which is responsible for supervising either (A) such Benchmark Replacement or (B) the administrator of such Benchmark Replacement or (2) any working group or committee officially endorsed or convened by (A) the central bank for the currency in which such amounts are denominated, (B) any central bank or other supervisor that is responsible for supervising either (i) such Benchmark Replacement or (ii) the administrator of such Benchmark Replacement, (C) a group of those central banks or other supervisors or (D) the Financial Stability Board or any part thereof.

“SOFR” means a rate per annum equal to the secured overnight financing rate for any Business Day published by the Federal Reserve Bank of New York (or a successor administrator of the secured overnight financing rate) on the immediately succeeding Business Day on the website of the Federal Reserve Bank of New York, currently at <http://www.newyorkfed.org> (or any successor source for the secured overnight financing rate identified as such by the administrator of the secured overnight financing rate from time to time).

“Term SOFR” means, for the applicable corresponding tenor, the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.

“USD LIBOR” means the London interbank offered rate for Dollars.

(n) Article VII is amended by adding thereto a new Section 7.10, to read as follows:

SECTION 7.10 Erroneous Payments.

(a) If the Agent (x) notifies a Lender, or any Person who has received funds on behalf of a Lender (any such Lender or other recipient (and each of their respective successors and assigns) , a “Payment Recipient”) that the Agent has determined in its sole discretion (whether or not after receipt of any notice under immediately succeeding clause (b)) that any funds (as set forth in such notice from the Agent) received by such Payment Recipient from the Agent or any of its Affiliates were erroneously or mistakenly transmitted to, or otherwise erroneously or mistakenly received by, such Payment Recipient (whether or not known to such Lender or other Payment Recipient on its behalf) (any such funds, whether transmitted or received as a payment, prepayment or repayment of principal, interest, fees, distribution or otherwise, individually and collectively, an “Erroneous Payment”) and (y) demands in writing the return of such

Erroneous Payment (or a portion thereof), such Erroneous Payment shall at all times remain the property of the Agent pending its return or repayment as contemplated below in this Section 7.10 and held in trust for the benefit of the Agent, and such Lender shall (or, with respect to any Payment Recipient who received such funds on its behalf, shall cause such Payment Recipient to) promptly, but in no event later than two (2) Business Days thereafter (or such later date as the Agent may, in its sole discretion, specify in writing), return to the Agent the amount of any such Erroneous Payment (or portion thereof) as to which such a demand was made, in same day funds (in the currency so received), together with interest thereon (except to the extent waived in writing by the Agent) in respect of each day from and including the date such Erroneous Payment (or portion thereof) was received by such Payment Recipient to the date such amount is repaid to the Agent in same day funds at the greater of (1) the Federal Funds Effective Rate (if such amount is denominated in Dollars) or at the cost of funds incurred by the Agent (if such amount is denominated in an Committed Currency) and (2) a rate determined by the Agent in accordance with banking industry rules on interbank compensation from time to time in effect. A notice of the Agent to any Payment Recipient under this clause (a) shall be conclusive, absent manifest error.

(b) Without limiting immediately preceding clause (a), each Lender or any Person who has received funds on behalf of a Lender (and each of their respective successors and assigns) , agrees that if it receives a payment, prepayment or repayment (whether received as a payment, prepayment or repayment of principal, interest, fees, distribution or otherwise) from the Agent (or any of its Affiliates) (x) that is in a different amount than, or on a different date from, that specified in this Agreement or in a notice of payment, prepayment or repayment sent by the Agent (or any of its Affiliates) with respect to such payment, prepayment or repayment, (y) that was not preceded or accompanied by a notice of payment, prepayment or repayment sent by the Agent (or any of its Affiliates), or (z) that such Lender, or other such recipient, otherwise becomes aware was transmitted, or received, in error or by mistake (in whole or in part), then in each such case:

(i) it acknowledges and agrees that (A) in the case of immediately preceding clauses (x) or (y), an error and mistake shall be presumed to have been made (absent written confirmation from the Agent to the contrary) or (B) an error and mistake has been made (in the case of immediately preceding clause (z)), in each case, with respect to such payment, prepayment or repayment; and

(ii) such Lender shall (and shall use commercially reasonable efforts to cause any other recipient that receives funds on its respective behalf to) promptly (and, in all events, within one (1) Business Day of its knowledge of the occurrence of any of the circumstances described in immediately preceding clauses (x), (y) and (z)) notify the Agent of its receipt of such payment, prepayment or repayment, the details thereof (in reasonable detail) and that it is so notifying the Agent pursuant to this Section 7.10(b).

For the avoidance of doubt, the failure to deliver a notice to the Agent pursuant to this Section 7.10(b) shall not have any effect on a Payment Recipient's obligations pursuant to Section 7.10(a) or on whether or not an Erroneous Payment has been made.

(c) Each Lender hereby authorizes the Agent to set off, net and apply any and all amounts at any time owing to such Lender under this Agreement, or otherwise payable or distributable by the Agent to such Lender under this Agreement with respect to any payment of principal, interest, fees or other amounts, against any amount that the Agent has demanded to be returned under immediately preceding clause (a).

(d) (i) In the event that an Erroneous Payment (or portion thereof) is not recovered by the Agent for any reason, after demand therefor in accordance with immediately preceding clause (a), from any Lender that has received such Erroneous Payment (or portion thereof) (and/or from any Payment Recipient who received such Erroneous Payment (or portion thereof) on its respective behalf) (such unrecovered amount, an “Erroneous Payment Return Deficiency”), upon the Agent’s notice to such Lender at any time, then effective immediately (with the consideration therefor being acknowledged by the parties hereto), (A) such Lender shall be deemed to have assigned its Advances (but not its Commitments) in an amount equal to the Erroneous Payment Return Deficiency (or such lesser amount as the Agent may specify) (such assignment of the Advances (but not Commitments), the “Erroneous Payment Deficiency Assignment”) (on a cashless basis and such amount calculated at par plus any accrued and unpaid interest (with the assignment fee to be waived by the Agent in such instance)), and is hereby (together with the Borrower) deemed to execute and deliver an Assignment and Assumption (or, to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to a Platform as to which the Agent and such parties are participants) with respect to such Erroneous Payment Deficiency Assignment, and such Lender shall deliver any Notes evidencing such Advances to the Borrower or the Agent (but the failure of such Person to deliver any such Notes shall not affect the effectiveness of the foregoing assignment), (B) the Agent as the assignee Lender shall be deemed to have acquired the Erroneous Payment Deficiency Assignment, (C) upon such deemed acquisition, the Agent as the assignee Lender shall become a Lender, as applicable, hereunder with respect to such Erroneous Payment Deficiency Assignment and the assigning Lender shall cease to be a Lender, as applicable, hereunder with respect to such Erroneous Payment Deficiency Assignment, excluding, for the avoidance of doubt, its obligations under the indemnification provisions of this Agreement and its applicable Commitments which shall survive as to such assigning Lender, (D) the Agent and the Borrower shall each be deemed to have waived any consents required under this Agreement to any such Erroneous Payment Deficiency Assignment, and (E) the Agent will reflect in the Register its ownership interest in the Advances subject to the Erroneous Payment Deficiency Assignment. For the avoidance of doubt, no Erroneous Payment Deficiency Assignment will reduce the Commitments of any Lender and such Commitments shall remain available in accordance with the terms of this Agreement.

(ii) Subject to Section 8.07 (but excluding, in all events, any assignment consent or approval requirements (whether from the Borrower Representative or otherwise)), the Agent may, in its discretion, sell any Advances acquired pursuant to an Erroneous Payment Deficiency Assignment and upon receipt of the proceeds of such sale, the Erroneous Payment Return Deficiency owing by the applicable Lender shall be reduced by the net proceeds of the sale of such Advance (or portion thereof), and the Agent shall retain all other rights, remedies and claims against such Lender (and/or against any recipient that receives funds on its respective behalf). In addition, an Erroneous Payment Return Deficiency owing by the applicable Lender (x) shall be reduced by the proceeds of prepayments or repayments of principal and interest, or other distribution in respect of principal and interest, received by the Agent on or with respect to any such Advances acquired from such Lender pursuant to an Erroneous Payment Deficiency Assignment (to the extent that any such Advances are then owned by the Agent) and (y) may, in the sole discretion of the Agent, be reduced by any amount specified by the Agent in writing to the applicable Lender from time to time.

(e) The parties hereto agree that (x) irrespective of whether the Agent may be equitably subrogated, in the event that an Erroneous Payment (or portion thereof) is not recovered from any Payment Recipient that has received such Erroneous Payment (or

portion thereof) for any reason, the Agent shall be subrogated to all the rights and interests of such Payment Recipient (and, in the case of any Payment Recipient who has received funds on behalf of a Lender, to the rights and interests of such Lender) under this Agreement with respect to such amount (the “Erroneous Payment Subrogation Rights”) (provided that the Borrower’s obligations this Agreement in respect of the Erroneous Payment Subrogation Rights shall not be duplicative of such obligations in respect of Advances that have been assigned to the Agent under an Erroneous Payment Deficiency Assignment) and (y) an Erroneous Payment shall not pay, prepay, repay, discharge or otherwise satisfy any obligations owed hereunder by the Borrower; provided that this Section 7.10 shall not be interpreted to increase (or accelerate the due date for), or have the effect of increasing (or accelerating the due date for), the obligations of the Borrower hereunder relative to the amount (and/or timing for payment) of the obligations of the Borrower hereunder that would have been payable had such Erroneous Payment not been made by the Agent; provided, further, that for the avoidance of doubt, immediately preceding clauses (x) and (y) shall not apply to the extent any such Erroneous Payment is, and solely with respect to the amount of such Erroneous Payment that is, comprised of funds received by the Agent from the Borrower for the purpose of making such Erroneous Payment.

(f) To the extent permitted by applicable law, no Payment Recipient shall assert any right or claim to an Erroneous Payment, and hereby waives, and is deemed to waive, any claim, counterclaim, defense or right of set-off or recoupment with respect to any demand, claim or counterclaim by the Agent for the return of any Erroneous Payment received, including, without limitation, any defense based on “discharge for value” or any similar doctrine.

(g) Each party’s obligations, agreements and waivers under this Section 7.10 shall survive the resignation or replacement of the Agent, any transfer of rights or obligations by, or the replacement of, a Lender, the termination of the Commitments and/or the repayment, satisfaction or discharge of all obligations of the Borrower (or any portion thereof) under this Agreement.

(o) Section 8.04(d) is amended in full to read as follows.

(d) Waiver of Consequential Damages, Etc. To the fullest extent permitted by applicable law, the Borrower shall not assert, and hereby waives, any claim against any of the Agent (or any sub-agent thereof) or any Lender, or any Related Party of any of the foregoing Persons (each such Person being called a “Lender-Related Person”), on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement or any agreement or instrument contemplated hereby, the transactions contemplated hereby, any Advance, or the use of the proceeds thereof. No Lender-Related Person shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the transactions contemplated hereby.

(p) Section 8.16 is amended in full to read as follows:

SECTION 8.16 Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in this Agreement or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under this Agreement, to the extent such liability is unsecured, may be subject to the Write-Down

and Conversion Powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by

- (a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable:
 - (i) a reduction in full or in part or cancellation of any such liability;
 - (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement; or
 - (iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of the applicable Resolution Authority.

As used herein, the following terms shall have the following meanings:

“Affected Financial Institution” shall mean (a) any EEA Financial Institution or (b) any UK Financial Institution.

“Bail-In Action” shall mean the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

“Bail-In Legislation” shall mean (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

“EEA Financial Institution” shall mean (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” shall mean any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority” shall mean any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country

(including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“EU Bail-In Legislation Schedule” shall mean the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“Resolution Authority” shall mean an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

“UK Financial Institution” shall mean any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any Person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

“UK Resolution Authority” shall mean the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

“Write-Down and Conversion Powers” shall mean, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that Person or any other Person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

SECTION 2. Terms Applicable to SONIA Advances. From and after the effectiveness of this Amendment, the parties hereto agree as follows:

(a) Sterling. (i) Sterling shall not be considered a currency for which there is a published LIBOR rate, and (ii) any request for a new Borrowing denominated in Sterling, or to continue an existing Borrowing denominated in Sterling, shall be deemed to be a request for a new Borrowing bearing interest at SONIA; provided, that, to the extent any Borrowing bearing interest at the Eurocurrency Rate is outstanding on the Amendment Effective Date, such Borrowing shall continue to bear interest at the Eurocurrency Rate until the end of the current Interest Period or payment period applicable to such Borrowing.

(b) References to Eurocurrency Rate and Eurocurrency Rate Advances in the Credit Agreement.

(i) References to the Eurocurrency Rate and Eurocurrency Rate Advances in provisions of the Credit Agreement that are not specifically addressed herein (other than the definitions of Eurocurrency Rate and Eurocurrency Rate Advance) shall be deemed to include SONIA and SONIA Advances, as applicable.

(ii) For purposes of any requirement for the Borrower to compensate Lenders for losses in the Credit Agreement resulting from any continuation, conversion, payment or prepayment of any Advances denominated in Sterling on a day other than the last day of any Interest Period (as defined in the Credit Agreement), references to the Interest Period (as defined in the Credit Agreement) shall be deemed to include any relevant interest payment date or payment period for a SONIA Advance.

SECTION 3. Conditions of Effectiveness. This Amendment shall become effective as of the date first above written when, and only when, the Agent shall have received counterparts of this Amendment executed by the Borrower and all of the Lenders. This Amendment is subject to the provisions of Section 8.01 of the Credit Agreement.

SECTION 4. Representations and Warranties of the Borrower. The Borrower represents and warrants as follows:

- (a) The Borrower is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware.
- (b) The execution, delivery and performance by the Borrower of this Amendment and the Credit Agreement, as amended hereby, are within the Borrower's corporate powers, have been duly authorized by all necessary corporate action, and do not contravene (i) the Borrower's charter or by-laws or (ii) law or any material contractual restriction binding on the Borrower, in each case under this clause (ii), other than any such contravention which could not be reasonably likely to have a Material Adverse Effect.
- (c) No authorization or approval or other action by, and no notice to or filing with, any governmental authority or regulatory body or any other third party is required for the due execution, delivery and performance by the Borrower of this Amendment or any of the Credit Agreement, as amended hereby.
- (d) This Amendment has been duly executed and delivered by the Borrower. This Amendment and the Credit Agreement, as amended hereby, are the legal, valid and binding obligation of the Borrower enforceable against the Borrower in accordance with their respective terms except to the extent that the enforceability thereof may be limited by applicable bankruptcy, insolvency, moratorium and other laws affecting creditors' rights generally and by equitable principles (regardless of whether enforcement is sought in equity or at law).
- (e) There is no pending or threatened action, suit, investigation, litigation or proceeding, including, without limitation, any Environmental Action, affecting the Borrower or any of its Subsidiaries before any court, governmental agency or arbitrator that (i) could be reasonably likely to have a Material Adverse Effect (other than the Disclosed Litigation) and there has been no adverse change in the status, or financial effect on the Borrower or any of its Subsidiaries, of the Disclosed Litigation or (ii) purports to affect the legality, validity or enforceability of this Amendment or the Credit Agreement, as amended hereby.

SECTION 5. Reference to and Effect on the Credit Agreement and the Notes. (a) On and after the effectiveness of this Amendment, each reference in the Credit Agreement to "this Agreement", "hereunder", "hereof" or words of like import referring to the Credit Agreement, and each reference in the Notes to "the Credit Agreement", "thereunder", "thereof"

or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement, as amended by this Amendment.

(b) The Credit Agreement and the Notes, as specifically amended by this Amendment, are and shall continue to be in full force and effect and are hereby in all respects ratified and confirmed.

(c) The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of any Lender or the Agent under the Credit Agreement, nor constitute a waiver of any provision of the Credit Agreement.

SECTION 6. Costs and Expenses. The Borrower agrees to pay on demand all costs and expenses of the Agent in connection with the preparation, execution, delivery and administration, modification and amendment of this Amendment and the other instruments and documents to be delivered hereunder (including, without limitation, the reasonable fees and expenses of counsel for the Agent) in accordance with the terms of Section 8.04(a) of the Credit Agreement.

SECTION 7. Execution in Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute but one and the same agreement. Delivery of an executed counterpart of a signature page to this Amendment by telecopier shall be effective as delivery of a manually executed counterpart of this Amendment.

SECTION 8. Governing Law. This Amendment shall be governed by, and construed in accordance with, the laws of the State of New York.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed by their respective officers thereunto duly authorized, as of the date first above written.

JUNIPER NETWORKS, INC.

By /s/ Ken Miller
Name: Ken Miller
Title: CFO

CITIBANK, N.A., as Agent and as a Lender

By /s/ Susan M. Olsen

Name: Susan M. Olsen

Title: Vice President

BANK OF AMERICA, N.A.

By /s/ Puneet Lakhota

Name: Puneet Lakhota

Title: Director

BARCLAYS BANK PLC

By /s/ May Huang

Name: May Huang

Title: Assistant Vice President

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH

By /s/ Doreen Barr

Name: Doreen Barr

Title: Authorized Signatory

By /s/ Michael Dieffenbacher

Name: Michael Dieffenbacher

Title: Authorized Signatory

HSBC BANK USA, NATIONAL ASSOCIATION

By /s/ Andrew Hietala

Name: Andrew Hietala

Title: Senior Vice President

JPMORGAN CHASE BANK, N.A.

By /s/ John Kowalczyk

Name: John Kowalczyk

Title: Executive Director

MIZUHO BANK, LTD.

By /s/ Tracy Rahn

Name: Tracy Rahn

Title: Executive Director

WELLS FARGO BANK, NATIONAL ASSOCIATION

By /s/ Derek Jensen

Name: Derek Jensen

Title: Vice President

**Amendment No. 10 to
Master Services Agreement**

The Master Services Agreement, dated as of December 31, 2018, between Juniper Networks, Inc. (“**Customer**”) and International Business Machines Corporation (“**Provider**”), as previously modified by Change Orders (the “**Agreement**”), is hereby amended as set forth in this amendment (“**Amendment No. 10**”), effective as of August 17, 2021 (the “**Amendment Effective Date**”). All capitalized terms used herein and not otherwise defined herein shall have the meanings given to them in the Agreement.

For good and valuable consideration, the receipt and sufficiency of which consideration is acknowledged, Customer and Provider hereby agree as follows as of the Amendment Effective Date:

1. INTRODUCTION

- a. The Parties have discussed certain changes to Schedule 11 Provider Affiliates to add Kyndryl, Inc. and its Affiliates as IBM Provider Affiliates providing Services under the Agreement as set forth in this Amendment No.10; and
- b. The Parties have determined the following:

2. GENERAL

- a. The Agreement, as amended by this Amendment No. 10, sets forth the entire agreement and understanding of the Parties with respect to the matters set forth herein and therein, and supersedes all prior negotiations, agreements, arrangements, and undertakings with respect to the matters set forth herein and therein. No representations, warranties, or inducements have been made to any Party concerning the matters set forth in this Agreement, as amended by this Amendment No. 10, other than the representations, warranties, and covenants contained and memorialized in the Agreement, as amended by this Amendment No. 10.
 - b. In the event of a conflict or inconsistency between the terms of this Amendment No. 10 and those in the Agreement, the terms of this Amendment No. 10 shall control and govern.
-

3. CHANGES TO IBM SCHEDULE 11 PROVIDER AFFILIATES

“Schedule 11 Provider Affiliates (Version 3), 5.10.21, to the Agreement is hereby deleted in its entirety and replaced with the attached amended “Schedule 11 Provider Affiliates (Version 4), 8.17.21” to the Agreement.

4. LIST OF AMENDMENT NO. 10 ATTACHMENTS

The following documents are attached to, and form a part of, this Amendment No. 8 and the Agreement:

- a. Schedule 11 Provider Affiliates, (Version 4), 8.17.2021.

Except for the modifications set forth above, all of the other terms and conditions of the Agreement (including its Schedules and Exhibits) remain in full force and effect. EACH PARTY ACKNOWLEDGES THAT IT HAS READ AND UNDERSTANDS THIS AMENDMENT NO. 10 AND AGREES TO BE BOUND BY THE TERMS HEREOF.

JUNIPER/IBM CONFIDENTIAL
AMENDMENT No.10

IN WITNESS WHEREOF, Customer and Provider each has caused this Amendment No. 10 to the Agreement to be signed and delivered by its duly authorized officer.

JUNIPER NETWORKS, INC.

INTERNATIONAL BUSINESS MACHINES CORPORATION

Signed: /s/ Tim Bunting
Name(print): Tim Bunting

Title: Asst Counsel
Date: August 31, 2021

Signed: /s/ Kim Bedford
Name(print): Kim Bedford
Director, Client Unit Executive -
Juniper
Date: August 27, 2021

JUNIPER/IBM CONFIDENTIAL
AMENDMENT No.10

***CERTAIN MATERIAL (INDICATED BY THREE ASTERISKS IN BRACKETS) HAS BEEN OMITTED FROM THIS DOCUMENT BECAUSE IT IS BOTH (1) NOT MATERIAL AND (2) THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

**Amendment No. 11 to
Master Services Agreement**

The Master Services Agreement, dated as of December 31, 2018, between Juniper Networks, Inc. (“**Customer**”) and International Business Machines Corporation (“**Provider**”), as previously modified by Change Orders (the “**Agreement**”), is hereby amended as set forth in this amendment (“**Amendment No. 11**”), effective as of September 1, 2021 (the “**Amendment Effective Date**”). All capitalized terms used herein and not otherwise defined herein shall have the meanings given to them in the Agreement.

For good and valuable consideration, the receipt and sufficiency of which consideration is acknowledged, Customer and Provider hereby agree as follows as of the Amendment Effective Date:

1. INTRODUCTION

- a. The Customer has requested End User support services for [***] and the Parties have discussed certain changes to Exhibit I (Service Locations) to adding the new sites listed above as set forth in this Amendment No.11; and
- b. The Parties have determined the following:

2. GENERAL

- a. The Agreement, as amended by this Amendment No. 11, sets forth the entire agreement and understanding of the Parties with respect to the matters set forth herein and therein, and supersedes all prior negotiations, agreements, arrangements, and undertakings with respect to the matters set forth herein and therein. No representations, warranties, or inducements have been made to any Party concerning the matters set forth in this Agreement, as amended by this Amendment No. 11, other than the representations, warranties, and covenants contained and memorialized in the Agreement, as amended by this Amendment No. 11.
 - b. In the event of a conflict or inconsistency between the terms of this Amendment No. 11 and those in the Agreement, the terms of this Amendment No. 11 shall control and govern.
-

3. CHANGES TO IBM EXHIBIT I (SERVICE LOCATIONS)

Exhibit I (Service Locations), Section 2, Customer Facilities, is modified by adding the following:

“End User Services will be provided as On-site, Dispatch or Remote according to the following table:

City	Country	Geo	On-site vs dispatch
***	***	***	***
***	***	***	***

* IBM to provide to Dispatch Support to the locations only upon prior Juniper request and approval.

[***] dispatch service charges will be invoiced at [***] for the first hour and [***] for each subsequent hour.

[***] dispatch service charges will be invoiced at [***] per hour.

Annual Economic Change Adjustment (ECA) is applicable and will start January 1, 2022.

The actual number of hours per site spent by the Engineer onsite will be invoiced to Juniper in [***].”

Except for the modifications set forth above, all of the other terms and conditions of the Agreement (including its Schedules and Exhibits) remain in full force and effect. EACH PARTY ACKNOWLEDGES THAT IT HAS READ AND UNDERSTANDS THIS AMENDMENT NO. 10 AND AGREES TO BE BOUND BY THE TERMS HEREOF.

JUNIPER/IBM CONFIDENTIAL
AMENDMENT No.11

IN WITNESS WHEREOF, Customer and Provider each has caused this Amendment No. 11 to the Agreement to be signed and delivered by its duly authorized officer.

JUNIPER NETWORKS, INC.

Signed: /s/ Gail Provenzano
Name(print): Gail Provenzano
Title: _____
Date: October 6, 2021

INTERNATIONAL BUSINESS MACHINES CORPORATION

Signed: /s/ Wilfred Stikkelman
Name(print): Wilfred Stikkelman
Title: _____
Date: September 29, 2021

JUNIPER/IBM CONFIDENTIAL
AMENDMENT No.11

**Amendment No. 12 to the
Master Services Agreement**

The Master Services Agreement, dated as of December 31, 2018, between Juniper Networks, Inc. (“**Customer**”) and International Business Machines Corporation (“**Provider**”), as previously modified by Change Orders (the “**Agreement**”), is hereby amended as set forth in this amendment (“**Amendment No. 12**”), effective as of November 9, 2021 (the “**Amendment Effective Date**”). All capitalized terms used herein and not otherwise defined herein shall have the meanings given to them in the Agreement.

For good and valuable consideration, the receipt and sufficiency of which consideration is acknowledged, Customer and Provider hereby agree as follows as of the Amendment Effective Date:

1. INTRODUCTION

- a. In Amendment 10, the Parties agreed to amend Schedule 11 (Provider Affiliates) to the Agreement to add Kyndryl, Inc. and its affiliates as Provider Affiliates. At the time of such Amendment 10, Kyndryl, Inc. and its affiliates were Provider Affiliates as specified in Section 9.6(B) of the Agreement. On November 3, 2021, Provider completed its spin-off of Kyndryl, Inc. and its affiliates and are now no longer Provider Affiliates but independent entities. This Amendment is being entered into to identify Kyndryl, Inc. and its affiliates subcontractor Provider Agents under the Agreement.
- b. The Parties have determined the following:

2. GENERAL

- a. The Agreement, as amended by this Amendment No. 12, sets forth the entire agreement and understanding of the Parties with respect to the matters set forth herein, and supersedes all prior negotiations, agreements, arrangements, and undertakings with respect to the matters set forth herein and therein. No representations, warranties, or inducements have been made to any Party concerning the matters set forth in this Agreement, as amended by this Amendment No. 12, other than the representations, warranties, and covenants contained and memorialized in the Agreement, as amended by this Amendment No. 12.
-

- b. In the event of a conflict or inconsistency between the terms of this Amendment No. 12 and those in the Agreement, the terms of this Amendment No. 12 shall control and govern.

3. CHANGES TO THE AGREEMENT

- a. Subject to Section 9.6 of the Agreement, Customer hereby consents to Kyndryl, Inc. and its affiliates listed in Attachment A to be Provider Agents of Provider with respect to the Services described in Statement of Work for Infrastructure Services (SOW #1) and Statement of Work for End User Services (SOW #2). Provider, Kyndryl, Inc. and its affiliates will comply with the requirements of section 9.6 of the Agreement. This consent by Customer is effective as of November 3, 2021, when Kyndryl, Inc. and its affiliates became independent companies from Provider.
- b. In accordance with and subject to the terms of Section 25.1 (Assignment) of the Agreement, Provider has assigned the right to be paid under SOW #1 and SOW #2 to Kyndryl, Inc. and its affiliates. Kyndryl (IBM Global Finance) accounts shall be designated as the recipient for all payments made by the Customer for any invoices submitted by Provider, Kyndryl, Inc., or a Kyndryl affiliate listed in Attachment A with respect to the Services set forth in SOW#1 and SOW#2 under the Agreement.

4. LIST OF AMENDMENT NO. 12 ATTACHMENTS

The following documents are attached to, and form a part of, this Amendment No. 12 and the Agreement:

- a. Attachment A is the list of Kyndryl, Inc. affiliates now authorized as Provider Agents under the Agreement.

Except for the modifications set forth above, all of the other terms and conditions of the Agreement (including its Schedules and Exhibits) remain in full force and effect. EACH PARTY ACKNOWLEDGES THAT IT HAS READ AND UNDERSTANDS THIS AMENDMENT NO. 12 AND AGREES TO BE BOUND BY THE TERMS HEREOF.

JUNIPER/IBM CONFIDENTIAL
AMENDMENT No.12

IN WITNESS WHEREOF, Customer and Provider each has caused this Amendment No. 12 to the Agreement to be signed and delivered by its duly authorized officer.

JUNIPER NETWORKS, INC.

Signed: /s/ Sharon Mandell
Name(print): Sharon Mandell
Title: CIO
Date: November 10, 2021

INTERNATIONAL BUSINESS MACHINES
CORPORATION

Signed: /s/ Ki Hwang
Name(print): Ki Hwang
Title: IBM Consulting VP
Date: November 9, 2021

KYNDRYL, INC.

Signed: /s/ Kim Bedford
Name(print): Kim Bedford
Title: Director, Client Unit Executive - Juniper
Date: November 10, 2021

JUNIPER/IBM CONFIDENTIAL
AMENDMENT No.12

SUBSIDIARIES OF THE COMPANY AS OF DECEMBER 31, 2021*

NAME	JURISDICTION OF INCORPORATION
Juniper Networks International B.V.	The Netherlands
Juniper Networks (US), Inc.	California, USA

* All other subsidiaries would not in the aggregate constitute a “significant subsidiary” as defined in Regulation S-X.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-3 No. 333-233090) of Juniper Networks, Inc., and related prospectus, and

(2) Registration Statements (Form S-8 Nos. 333-252472, 333-251027, 333-240345, 333-233091, 333-230685, 333-229813, 333-218344, 333-216246, 333-213490, 333-211824, 333-204297, 333-183165, 333-151669, and 333-176171) of Juniper Networks, Inc.;

of our reports dated February 11, 2022, with respect to the consolidated financial statements and schedule of Juniper Networks, Inc., and the effectiveness of internal control over financial reporting of Juniper Networks, Inc., included in this Annual Report (Form 10-K) of Juniper Networks, Inc., for the year ended December 31, 2021.

/s/ Ernst & Young LLP

San Jose, California
February 11, 2022

**Certification of Principal Executive Officer
Pursuant to
Exchange Act Rules 13a-14(a) and 15d-14(a),
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Rami Rahim, certify that:

1. I have reviewed this Annual Report on Form 10-K of Juniper Networks, 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(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 11, 2022

/s/ Rami Rahim

Rami Rahim

Chief Executive Officer

(Principal Executive Officer)

**Certification of Principal Financial Officer
Pursuant to
Exchange Act Rules 13a-14(a) and 15d-14(a),
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Kenneth B. Miller, certify that:

1. I have reviewed this Annual Report on Form 10-K of Juniper Networks, 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(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 11, 2022

/s/ Kenneth B. Miller

Kenneth B. Miller

Executive Vice President, Chief Financial Officer

(Principal Financial Officer)

**Certification of Chief Executive Officer
Pursuant to 18 U.S.C. Section 1350 As Adopted
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

I, Rami Rahim, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Juniper Networks, Inc. on Form 10-K for the fiscal year ended December 31, 2021, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Juniper Networks, Inc.

/s/ Rami Rahim
Rami Rahim
Chief Executive Officer
February 11, 2022

**Certification of Chief Financial Officer
Pursuant to 18 U.S.C. Section 1350 As Adopted
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

I, Kenneth B. Miller, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Juniper Networks, Inc. on Form 10-K for the fiscal year ended December 31, 2021, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Juniper Networks, Inc.

/s/ Kenneth B. Miller

Kenneth B. Miller

Executive Vice President, Chief Financial Officer

February 11, 2022