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FORM 10-K

GTT Communications, Inc. - GTT

Filed: March 01, 2019 (period: December 31, 2018)

Annual report with a comprehensive overview of the company

FORM 10-K

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

For the Fiscal year ended December 31, 2018

Commission File Number 000-51211

GTT Communications, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of
Incorporation or Organization)

20-2096338

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

**7900 Tysons One Place
Suite 1450
McLean, Virginia 22102
(703) 442-5500**

*(Address including zip code, and telephone number, including area
code, of principal executive offices)*

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

Title of each class	Name of each exchange on which registered
Common stock, par value \$.0001 per share	NYSE

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

None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark whether 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 filing requirements for the past 90 days. Yes No

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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. (Check one):

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

The aggregate market value of the common stock held by non-affiliates of the registrant (44,272,613 shares) based on the \$45.00 closing price of the registrant's common stock as reported on the NYSE on June 30, 2018, was \$1,992,267,585. For purposes of this computation, all officers, directors and 10% beneficial owners of the registrant are deemed to be affiliates. Such determination should not be deemed to be an admission that such officers, directors or 10% beneficial owners are, in fact, affiliates of the registrant.

As of February 27, 2019, 55,803,359 shares of common stock, par value \$.0001 per share, of the registrant were outstanding.

Documents Incorporated by Reference

Portions of our definitive proxy statement for the 2019 Annual Meeting of Stockholders, to be filed within 120 days after the end of the fiscal year covered by this Form 10-K, are incorporated by reference into Part III hereof.

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CAUTIONARY NOTES REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this Form 10-K ("Annual Report") may constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Act of 1934, as amended (the "Exchange Act"). Any statements included or incorporated by reference in this Annual Report about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and are forward-looking statements. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may differ from those anticipated, estimated or expected. You can identify these forward-looking statements by the use of words or phrases such as "may," "likely," "potentially," "will," "expect," "intend," "anticipate," "projects," "believe," "estimate," "plan," "could," "should," "opportunity," and "continue" or similar words, whether in the negative or the affirmative. Forward-looking statements include information concerning our business strategy, plans, and goals and objectives, as well as information concerning the expected timing, consummation and financial benefits of certain transactions.

Forward-looking statements are based on our beliefs, assumptions and expectations of our future performance, taking into account information currently available to us. These forward-looking statements are subject to known and unknown risks, uncertainties and factors or events that may cause our actual results, performance or achievements expressed or implied by such forward-looking statements, many of which are beyond our control. These statements include, among others, statements concerning:

- our business and our strategy for continuing to pursue our business;
- our integration of the operations from recent and anticipated acquisitions, and realization of anticipated benefits and synergies in connection with the acquisitions;
- anticipated growth of our industry;
- expectations as to our future revenue, margins, expenses, cash flows, profitability and capital requirements; and
- other statements of expectations, beliefs, future plans and strategies, anticipated developments and other matters that are not historical facts.

These statements are subject to risks and uncertainties, including, among others, financial, regulatory, environmental, and industry projections, that could cause actual events or results to differ materially from those expressed or implied by the statements. Factors, contingencies, and risks that could cause our actual results to differ materially from these forward-looking statements include, but are not limited to, the effects on our business and customers of general economic and financial market conditions, as well as the following:

- our ability to achieve the expected benefits of certain transactions;
- our ability to develop and market new products and services that meet customer demands and generate acceptable margins;
- our reliance on several large customers;
- our ability to negotiate and enter into acceptable contract terms with our suppliers;
- our ability to attract and retain qualified management and other personnel;
- competition in the industry in which we do business;
- failure of the third-party communications networks on which we depend;
- legislation or regulatory environments, requirements or changes adversely affecting the businesses in which we are engaged;
- our ability to maintain our databases, management systems and other intellectual property;
- our ability to prevent process and system failures or security breaches that significantly disrupt the availability and quality of the services that we provide;
- our ability to maintain adequate liquidity and produce sufficient cash flow to fund acquisitions and capital expenditures;
- our ability to meet all the terms and conditions of our debt obligations;
- our ability to obtain capital to grow our business;
- our ability to utilize our net operating losses;
- expectations regarding the trading price of our common stock;
- our ability to complete acquisitions or divestitures and effectively integrate any business or operation acquired;
- foreign exchange rate fluctuations; and
- fluctuations in our effective tax rate.

Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties inherent in our business. Such risks and uncertainties include, among others, factors discussed under the section entitled "Risk Factors" in this Annual Report. Any such risks and uncertainties could materially and adversely affect our results of operations, our profitability and our cash flows, which could, in turn, have a material adverse impact on our ability to make payments on our debt.

You should not place undue reliance on any forward-looking statements. Forward-looking statements speak only as of the date of which statements were made. We expressly disclaim any obligation to update our forward-looking statements, whether as a result of new information, future events or circumstances, or otherwise, except as required by law.

You should understand that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements included or incorporated by reference in this Annual Report by these cautionary statements. Although we believe that our plans, intentions, expectations, strategies and prospects as reflected in our forward-looking statements are reasonable, we cannot guarantee future results, events, levels of activity, performance or achievement. You should carefully consider the risk factors contained herein, in addition to the other information included or incorporated by reference.

PART I

ITEM 1. BUSINESS

Overview

GTT Communications, Inc. ("GTT," the "Company," "we," or "us") is redefining global communications to serve a cloud-based future, with a powerful purpose of connecting people across organizations, around the world, and to every application in the cloud. We serve large enterprise and carrier clients with complex national and global networking needs, and differentiate ourselves from the competition by providing an outstanding service experience built on our core values of simplicity, speed and agility. We operate a global Tier 1 internet network ranked among the largest in the industry, and own a fiber network that includes an expansive pan-European footprint and subsea cables. Our global network includes over 600 points of presence ("PoPs") spanning six continents, and we provide services in more than 140 countries. Our comprehensive portfolio of cloud networking services includes:

- Wide area networking, including software-defined wide area networking ("SD-WAN"), multiprotocol label switching ("MPLS") and virtual private LAN service ("VPLS");
- Transport & infrastructure services, including wavelength, Ethernet, colocation, dark fiber and video transport;
- Internet services, including IP transit, dedicated internet access, and broadband internet;
- Managed services, including managed equipment, managed security, and managed hosting; and
- Voice services, including Session Initiation Protocol ("SIP") trunking and hosted Private Branch Exchange ("PBX").

We are a Delaware corporation founded in 2005. As of December 31, 2018, we had approximately 3,200 full-time equivalent employees.

Strategy

Businesses all around the world are experiencing significant growth in demand for networking services as they try to keep pace with increasing bandwidth demands across all applications, migrate applications to the cloud, virtualize key applications and outsource IT infrastructure services. We believe our global network reach and broad portfolio of cloud networking service offerings uniquely position GTT to address these trends and serve the complex, ever-changing needs of large national and multinational clients.

Our strategy is focused on three key elements:

Expanding cloud networking services to multinational clients. Our network assets and services are built to serve the requirements of large, global clients. These organizations have increasing demands for scalable and flexible network connectivity due to the rapid adoption of cloud-based applications and increasing data usage across locations driven by increasing file sizes, voice, video and real-time collaboration tools. In addition, enterprise CIOs and technology executives are increasingly using third-party management of their network and IT infrastructure so their teams can focus on application development and performance. We are one of the few non-incumbent providers with the product breadth, global scope and operating experience to meet the sophisticated networking needs and managed service requirements of the world's most demanding multinational clients, and we will continue to look for ways to enhance our portfolio of services to meet our clients' needs.

Extending secure network connectivity to any location in the world and any application in the cloud. We operate one of the five largest IP networks in the world, and our global access footprint is one of the broadest in the industry. Network connectivity is a fundamental requirement for clients to realize the full benefits of cloud computing, and they are increasingly demanding dedicated, secure and high-bandwidth connectivity between their various office locations and leading cloud service providers for mission-critical applications and services. We can connect any client location in the world to our global network through our core network infrastructure and relationships with over 3,000 regional suppliers. We will continue to seek opportunities to expand our global footprint to enable our clients to connect to the cloud more efficiently and cost-effectively.

Delivering outstanding client experience by living our core values of Simplicity, Speed and Agility. We strive to be easy to work with, fast and responsive, and to say "yes" to our clients. We are committed to delivering high-quality, reliable and secure services that will continue to attract new clients and create additional opportunities with existing clients. We believe that by operating all areas of our business with simplicity, speed and agility, we offer customers a better service experience than larger incumbent providers.

We execute on this strategy both through rep-driven growth and through strategic acquisitions. We have approximately 300 quota bearing reps focused on designing and delivering world-class global network solutions that connect diversely and securely to any office location in the world, and to any application in the cloud. We continue to expand our sales force through external hiring and through acquisitions. We have completed many acquisitions throughout our history, and we believe we have consistently demonstrated an ability to acquire and effectively integrate companies and realize cost synergies. Acquisitions have the ability to increase the scale of our operations, which in turn affords us the ability to expand our operating leverage, extend our network reach, augment our product set, and broaden our customer base. We believe our ability to realize significant cost synergies through acquisitions provides us with a competitive advantage in future consolidation opportunities within our industry. We will continue to evaluate these opportunities and are regularly involved in acquisition discussions. We will evaluate these opportunities based on a number of criteria, including the strategic fit within our existing businesses, the ability to integrate people, systems and networks quickly, and the opportunity to create value through the realization of cost synergies.

Global Network

Our global network spans North America, South America, Europe, the Middle East, Asia, and Australia. Our Tier 1 IP network consists of over 600 PoPs in top data centers around the world, connected with resilient and redundant transport. Based on industry data, our IP backbone is consistently ranked as a top network in terms of internet routes. We own and operate three trans-Atlantic subsea cables connecting North America and Europe, including our industry leading lowest latency Express subsea cable system, as well as more than 72,000 route kilometers of terrestrial fiber including an expansive pan-European transport network.

Our private, long-haul optical network provides the foundation for an MPLS mesh between core backbone routers in each market. We engineer our network to provide high levels of capacity and performance, even when utilizing enhanced services such as traffic analysis and filtering. We route network traffic to ensure customer applications take the shortest path possible through the network, delivering low latency performance, reliability and security.

We employ a "capex light" model, which leverages the sophisticated routing and switching infrastructure in our core global network, then integrates network access leased from last mile carriers. This business model benefits us and our customers. We are able to quickly add capacity as needed, minimize infrastructure deployment, maintenance and replacement costs, and focus solely on designing the best network solutions for our clients' specific needs.

Service Offerings

We deliver the following primary service offerings to our clients:

Wide Area Networking

We provide a variety of wide area networking solutions to meet the growing needs of our clients, including SD-WAN, MPLS, VPLS, and Ethernet. We design and implement custom private, public, and hybrid cloud network solutions for our customers, offering bandwidth speeds from 10 Mbps to 100 Gbps per port with burstable and aggregate bandwidth capabilities.

Through GTT's wide area networking services, clients can securely connect to cloud service providers in data centers and exchanges around the world. Our Cloud Connect feature provides private, secure, pre-established connectivity to leading cloud service providers. Using GTT's global network, clients can connect any office location in the world to any application in the cloud.

SD-WAN is an enterprise networking technology in the early stages of market adoption with high growth potential. The software-based network intelligence in SD-WAN enables more efficient delivery of traffic across a mix of access types, accelerates the speed of service deployments, and improves application visibility and performance. GTT's SD-WAN delivers managed global connectivity, enhanced application performance and control, and secure access to cloud-based services and applications. Our service leverages GTT's global, Tier 1 IP network, securely connecting client locations to any destination on the internet or to any cloud service provider. We offer the widest range of access options with bundled network security, making it simple and cost-effective to integrate new locations and add network bandwidth as needed.

Transport & Infrastructure Services

We provide a full suite of transport and infrastructure services over our global network, enabling cloud-based applications and the transport of high volume data between data centers, large enterprise office locations, and media hubs. Our service is differentiated based on an expansive pan-European fiber footprint and subsea cable infrastructure, network diversity, and low latency connections between major financial and commercial centers in North America and Europe. Our clients for these services include internet-based technology companies and OTTs, large banks, and other service providers requiring network infrastructure. All services are

available on a protected basis with the ability to specify pre-configured alternate routes to minimize the impact of any network disruption.

GTT's wavelength service is designed to deliver scalable high-performance optical connectivity over a state-of-the-art dense wave division multiplexing platform. We offer low latency services between the major financial centers and exchanges, tailored to meet the requirements of proprietary trading firms for the fastest connections. In particular, GTT's Express transatlantic cable offers industry leading lowest latency between North America and Europe. We also offer dark fiber and duct services across our fiber network.

GTT's Ethernet service enables clients to design a network environment best suited to their needs, with point-to-point and point-to-multipoint topology options, and dynamic or fixed routing. GTT's Ethernet Direct service provides enhanced performance capabilities for clients seeking guaranteed routes and latency SLAs between key financial markets, data centers and carrier hotels over a service-specific platform. This service is particularly suited for the financial industry, including trading firms that may require a lower-bandwidth alternative to wavelength services. Financial organizations can also leverage our low-latency network to access over 60 unique routes and more than 130 financial exchanges.

We offer colocation services in over 50 facilities in Europe and North America. The turnkey service offering includes cabinets, racks, suites, and technical support services, providing clients with efficient and secure access to other carrier networks.

We offer a suite of video transport services for clients in the media and entertainment industry, designed to support broadcast quality transmission of live events, sports entertainment, and news. We can manage individual services, multicast distribution, and entire client networks, supporting all video formats required for today's media workflow.

Internet

We offer clients scalable, high-bandwidth global internet connectivity and IP transit with guaranteed availability and packet delivery, utilizing our Tier global 1 IP network. Our Internet services offer flexible connectivity with multiple port interfaces including Fast Ethernet, Gigabit Ethernet, 10 Gigabit Ethernet, and 100 Gigabit Ethernet. We also offer a wide range of broadband internet and wireless internet access services. We support a dual stack of IPv4 and IPv6 protocols, enabling the delivery of seamless IPv6 services alongside existing IPv4 services.

Managed Services

We offer fully managed network services, including managed equipment, security, and managed hosting.

GTT's Managed Equipment provides a turnkey solution for the end-to-end management of customer premise equipment. This includes the design, procurement, implementation, monitoring, and maintenance of equipment including routers, switches, servers, and Wi-Fi access points.

GTT's Managed Security is available as a cloud-based or premises-based security service and provides a comprehensive, multi-layered security solution that protects the network while meeting the most stringent security standards. Our Unified Threat Management services include advanced firewall, intrusion detection, anti-virus, web filtering, and anti-spam. GTT's distributed denial of services ("DDoS") Mitigation service detects and removes malicious traffic, ensuring business continuity for our clients, even in the event of a large-scale DDoS attack. The service utilizes a next-generation DDoS platform technology, which provides immediate threat detection, deep packet inspection analytics and filtering of compromised traffic at GTT's scrubbing centers. We offer a full range of compliancy packages, which include developing, deploying, configuring, and monitoring network and security assets, and providing documentation to comply with audits.

GTT's Managed Hosting service includes application hosting and management.

Voice

We offer local voice service in over 60 countries around the world, along with global long-distance and toll-free services. Our SIP Trunking service delivers worldwide PSTN access to client telephony equipment over an integrated data connection, driving efficiency and productivity organization-wide while allowing clients to retain control of their core voice infrastructure. Our Hosted PBX service allows clients to eliminate traditional voice infrastructure with communication services delivered through the cloud and a wide array of features and customization choices for each site and user.

Operations

Supplier Management

We have strong, long-standing relationships with a diverse group of over 3,000 suppliers from which we source our global network connectivity, last-mile bandwidth capacity and other services. We maintain multiple supplier agreements covering diverse routes throughout our network to ensure service continuity, competitive pricing, bandwidth capacity and improved carrier responsiveness.

For our core global network, supplier agreements for lit capacity are typically one-year commitments with an option to renew, which enables us to (i) maintain significant flexibility regarding the amount of bandwidth purchased and (ii) consistently benefit from the latest competitive pricing. For last-mile connections, we typically structure the term to match the term of the underlying customer contract.

Our supplier management team continually monitors supplier performance, network information and pricing to provide greater choice, flexibility and cost savings for our customers.

Network Operations

Our network is supported by Network Operations Centers ("NOCs") located in the U.S., Ireland, Bulgaria, and India. The NOCs provide active monitoring, prioritization and resolution of network-related events 24 hours per day, 365 days per year. Our NOCs also respond to customer network inquiries, and coordinate and notify customers of maintenance activities.

IT Systems

We maintain several proprietary client facing and internally focused IT systems. We provide customers with advanced routing control and visibility into their network performance. Our proprietary online client portal (EtherVision) provides customers with online access to monitor their network performance and track real-time statistics.

We have developed a comprehensive Client Management Database ("CMD") that manages our network, customer and supplier contracts, sales quoting, service provisioning, and customer invoicing. CMD also supports our financial reporting and other operational processes as well as our integration of acquired companies. Our CMD system has been in operation since our inception, and its capabilities and processes are continually enhanced and automated. The CMD system provides our management team with visibility into all areas of our operations and allows us to operate with simplicity, speed and agility.

Sales and Marketing

We market our products and services through a global direct sales force and indirect sales channels. We have sales representatives throughout North America, Europe, South America, the Middle East, and Asia. Our sales activities are specifically focused on building relationships with new clients and driving expansion within existing client accounts. Because we typically sell to large, global clients and our markets are highly competitive, we believe that personal relationships and quality of service delivery remain important in winning new and repeat customer business. We supplement our direct sales approach with a trusted community of agents and system integrators who already have personal relationships with many leading multinational clients.

GTT's marketing activities aim to generate broad awareness and promote our value proposition to multinational clients, applying both traditional and digital marketing methods that target key client decision makers.

Customers

Our customer base consists of enterprise, carrier, and government clients around the world. Our multinational enterprise client base includes leading organizations in financial services, healthcare, technology, manufacturing, retail, media and entertainment, and professional services. Carrier customers include some of the largest telecommunications in the world, who rely on our global network to meet their large capacity requirements and extend their reach.

Our customer contracts for network services range from one to three years or more for the initial term. Following the initial term, these agreements typically provide for automatic renewal for specified periods ranging from one month to one year. Our prices are fixed for the duration of the contract, and we typically bill monthly in advance for such services. If a customer terminates its agreement, the terms of our customer contracts typically require full recovery of any amounts due for the remainder of the term or, at a minimum, our liability to any underlying suppliers.

Competition

We operate in a highly competitive industry. Our competitors include incumbent telecom carriers, competitive telecom carriers, internet service providers, cable companies, and other facilities-based operators. Many of these competitors are large, well-capitalized, and have strong market presence, brand recognition, and existing customer relationships. We also face competition from smaller providers who offer network services and managed enterprise solutions similar to ours. Specific competitors vary based on geography, product offering, and vertical market.

Regulatory Matters

We are subject to US federal and state, and foreign regulations. In the United States, the Federal Communications Commission ("FCC") has jurisdiction over interstate telecommunications and international telecommunications that originate or terminate in the United States. State Public Utilities Commissions have similar powers with respect to intrastate telecommunications. Foreign country laws and regulations typically apply to telecommunications that originate or terminate in, or in some instances traverse, that country. The regulation of the telecommunications industry is constantly evolving, and varies from state to state and from country to country.

Where certification, licensing or authorization is required, carriers are required to comply with certain ongoing responsibilities. For example, we are required to submit periodic reports to various telecommunications regulatory authorities relating to the provision of services within relevant jurisdictions. In addition, we are responsible for the payment of certain regulatory fees and the collection and remittance of certain surcharges and fees associated with the provision of telecommunications services depending upon the jurisdiction, the type of service and the type of customer.

Intellectual Property

We do not own any material patent registrations, applications, or licenses.

Available Information

We make available free of charge, through our website, www.gtt.net, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and exhibits and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, promptly after they are electronically filed with the Securities and Exchange Commission (the "SEC"). We caution you that the information on our website is not part of this or any other report we file with, or furnish to, the SEC.

In addition to our website, you may read and copy any materials we file with the SEC at www.sec.gov.

ITEM 1A. RISK FACTORS

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. Below are the risks and uncertainties we believe are most important for you to consider. Additional risks and uncertainties not presently known to us, which we currently deem immaterial or which are similar to those faced by other companies in our industry or telecommunications and/or technology companies in general, may also impair our business operations. If any of these risks or uncertainties actually occurs, our business, financial condition and operating results could be materially adversely affected.

Risks Related to Our Business and Operations

Our business could suffer delays and problems due to the actions of network providers on whom we are partially dependent.

Most of our customers are connected to our network by means of communications lines that are provided as services by local telephone companies and others. We may experience problems with the installation, maintenance, and pricing of these lines and other communications links, which could adversely affect our results of operations and our plans to add additional customers to our network using such services. We attempt to mitigate this risk by using many different providers so that we have alternatives for linking a customer to our network. Competition among the providers tends to improve installation intervals, maintenance, and pricing.

Our network may be the target of potential cyber-attacks and other security breaches that could have significant negative consequences.

Our business depends on our ability to limit and mitigate interruptions or degradation to our network availability. Our network, including our routers, may be vulnerable to unauthorized access, computer viruses, cyber-attacks, DDoS, and other security breaches. Cyber-attacks have increased in frequency, scope, and potential harm in recent years. An attack on or security breach of our network could result in interruption or cessation of services, our inability to meet our service level commitments, and potentially compromise customer data transmitted over our network. If cyber-thieves gain improper access to our network, they may be able to access, steal, publish, delete, misappropriate, or modify confidential customer data, and additional harm to customers could be perpetrated by third parties who are given access to such confidential customer data. We cannot guarantee that our security measures will not be circumvented, thereby resulting in compromised customer data or network failures or interruptions that could impact our network availability and have a material adverse effect on our business, financial condition, and operational results. We may be required to expend significant resources to protect against such threats, and may experience litigation, a reduction in revenues, and a diminution in goodwill, caused by a breach. Although our customer contracts limit our liability, affected customers and third parties may seek to recover damages from us under various legal theories.

We are required to maintain, repair, upgrade and replace our network and facilities and our network could suffer serious disruption if certain locations experience serious damage.

Our business requires that we maintain, upgrade, repair, and periodically replace parts of our network facilities. This requires, and will continue to require, management time and the expenditure of capital on a regular basis. In the event that we fail to maintain, upgrade, or replace essential portions of our network facilities, it could lead to a material degradation in the level of service that we provide, which would adversely affect our business.

There are certain locations through which a large amount of our Internet traffic passes. Examples are facilities in which we exchange traffic with other carriers, the facilities through which our subsea cable traffic passes, and certain of our network hub sites. If any of these facilities were destroyed or seriously damaged, a significant amount of our network traffic could be disrupted. Because of the large volume of traffic passing through these facilities, our ability (and the ability of carriers with whom we exchange traffic) to quickly restore service would be challenged. Our subsea cables may require repairs for damage caused by natural disasters, fishing vessels, or intentional damage by activist groups. These repairs may take significant time and our ability to re-route traffic to other cable systems or procure services on competitors subsea cables may affect our ability to service these customers.

In the event of such damage to any of our owned infrastructure, we will be required to incur expenses to repair such damage. There could be parts of our network or the networks of other carriers that could not be quickly restored or that would experience substantially reduced service for a significant time. If such a disruption occurs, we may lose customers or have difficulty attracting new customers, resulting in an adverse effect on our business, operating results, and cash flows.

We may have difficulty and experience disruptions as we add features and upgrade our network.

We are constantly upgrading our network and implementing new features and services. This process involves reconfiguring our network and making changes to our operating systems. In doing so we may experience disruptions that affect our customers, our revenue, and our ability to grow. We may require additional resources to accomplish this work in a timely manner. That could cause us to incur unexpected expenses or delay portions of this effort to the detriment of our ability to provide service to our customers.

We may make purchase commitments to vendors for longer terms or in excess of the volumes committed by our underlying customers, or we may occasionally have certain sales commitments to customers that extend beyond our commitments from our underlying suppliers.

We attempt to match our purchase of network capacity from our suppliers and service commitments from our customers. However, from time to time, we may contract for obligations to our suppliers that exceed the duration of the related customer contracts or that are for capacity in excess of the amount for which we have customer commitments. This could arise:

- based upon the terms and conditions available from our suppliers;
- from an expectation that we will be able to utilize the excess capacity;
- as a result of a breach of a customer's commitment to us; and
- to support fixed elements of our network.

Under any of these circumstances, we may incur the cost of the network capacity from our supplier without having corresponding revenue from customers, which could result in a material and adverse impact on our operating results.

Conversely, from time to time, our customer may contract for services that extend beyond the duration of the underlying vendor commitment. This may cause us to seek a renewal of services for a shorter period than we typically seek, or a shortened service period at higher prices. Our financial results could be adversely affected if we are unable to purchase extended service from a supplier at a cost sufficiently low to maintain margins for the remaining term of our commitment to a customer. While we have not historically encountered material price increases from suppliers with respect to continuation or renewal of services after expiration of initial contract terms, we cannot be certain that we would be able to obtain similar terms and conditions from suppliers going forward.

Our connections to the Internet require us to establish and maintain peering relationships with other providers, which we may not be able to maintain.

The Internet is composed of various network providers who operate their own networks that interconnect at public and private interconnection points. Our network is one such network. In order to obtain Internet connectivity for our network, we must establish and maintain relationships with other providers, including many providers that are customers, and incur the necessary capital costs to locate our equipment and connect our network at these various interconnection points.

By entering into what are known as settlement-free peering arrangements, providers agree to exchange traffic between their respective networks without charging each other. Our ability to avoid the higher costs of acquiring paid dedicated network capacity (transit or paid peering) and to maintain high network performance is dependent upon our ability to establish and maintain peering relationships and to increase the capacity of these peering connections. The terms and conditions of our peering relationships may also be subject to adverse changes, which we may not be able to control. If we are not able to maintain or increase our peering relationships in all of our markets on favorable terms, we may not be able to provide our customers with high performance or affordable or reliable services, which could cause us to lose existing and potential customers, damage our reputation and have a material adverse effect on our business.

Our core network infrastructure equipment is provided by a concentrated number of vendors.

We purchase from the majority of the routers and transmission equipment used in our core IP network from a concentrated number of vendors. If these vendors fail to provide equipment on a timely basis or fail to meet our performance expectations, including in the event that these vendors fail to enhance, maintain, upgrade or improve their products, hardware or software we purchase from them when and how we need, we may be delayed or unable to provide services as and when requested by our customers. Any disruption could increase our costs, decrease our operating efficiencies, and have an adverse effect on our business, results of operations, and financial condition.

These vendors may also be subject to litigation with respect to the technology on which we depend, including litigation involving claims of patent infringement. Such claims have been growing rapidly in the communications industry. Regardless of the merit of these claims, they can result in the diversion of technical and management personnel, or require us to obtain non-infringing technology or enter into license agreements for the technology on which we depend. There can be no assurance that such non-infringing technology or licenses will be available on acceptable terms and conditions, if at all.

If the information systems that we depend on to support our customers, network operations, sales, billing, and financial reporting do not perform as expected, our operations and our financial results may be adversely affected.

We rely on complex information systems to operate our network and support our other business functions. Our ability to track sales leads, close sales opportunities, provision services, bill our customers for our services, and prepare our financial statements depends upon the effective integration of our various information systems. If our information systems, individually or collectively, fail or do not perform as expected, our ability to process and provision orders, to make timely payments to vendors, to ensure that we collect amounts owed to us and prepare our financial statements would be adversely affected. Such failures or delays could result in increased capital expenditures, customer and vendor dissatisfaction, loss of business or the inability to add new customers or additional services, and the inability to prepare accurate and timely financial statements, all of which would adversely affect our business and results of operations.

Our business depends on agreements with carrier neutral data center operators, which we could fail to obtain or maintain.

Our business depends upon access to customers in carrier neutral data centers, which are facilities in which many large users of the Internet house the computer servers that deliver content and applications to users by means of the Internet and provide access to multiple Internet access networks. Most carrier neutral data centers allow any carrier to operate within the facility (for a standard fee). We expect to enter into additional agreements with carrier neutral data center operators as part of our growth plan. Current government regulations do not require carrier neutral data center operators to allow all carriers access on terms that are reasonable

or nondiscriminatory. We have been successful in obtaining agreements with these operators in the past and have generally found that the operators want to have us located in their facilities because we offer low-cost, high-capacity Internet service to their customers. Any deterioration in our existing relationships with these operators could harm our sales and marketing efforts and could substantially reduce our potential customer base.

We may be liable for the material that content providers distribute over our network.

Although we believe our liability for third-party information stored on or transmitted through our networks is limited, the liability of private network operators is impacted both by changing technology and evolving legal principles. As a private network provider, we could be exposed to legal claims relating to third-party content stored or transmitted on our networks. Such claims could involve, among others, allegations of defamation, invasion of privacy, copyright infringement, or aiding and abetting restricted activities such as online gambling or pornography. If we decide to implement additional measures to reduce our exposure to these risks or if we are required to defend ourselves against these kinds of claims, our operating results and financial condition could be negatively affected.

Historically, we have generated net losses and used more cash than we have generated from operations, and we may continue to do so.

We have historically generated net losses and such losses may continue in the future. These net losses primarily have been driven by acquisition-related expenses, depreciation, amortization, interest expense, and share-based compensation. We cannot assure you that we will generate net income in the future.

We have also consistently consumed our entire positive cash flow generated from operating activities with our investing activities. Our investing activities have consisted principally of the acquisition of businesses and customer contracts as well as additions to property and equipment. We have funded the excess of cash used in investing activities over cash provided by operating activities with proceeds from equity and debt issuances.

We intend to continue to invest in expanding our business and pursuing acquisitions that we believe provide an attractive return on our capital. These investments may continue to exceed the amount of cash flow available from operations after debt service requirements. To the extent that our investments exceed our cash flow from operations, we plan to rely on potential future debt or equity issuances, which could increase interest expense or dilute the interest of stockholders, as well as cash on hand and borrowings under our revolving credit facility. We cannot assure you, however, that we will be able to obtain or continue to have access to sufficient capital on reasonable terms, or at all, to successfully grow our business.

Our revenue is relatively concentrated among a small number of customers, and the loss of any of these customers could significantly harm our business, financial condition, results of operations, and cash flows.

Revenues from our top five customers accounted for less than 10% of our revenue for the year ended December 31, 2018. We currently depend, and expect to continue to depend, upon a relatively small number of customers for a significant percentage of our revenue. Many of these customers are also competitors for some or all of our service offerings. Our customer contracts typically have terms of one to three years. Our customers may elect not to renew these contracts. Furthermore, our customer contracts are terminable for cause if we breach a material provision of the contract. We may face increased competition and pricing pressure as our customer contracts become subject to renewal. Our customers may negotiate renewal of their contracts at lower rates, for fewer services or for shorter terms. Many of our customers are in the telecommunications industry, which is undergoing consolidation. To the extent that two or more of our customers combine, they may be able to use their greater size to negotiate lower prices from us and may purchase fewer services from us, especially if their networks overlap. If we are unable to successfully renew our customer contracts on commercially acceptable terms, or if our customer contracts are terminated, our business could suffer.

We are also subject to credit risk associated with the concentration of our accounts receivable from our key customers. If one or more of these customers were to become bankrupt, insolvent or otherwise were unable to pay for the services provided by us, we may incur significant write-offs of accounts receivable or incur impairment charges.

Future acquisitions are a component of our strategic plan, and will include integration and other risks that could harm our business.

We have grown rapidly and intend to continue to acquire complementary businesses and assets. This exposes us to the risk that when we evaluate a potential acquisition target we over-estimate the target's value and, as a result, pay too much for it. We also cannot be certain that we will be able to successfully integrate acquired assets or the operations of the acquired entity with our existing operations. Businesses and assets that we have acquired or may acquire in the future may be subject to unknown or contingent

liabilities for which we may have limited or no recourse against the sellers. While we usually require the sellers to indemnify us with respect to breaches of representations and warranties that survive, such indemnification is often limited and subject to various claim expiration periods, materiality thresholds, a significant deductible or an aggregate cap on losses. As a result, there is no guarantee that we will recover any amounts with respect to losses due to breaches by the sellers of their representations and warranties. In addition, the total amount of costs and expenses that we may incur with respect to liabilities associated with acquired properties and entities may exceed our expectations, which may adversely affect our operating results and financial condition.

Difficulties with integration could cause material customer disruption and dissatisfaction, which could in turn increase churn and reduce new sales. Additionally, we may not be able to integrate acquired businesses in a manner that permits us to realize the cost synergies we anticipate. Our actual cost synergies, cost savings, growth opportunities, and efficiency and operational benefits resulting from any acquisition may be lower and may take longer to realize than we currently expect.

We may incur additional debt or issue additional equity to assist in the funding of these potential transactions, which may increase our leverage and/or dilute the interest of stockholders. Further, additional transactions could cause disruption of our ongoing business and divert management's attention from the management of daily operations to the closing and integration of the acquired business. Acquisitions also involve other operational and financial risks such as:

- increased demand on our existing employees and management related to the increase in the size of the business and the possible distraction from our existing business due to the acquisition;
- loss of key employees and salespeople of the acquired business;
- liabilities of the acquired business, both unknown and known at the time of the consummation of the acquisition;
- discovery that the financial statements we relied on to buy a business were incorrect;
- expenses associated with the integration of the operations of the acquired business;
- the possibility of future impairment, write-downs of goodwill and other intangibles associated with the acquired business;
- finding that the services and operations of the acquired business do not meet the level of quality of those of our existing services and operations; and
- determining that the internal controls of the acquired business were inadequate.

We are growing rapidly and may not maintain or efficiently manage our growth.

We have rapidly grown our company through acquisitions of companies and assets and the acquisition of new customers through our own sales efforts. In order to become consistently profitable and consistently cash flow positive, we need to both retain existing customers and continue to add a large number of new customers. While no single customer accounted for more than 5% of our 2018 revenue, the loss of or reduced purchases from several significant customers could impair our growth, cash flow, and profitability. Customers can be reluctant to switch providers of bandwidth services because it can involve substantial expense and technical difficulty. That can make it harder for us to acquire new customers through our own sales efforts. Our expansion may place strains on our management and our operational and financial infrastructure. Our ability to manage our growth will be particularly dependent upon our ability to:

- expand, develop, and retain an effective sales force and other qualified personnel;
- maintain the quality of our operations and our service offerings;
- attract customers to switch from their current providers to us in spite of the costs associated with switching providers;
- maintain and enhance our system of internal controls to ensure timely and accurate reporting; and
- expand our operational information systems in order to support our growth, including integrating new customers without disruption.

We expect that economies of scale will allow us to increase revenue while incurring incremental costs that are proportionately lower than those applicable to our existing businesses. If the increased costs required to support our revenue growth turn out to be greater than anticipated, we may be unable to improve our profitability and/or cash flows even if our revenue growth goals are achieved.

We are highly dependent on our management team and other key employees.

We expect that our continued success will largely depend upon the efforts and abilities of members of our management team and other key employees. Our success also depends upon our ability to identify, attract, develop, and retain qualified employees. If we lose members of our management team or other key employees, or if we are unable to recruit qualified employees in the future, it would likely have a material adverse effect on our business and our cash flows.

The international operations of our business expose us to risks that could materially and adversely affect the business.

We have operations and investments outside of the United States, as well as rights to subsea cable capacity extending to other countries, that expose us to risks inherent in international operations. These include:

- general economic, social, and political conditions;
- the difficulty of enforcing agreements and collecting receivables through certain foreign legal systems;
- tax rates in some foreign countries may exceed those in the U.S.;
- foreign currency exchange rates may fluctuate, which could adversely affect our results of operations and the value of our international assets and investments;
- foreign earnings may be subject to withholding requirements or the imposition of tariffs, exchange controls, or other restrictions;
- difficulties and costs of compliance with foreign laws and regulations that impose restrictions on our investments and operations, with penalties for noncompliance, including loss of licenses and monetary fines;
- difficulties in obtaining licenses or interconnection arrangements on acceptable terms, if at all; and
- changes in U.S. laws and regulations relating to foreign trade and investment.

In addition, on June 23, 2016, the citizens of the United Kingdom voted to leave the European Union ("Brexit"). In March 2017, the British government invoked Article 50 of the Treaty on European Union, which formally triggered a negotiation process with the European Union. In March 2018, the parties agreed to a transition period of 21 months -- from March 29, 2019 until the end of 2020 -- before the United Kingdom leaves the European Union completely, assuming approval of the negotiated withdrawal agreement. Withdrawal from the European Union is controversial in the United Kingdom notwithstanding the 2016 vote. In December 2018, the European Court of Justice ruled that, subject to certain conditions, a member state could revoke notification of its intention to withdraw from the European Union. The British government and the European Union have now negotiated a withdrawal agreement and the European Union has approved that agreement, but the British Parliament has not yet approved it. As a result, there remains considerable uncertainty around the withdrawal. Failure to obtain parliamentary approval of the negotiated withdrawal agreement could mean that the United Kingdom would be forced to leave the European Union on March 29, 2019 (a so-called "hard Brexit"). The consequences for the economies of the European Union and the United Kingdom are unknown and unpredictable, especially in the case of a hard Brexit. Our operations in the United Kingdom and Europe, as well as our North American operations, could be impacted by the global economic uncertainty caused by Brexit. If we are unable to manage any of these risks effectively, our business could be adversely affected.

We may as part of our expansion strategy increase our exposure to international investments and operations.

Some of our customer agreements contain service level obligations that could subject us to liability or the loss of revenue.

Some of our contracts with customers contain service level guarantees (including network availability) and service delivery date targets, which, if not met, enable customers to claim credits and, under certain conditions, terminate their agreements. Our failure to meet our service level guarantees could adversely affect our business, financial condition, and results of operations. Lost revenue from failure to meet service level guarantees was de minimis for the years ended December 31, 2017 and 2018. While we typically have carve-outs for force majeure events, many events, such as fiber cuts, equipment failure, and third-party vendors being unable to meet their underlying commitments with us, could impact our ability to meet our service level agreements, which could adversely affect our financial condition and operations.

Our international operations expose us to currency risk.

We conduct a portion of our business using foreign currencies, predominately the British Pound Sterling and the Euro. Fluctuation of the U.S. Dollar could adversely affect our consolidated revenue. Since we tend to incur costs in the same currency in which those operations realize revenue, the effect on operating income and operating cash flow is largely mitigated. However, if the U.S. Dollar fluctuates significantly, future revenues, operating income, and operating cash flows could be adversely affected.

Our future tax liabilities are not predictable or controllable. If we become subject to increased levels of taxation, our financial condition and operations could be negatively impacted.

We provide telecommunication and other services in multiple jurisdictions primarily across the United States and Europe and are, therefore, subject to multiple sets of complex and varying tax laws and rules. We cannot predict the amount of future tax liabilities to which we may become subject. Any increase in the amount of taxation incurred as a result of our operations or due to legislative or regulatory changes would be adverse to us. In addition, we may become subject to income tax audits by many tax jurisdictions throughout the world. It is possible that certain tax positions taken by us could result in tax liabilities for us. While we

believe that our current provisions for taxes are reasonable and appropriate, we cannot assure you that these items would be settled for the amounts accrued or that we will not identify additional exposures in the future.

We cannot assure you whether, when or in what amounts we will be able to use our net operating losses, or when they will be depleted.

At December 31, 2018, we had \$216.5 million of U.S. federal net operating loss carryforwards ("NOLs") net of limitations under Section 382 and \$911.2 million of foreign NOLs. Under certain circumstances, these NOLs can be used to offset our future federal and certain state taxable income.

If we experience an "ownership change," as defined in Section 382 of the Internal Revenue Code and related Treasury regulations, our ability to use the NOLs could be substantially limited. This limit could impact the timing of the usage of the NOLs, thus accelerating cash tax payments or causing NOLs to expire prior to their use, which could affect the ultimate realization of the NOLs. Furthermore, transactions that we enter into, as well as transactions by existing or future 5% stockholders that we do not participate in, could cause us to incur an "ownership change," which could prevent us from fully utilizing our NOLs to reduce our federal income taxes. These limitations could cause us not to pursue otherwise favorable acquisitions and other transactions involving our capital stock, or could reduce the net benefits to be realized from any such transactions.

We issue projected results and estimates for future periods from time to time, and such projections and estimates are subject to inherent uncertainties and may prove to be inaccurate.

Financial information, results of operations and other projections that we may issue from time to time are based upon our assumptions and estimates. While we believe these assumptions and estimates to be reasonable when they are developed, they are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control. You should understand that certain unpredictable factors could cause our actual results to differ from our expectations and those differences may be material. No independent expert participates in the preparation of these estimates. These estimates should not be regarded as a representation by us as to our results of operations during such periods as there can be no assurance that any of these estimates will be realized. In light of the foregoing, we caution you not to place undue reliance on these estimates. These estimates constitute forward-looking statements.

If we do not comply with laws regarding corruption and bribery, we may become subject to monetary or criminal penalties.

The United States Foreign Corrupt Practices Act generally prohibits companies and their intermediaries from bribing foreign officials for the purpose of obtaining or keeping business. Other countries have similar laws to which we are subject. We currently take precautions to comply with these laws. However, these precautions may not protect us against liability, particularly as a result of actions that may be taken in the future by agents and other intermediaries through whom we have exposure under these laws even though we may have limited or no ability to control such persons. Our competitors include foreign entities that are not subject to the United States Foreign Corrupt Practices Act or laws of similar stringency, and hence we may be at a competitive disadvantage.

Risks Related to Our Industry

Consolidation among companies in the telecommunications industry could further strengthen our competitors and adversely impact our business.

The telecommunications industry is very competitive and continues to undergo significant consolidation. There are many reasons for consolidation in our industry, including the desire for companies to acquire customers or assets in regions where they currently have no or insufficient presence. The consolidation within the industry may cause customers to disconnect services to move them to their own networks, or consolidate buying with other providers. Additionally, consolidation in the industry could further strengthen our competitors, give them greater financial resources and geographic reach, and allow them to put additional pressure on prices for our services. Furthermore, consolidation can reduce the number of suppliers available to contract with, resulting in decreased flexibility and cost savings opportunity.

The sector in which we operate is highly competitive, and we may not be able to compete effectively.

We face significant competition from incumbent carriers, Internet service providers, and facilities-based network operators. Relative to us, many of these providers have significantly greater financial, technological, and personnel resources, more well-established brand names, superior marketing capabilities, greater network reach, larger customer bases, and more diverse strategic plans and service offerings. Most of these competitors are also our customers and suppliers. Intense competition from these traditional and new communications companies has led to declining prices and margins for many communications services, and we expect

this trend to continue as competition intensifies in the future. Our competitors may also introduce new technologies or services that could make our services less attractive to potential customers.

Certain of our services are subject to regulation that could change or otherwise impact us in an adverse manner.

Communications services are subject to domestic and international regulation at the federal, state, and local levels. These regulations affect our business and our existing and potential competitors. In the United States, both the FCC and the state public utility commissions or similar regulatory authorities typically require us to file periodic reports, pay various regulatory fees and assessments, and to comply with their regulations. Such compliance can be costly and burdensome and may affect the way we conduct our business. Delays in receiving required regulatory approvals (including approvals relating to acquisitions or financing activities or for interconnection agreements with other carriers), the enactment of new and adverse international or domestic legislation or regulations (including those pertaining to broadband initiatives and net-neutrality), or the denial, modification, or termination by a regulator of any approval or authorization, could have a material adverse effect on our business.

Our communications services and communications networks in Europe and elsewhere are also subject to regulatory oversight by national communications regulators, such as the United Kingdom's Office of Communications ("Ofcom"). In addition, in April 2016, the European Commission adopted the General Data Protection Regulation ("GDPR"), which went into effect in May 2018. GDPR extends the scope of European privacy laws to any entity which processes personal data about European Union residents in connection with the offer of goods or services or the monitoring of behavior. GDPR imposes numerous new requirements for the collection, use and disclosure of personal information, including: more stringent requirements relating to data subject consent; what information must be shared with data subjects regarding how their personal information is used; the obligation to notify regulators and affected individuals of personal data breaches; extensive new internal privacy governance obligations; and obligations to honor expanded rights of individuals in relation to their personal information (e.g., the right to access, correct and delete their data). Complying with GDPR and other emerging and changing privacy requirements may cause us to incur substantial costs or require us to change our business practices. Noncompliance could result in penalties or significant legal liability, and could affect our ability to retain and attract customers.

Local governments also exercise legal authority that may have an adverse effect on our business because of our need to obtain rights-of-way for certain portions of our network. While local governments may not prohibit persons from providing telecommunications services nor treat telecommunications service providers in a discriminatory manner, they can affect the timing and costs associated with our use of public rights-of-way. Further, the current regulatory landscape is subject to change through judicial review of current legislation and rulemaking by the FCC, Ofcom, and other domestic, foreign, and international rulemaking bodies. These rulemaking bodies regularly consider changes to their regulatory framework and fee obligations. Changes in current regulation may make it more difficult to obtain the approvals necessary to operate our business, significantly increase the regulatory fees to which we are subject, or have other adverse effects on our future operations in the United States and Europe.

We are subject to various forms of regulation from the Federal Communications Commission and state regulatory commissions in the states in which we operate, which limit our pricing flexibility and cost structure for regulated voice and high-speed Internet products.

As of December 31, 2018 we had operating authority from each of the 48 states and the District of Columbia in which we conducted operations, and we are subject to various forms of regulation from the regulatory commissions in each of these areas as well as from the FCC. The FCC has primary jurisdiction over interstate services including the rates that we pay other telecommunications companies to use their network and other issues related to interstate service. Future revenues, costs, and capital investment in our acquired businesses could be adversely affected by material changes to or decisions regarding applicability of government requirements. Federal and state communications laws and regulations may be amended in the future, and other laws and regulations may affect our business. In addition, certain laws and regulations applicable to us and our competitors may be, and have been, challenged in the courts and could be changed at any time. We cannot predict future developments or changes to the regulatory environment or the impact such developments or changes would have. In addition, these regulations could create significant compliance costs for us.

Our growth and financial health are subject to a number of economic risks.

A downturn in the world economy, especially the economies of North America and Europe, would negatively impact our growth. We would be particularly impacted by a decline in the development of new applications and businesses that make use of the Internet, which depend on numerous factors beyond our control. Our revenue growth is predicated on growing use of the Internet that makes up for the declining prices of Internet service. An economic downturn could impact the Internet business more significantly than other businesses that are less dependent on new applications and growth in the use of those applications because of the retrenchment by consumers and businesses that typically occur in an economic downturn.

Unfavorable general global economic conditions could negatively impact our operating results and financial condition.

Unfavorable general global economic conditions could negatively affect our business. Although it is difficult to predict the impact of general economic conditions on our business, these conditions could adversely affect the affordability of, and customer demand for, our services, and could cause customers to delay or forgo purchases of our services. One or more of these circumstances could cause our revenue to decline. Also, our customers may not be able to obtain adequate access to credit, which could affect their ability to purchase our services or make timely payments to us. The current economic conditions, including federal fiscal and monetary policy actions, may lead to inflationary conditions in our cost base, particularly in our lease and personnel related expenses. This could harm our margins and profitability if we are unable to increase prices or reduce costs sufficiently to offset the effects of inflation in our cost base. For these reasons, among others, if challenging economic conditions persist or worsen, our operating results and financial condition could be adversely affected.

Terrorist activity throughout the world, military action to counter terrorism, or natural disasters could adversely impact our business.

The continued threat of terrorist activity and other acts of war or hostility have had, and may continue to have, an adverse effect on business, financial, and general economic conditions internationally. Effects from these events and any future terrorist activity, including cyber terrorism, may, in turn, increase our costs due to the need to provide enhanced security, which would adversely affect our business and results of operations. These circumstances may also damage or destroy our Internet infrastructure and may adversely affect our ability to attract and retain customers, our ability to raise capital and the operation and maintenance of our network access points. We are also susceptible to other catastrophic events such as major natural disasters, extreme weather, fire, or similar events that could affect our headquarters, other offices, our network, infrastructure or equipment, which could adversely affect our business.

Risk Factors Related to Our Indebtedness

Our substantial level of indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations under our debt agreements.

We have substantial indebtedness. Our substantial debt may have important consequences. For instance, it could:

- make it more difficult for us to satisfy our financial obligations, including those relating to our debt;
- require us to dedicate a substantial portion of any cash flow from operations to the payment of interest and principal due under our debt, which will reduce funds available for other business purposes, including the growth of our operations, capital expenditures, and acquisitions;
- place us at a competitive disadvantage compared with some of our competitors that may have less debt and better access to capital resources; and
- limit our ability to obtain additional financing required to fund working capital and capital expenditures, for strategic acquisitions, and for other general corporate purposes.

Our ability to satisfy our obligations, including our debt, depends on our future operating performance and on economic, financial, competitive, and other factors, many of which are beyond our control. Our business may not generate sufficient cash flow, and future financings may not be available to provide sufficient net proceeds, to meet these obligations or to successfully execute our business strategy.

Despite our leverage, we may still be able to incur more debt. This could further exacerbate the risks that we and our subsidiaries face.

We and our subsidiaries may incur additional indebtedness, including additional secured indebtedness, in the future. The terms of our debt facilities restrict, but do not completely prohibit, us from doing so. If new debt or other liabilities are added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

We may be subject to interest rate risk, and increasing interest rates may increase our interest expense.

Borrowings under the credit agreement bear, and our future indebtedness may bear, interest at variable rates and expose us to interest rate risk. To mitigate the risk of rising interest rates, we may use interest rate swap agreements and exchange fixed and variable rate interest payment obligations over the life of the arrangements, without exchange of the underlying principal amounts. We may not be successful in structuring such swap agreements to manage our risks effectively which could adversely affect our business, earnings and financial condition. Additionally, if interest rates increase, our debt service obligations on the variable rate

indebtedness would increase even though the amount borrowed remained the same, and our net income and cash available for servicing our indebtedness would decrease.

On July 27, 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. It is unclear if at that time whether LIBOR will cease to exist or if new methods of calculating LIBOR will be established such that it continues to exist after 2021. The Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, announced replacement of U.S. dollar LIBOR with a new index calculated by short-term repurchase agreements, backed by U.S. Treasury securities called the Secured Overnight Financing Rate ("SOFR"). The first publication of SOFR was released in April 2018. Whether or not SOFR gains market traction as a LIBOR replacement remains in question and the future of LIBOR at this time is uncertain. If LIBOR ceases to exist, we may need to renegotiate our loan documents that utilize LIBOR as a factor in determining the interest rate to replace LIBOR with the new standard that is established.

The agreements governing our debt obligations impose restrictions on our business and could adversely affect our ability to undertake certain corporate actions.

The agreements governing our various debt obligations include covenants imposing significant restrictions on our business. These restrictions may affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities as they arise. These covenants place restrictions on our ability to, among other things:

- incur additional debt;
- create liens;
- make certain investments;
- consummate acquisitions;
- enter into certain transactions with affiliates;
- declare or pay dividends, redeem stock or make other distributions to stockholders; and
- consolidate, merge or transfer or sell all or substantially all of our assets.

Our ability to comply with these agreements may be affected by events beyond our control, including prevailing economic, financial, and industry conditions. These covenants could have an adverse effect on our business by limiting our ability to take advantage of financing, mergers and acquisitions, or other corporate opportunities.

In addition, the credit agreement requires us to comply with specified financial ratios, including ratios regarding secured leverage. Our ability to comply with these ratios may be affected by events beyond our control. These restrictions limit our ability to plan for or react to market conditions, meet capital needs, or otherwise constrain our activities or business plans. They also may adversely affect our ability to finance our operations, enter into acquisitions, or engage in other business activities that would be in our interest.

A breach of any of the covenants contained in our credit agreement or any future agreements related to indebtedness or our inability to comply with the financial ratios could result in an event of default, which would allow the lenders to declare all borrowings outstanding to be due and payable or to terminate the ability to borrow under our revolving line of credit facility ("Revolver"). If the amounts outstanding under the credit agreement or other future indebtedness were to be accelerated, we cannot assure that our assets would be sufficient to repay in full the money owed. In such a situation, we could be forced to file for bankruptcy or seek other protections from creditors.

To service our indebtedness, we will require a significant amount of cash. However, our ability to generate cash depends on many factors, many of which are beyond our control.

Our ability to make payments on and to refinance our indebtedness and to fund planned capital expenditures will depend on our ability to generate cash in the future, which, in turn, is subject to general economic, financial, competitive, regulatory, and other factors, many of which are beyond our control.

Our business may not generate sufficient cash flow from operations and we may not have available to us future borrowings in an amount sufficient to enable us to pay our indebtedness or to fund our other liquidity needs. In these circumstances, we may need to refinance all or a portion of our indebtedness on or before maturity. We may not be able to refinance any of our indebtedness on commercially reasonable terms or at all. Without this financing, we could be forced to sell assets or secure additional financing to make up for any shortfall in our payment obligations under unfavorable circumstances. However, we may not be able to secure additional financing on terms favorable to us or at all and, in addition, the terms of the indentures governing our notes limit our

ability to sell assets and also restrict the use of proceeds from such a sale. We may not be able to sell assets quickly enough or for sufficient amounts to enable us to meet our obligations, including our obligations under our notes.

If we are unable to meet our debt service obligations, we would be in default under the terms of our credit agreement, permitting acceleration of the amounts due under the credit agreement and eliminating our ability to draw on the Revolver. If the amounts outstanding under the credit facilities or future indebtedness were to be accelerated, we could be forced to file for bankruptcy.

Risks Related to Our Common Stock and the Securities Markets

Because we do not currently intend to pay dividends on our common stock, stockholders will benefit from an investment in our common stock only if it appreciates in value.

We do not currently anticipate paying any dividends on shares of our common stock. Any determination to pay dividends in the future will be made by our Board of Directors and will depend upon results of operations, financial conditions, contractual restrictions, restrictions imposed by applicable law, and other factors our Board of Directors deems relevant. Accordingly, realization of a gain on stockholders' investments will depend on the appreciation of the price of our common stock. There is no guarantee that our common stock will appreciate in value or even maintain the price at which stockholders purchased their shares.

The concentration of our capital stock ownership may limit a stockholder's ability to influence corporate matters, and could discourage a takeover that stockholders may consider favorable and make it more difficult for a stockholder to elect directors of its choosing.

H. Brian Thompson, the Company's Executive Chairman of the Board of Directors, and Universal Telecommunications, Inc., Mr. Thompson's private equity investment and advisory firm, beneficially owned approximately 12% of our common stock at February 27, 2019. As of February 27, 2019, our executive officers, directors, and affiliated entities, excluding Mr. Thompson and Universal Telecommunications, Inc., together beneficially owned common stock representing approximately 7% of our common stock. In addition, based on filings with the Securities and Exchange Commission, four additional investors each held more than 5% of our common stock, representing approximately 43% of our common stock in aggregate. As a result, our management and these other stockholders have the ability to exert significant control over matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. The interests of these stockholders might conflict with your interests as a holder of our securities, and it may cause us to pursue transactions that, in their judgment, could enhance their equity investments, even though such transactions may involve significant risks to you as a security holder. The large concentration of ownership in a small group of stockholders might also have the effect of delaying or preventing a change of control that other stockholders may view as beneficial.

We might require additional capital to support business growth, and this capital might not be available on favorable terms, or at all.

Our operations or expansion efforts may require substantial additional financial, operational, and managerial resources. While we believe we have sufficient liquidity as of December 31, 2018 to fund our working capital and other operating requirements, we may raise additional funds for acquisitions or to expand our operations. If we obtain additional funding in the future, we may seek debt financing or obtain additional equity capital. Additional capital may not be available to us, or may only be available on terms that adversely affect our existing stockholders, or that restrict our operations. For example, if we raise additional funds through issuances of equity or convertible debt securities, our existing stockholders could suffer dilution, and any new equity securities we issue could have rights, preferences, and privileges superior to those of holders of our common stock.

Disruptions in the financial markets could affect our ability to obtain debt or equity financing or to refinance our existing indebtedness on reasonable terms or at all.

Disruptions in the financial markets could impact our ability to obtain debt or equity financing, or lines of credit, in the future as well as impact our ability to refinance our existing indebtedness on reasonable terms or at all, which could affect our strategic operations and our financial performance and force modifications to our operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

As of December 31, 2018, we lease approximately 795,000 square feet of space for offices, data centers, colocation facilities, and PoPs throughout North America, Europe, Asia, South America, Africa, and Australia. Additionally, as of December 31, 2018, we owned ten cable landing stations in North America and Europe comprising approximately 79,000 square feet.

Our corporate headquarters facility consists of approximately 19,000 square feet, located in McLean, Virginia.

We believe our properties, taken as a whole, are in good operating condition and are adequate for our business needs.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we are party to legal proceedings arising in the normal course of business. We do not believe that we are party to any current or pending legal action that could reasonably be expected to have a material adverse effect on our financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market for Equity Securities

Our common stock trades on the NYSE under the symbol "GTT" and has traded on the NYSE since November 28, 2014. Prior to November 28, 2014, our common stock traded on the NYSE MKT and on the OTCBB.

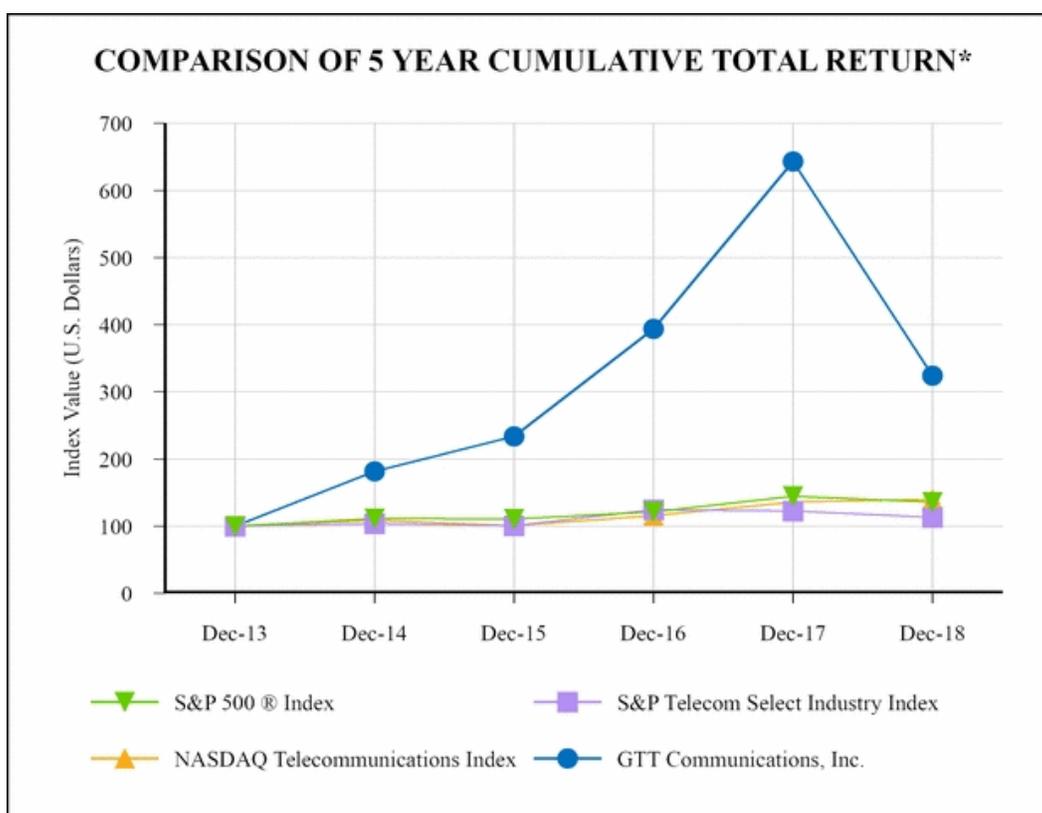
As of February 27, 2019, there were 152 holders of record of our common stock, par value \$.0001 per share.

Dividends

We have not paid any dividends on our common stock to date, and do not anticipate paying any dividends in the foreseeable future. Moreover, restrictive covenants existing from the credit agreement that we have entered into preclude us from paying dividends until certain conditions are met.

Performance Graph

The following performance graph compares the relative changes in the cumulative total return of our common stock for the period from December 31, 2013 to December 31, 2018, against the cumulative total return for the same period of (1) The Standard & Poor's 500 (S&P 500) Index, (2) The Standard & Poor's (S&P) Telecom Select Industry Index, and (3) NASDAQ Telecommunication Index. The comparison below assumes \$100 was invested on December 31, 2013 in our common stock, the S&P 500 Index, the S&P Telecom Select Industry Index, and NASDAQ Telecommunication Index.



* \$100 invested on December 31, 2013 in stock or index. Fiscal year ending December 31.

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	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
GTT Communications, Inc.	\$ 100.00	\$ 181.23	\$ 233.70	\$ 393.84	\$ 643.15	\$ 324.11
S&P 500 ® Index	100.00	111.39	110.58	121.13	144.65	135.63
S&P Telecom Select Industry Index	100.00	103.45	100.31	124.32	122.38	113.13
NASDAQ Telecommunications Index	100.00	108.91	100.74	115.72	135.90	140.02

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

ITEM 6. SELECTED FINANCIAL DATA

The annual financial information set forth below has been summarized from our audited consolidated financial statements for GTT Communications, Inc. and its wholly-owned subsidiaries, for the periods and as of the dates indicated. The information should be read in connection with, and is qualified in its entirety by reference to, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations", the consolidated financial statements and notes included elsewhere in this report and in our SEC filings. These historical results are not necessarily indicative of the results to be expected in the future.

Year Ended December 31,

	2018	2017	2016	2015	2014
<i>(Amounts in millions, except for share and per share data)</i>					
Consolidated Statement of Operations Data:					
Telecommunications services	\$ 1,490.8	\$ 827.9	\$ 527.3	\$ 372.5	\$ 209.0
Operating expenses:					
Cost of telecommunications services	819.4	432.1	279.6	207.7	129.7
Selling, general and administrative expenses	383.2	215.4	143.2	101.7	45.7
Severance, restructuring and other exit costs	37.1	22.4	0.9	12.7	9.4
Depreciation and amortization	211.4	132.6	62.8	46.7	24.9
Total operating expenses	<u>1,451.1</u>	<u>802.5</u>	<u>486.5</u>	<u>368.8</u>	<u>209.7</u>
Operating income (loss)	39.7	25.4	40.8	3.7	(0.7)
Interest expense, net	(146.9)	(71.2)	(29.4)	(13.9)	(8.5)
Loss on debt extinguishment	(13.8)	(8.6)	(1.6)	(3.4)	(3.1)
Other (expense) income, net	(127.9)	0.2	(0.6)	(1.2)	(8.6)
(Loss) income before income taxes	(248.9)	(54.2)	9.2	(14.8)	(20.9)
(Benefit from) provision for income taxes	(5.5)	17.3	3.9	(34.1)	2.1
Net (loss) income	<u>\$ (243.4)</u>	<u>\$ (71.5)</u>	<u>\$ 5.3</u>	<u>\$ 19.3</u>	<u>\$ (23.0)</u>
Net (loss) earnings per common share - basic	\$ (4.80)	\$ (1.71)	\$ 0.14	\$ 0.55	\$ (0.85)
Net (loss) earnings per common share - diluted	\$ (4.80)	\$ (1.71)	\$ 0.14	\$ 0.54	\$ (0.85)
Weighted average common shares - basic	50,718,279	41,912,952	37,055,663	34,973,284	27,011,381
Weighted average common shares - diluted	50,718,279	41,912,952	37,568,915	35,801,395	27,011,381

Consolidated Balance Sheet Data:

Cash and cash equivalents	\$ 55.3	\$ 101.2	\$ 29.7	\$ 14.6	\$ 49.3
Restricted cash and cash equivalents	—	—	304.3	—	—
Property and equipment, net	1,870.4	499.3	43.4	38.8	25.2
Total assets	4,537.6	1,785.4	948.5	584.3	260.4
Long-term debt, including current portion	3,191.5	1,243.5	729.5	386.2	120.8
Total stockholders' equity	414.7	231.4	127.8	110.5	77.6

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") contains certain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. Historical results may not indicate future performance. Our forward-looking statements reflect our current views about future events, are based on assumptions, and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those contemplated by these statements. Factors that may cause differences between actual results and those contemplated by forward-looking statements include, but are not limited to, those discussed in "Risk Factors" in Part I, Item 1A, of this Annual Report. We undertake no obligation to publicly update or revise any forward-looking statements, including any changes that might result from any facts, events, or circumstances after the date hereof that may bear upon forward-looking statements. Furthermore, we cannot guarantee future results, events, levels of activity, performance, or achievements.

This MD&A is intended to assist in understanding and assessing the trends and significant changes in our results of operations and financial condition. As used in this MD&A, the words, "GTT", "we", "our", and "us" refer to GTT Communications, Inc. and its consolidated subsidiaries. This MD&A should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report.

Company Overview

GTT Communications, Inc. is redefining global communications to serve a cloud-based future, with a powerful purpose of connecting people across organizations, around the world, and to every application in the cloud. We serve large enterprise and carrier clients with complex national and global networking needs, and differentiate ourselves from the competition by providing an outstanding service experience built on our core values of simplicity, speed and agility. A Fortune Future 50 company, we operate a global Tier 1 internet network ranked among the largest in the industry, and own a fiber network that includes an expansive pan-European footprint and subsea cables. Our global network includes over 600 PoPs spanning six continents, and we provide services in more than 140 countries. Our comprehensive portfolio of cloud networking services includes:

- Wide area networking, including SD-WAN, MPLS and VPLS;
- Transport & infrastructure services, including wavelength, Ethernet, colocation, dark fiber and video transport;
- Internet services, including IP transit, dedicated internet access, and broadband internet;
- Managed services, including managed equipment, managed security, and managed hosting; and
- Voice services, including SIP trunking and hosted PBX.

We deliver the following primary service offerings to our clients:

Wide Area Networking

We provide a variety of wide area networking solutions to meet the growing needs of our clients, including SD-WAN, MPLS, VPLS, and Ethernet. We design and implement custom private, public, and hybrid cloud network solutions for our customers, offering bandwidth speeds from 10 Mbps to 100 Gbps per port with burstable and aggregate bandwidth capabilities.

Through GTT's wide area networking services, clients can securely connect to cloud service providers in data centers and exchanges around the world. Our Cloud Connect feature provides private, secure, pre-established connectivity to leading cloud service providers. Using GTT's global network, clients can connect any office location in the world to any application in the cloud.

SD-WAN is an enterprise networking technology in the early stages of market adoption with high growth potential. The software-based network intelligence in SD-WAN enables more efficient delivery of traffic across a mix of access types, accelerates the speed of service deployments, and improves application visibility and performance. GTT's SD-WAN delivers managed global connectivity, enhanced application performance and control, and secure access to cloud-based services and applications. Our service leverages GTT's global, Tier 1 IP network, securely connecting client locations to any destination on the internet or to any cloud service provider. We offer the widest range of access options with bundled network security, making it simple and cost-effective to integrate new locations and add network bandwidth as needed.

Transport & Infrastructure Services

We provide a full suite of transport and infrastructure services over our global network, enabling cloud-based applications and the transport of high volume data between data centers, large enterprise office locations, and media hubs. Our service is

differentiated based on an expansive pan-European fiber footprint and subsea cable infrastructure, network diversity, and low latency connections between major financial and commercial centers in North America and Europe. Our clients for these services include internet-based technology companies and OTTs, large banks, and other service providers requiring network infrastructure. All services are available on a protected basis with the ability to specify pre-configured alternate routes to minimize the impact of any network disruption.

GTT's wavelength service is designed to deliver scalable high-performance optical connectivity over a state-of-the-art dense wave division multiplexing platform. We offer low latency services between the major financial centers and exchanges, tailored to meet the requirements of proprietary trading firms for the fastest connections. In particular, GTT's Express transatlantic cable offers industry leading lowest latency between North America and Europe. We also offer dark fiber and duct services across our fiber network.

GTT's Ethernet service enables clients to design a network environment best suited to their needs, with point-to-point and point-to-multipoint topology options, and dynamic or fixed routing. GTT's Ethernet Direct service provides enhanced performance capabilities for clients seeking guaranteed routes and latency SLAs between key financial markets, data centers and carrier hotels over a service-specific platform. This service is particularly suited for the financial industry, including trading firms that may require a lower-bandwidth alternative to wavelength services. Financial organizations can also leverage our low-latency network to access over 60 unique routes and more than 130 financial exchanges.

We offer colocation services in over 50 facilities in Europe and North America. The turnkey service offering includes cabinets, racks, suites, and technical support services, providing clients with efficient and secure access to other carrier networks.

We offer a suite of video transport services for clients in the media and entertainment industry, designed to support broadcast quality transmission of live events, sports entertainment, and news. We can manage individual services, multicast distribution, and entire client networks, supporting all video formats required for today's media workflow.

Internet

We offer clients scalable, high-bandwidth global internet connectivity and IP transit with guaranteed availability and packet delivery, utilizing our Tier global 1 IP network. Our Internet services offer flexible connectivity with multiple port interfaces including Fast Ethernet, Gigabit Ethernet, 10 Gigabit Ethernet, and 100 Gigabit Ethernet. We also offer a wide range of broadband internet and wireless internet access services. We support a dual stack of IPv4 and IPv6 protocols, enabling the delivery of seamless IPv6 services alongside existing IPv4 services.

Managed Services

We offer fully managed network services, including managed equipment, security, and managed hosting.

GTT's Managed Equipment provides a turnkey solution for the end-to-end management of customer premise equipment. This includes the design, procurement, implementation, monitoring, and maintenance of equipment including routers, switches, servers, and Wi-Fi access points.

GTT's Managed Security is available as a cloud-based or premises-based security service and provides a comprehensive, multi-layered security solution that protects the network while meeting the most stringent security standards. Our Unified Threat Management services include advanced firewall, intrusion detection, anti-virus, web filtering, and anti-spam. GTT's DDoS Mitigation service detects and removes malicious traffic, ensuring business continuity for our clients, even in the event of a large-scale DDoS attack. The service utilizes a next-generation DDoS platform technology, which provides immediate threat detection, deep packet inspection analytics and filtering of compromised traffic at GTT's scrubbing centers. We offer a full range of compliancy packages, which include developing, deploying, configuring, and monitoring network and security assets, and providing documentation to comply with audits.

GTT's Managed Hosting service includes application hosting and management.

Voice

We offer local voice service in over 60 countries around the world, along with global long-distance and toll-free services. Our SIP Trunking service delivers worldwide PSTN access to client telephony equipment over an integrated data connection, driving efficiency and productivity organization-wide while allowing clients to retain control of their core voice infrastructure. Our Hosted PBX service allows clients to eliminate traditional voice infrastructure with communication services delivered through the cloud

and a wide array of features and customization choices for each site and user.

Customer and Network Contracts

Our customer contracts for network services range from one to three years or more for the initial term. Following the initial term, these agreements typically provide for automatic renewal for specified periods ranging from one month to one year. Our prices are fixed for the duration of the contract, and we typically bill monthly in advance for such services. If a customer terminates its agreement, the terms of our customer contracts typically require full recovery of any amounts due for the remainder of the term or, at a minimum, our liability to any underlying suppliers.

Our revenue is composed of recurring revenue and non-recurring revenue. Recurring revenue relates to contracted ongoing service that is generally fixed in price and paid by the customer on a monthly basis for the contracted term. For the year ended December 31, 2018, recurring revenue was approximately 93% of our total revenue. Non-recurring revenue primarily includes installation and equipment charges to clients, one-time termination charges for clients who cancel their services prior to the contract termination date, and usage revenue which represents variable revenue based on whether a customer exceeds its committed usage threshold as specified in the contract.

Our network supplier contracts do not have any market related net settlement provisions. We have not entered into, and do not plan to enter into, any supplier contracts which involve financial or derivative instruments. The supplier contracts are entered into solely for the direct purchase of telecommunications capacity, which is resold by us in the normal course of business.

Other than cost of telecommunication services provided, our most significant operating expenses are employment costs. As of December 31, 2018, we had approximately 3,200 full-time equivalent employees. For the year ended December 31, 2018, the total employee cash compensation and benefits represented approximately 13% of total revenue.

Recent Developments Affecting Our Results

Business Acquisitions

Since our formation, we have consummated a number of transactions accounted for as business combinations as part of our strategy of expanding through acquisitions. These acquisitions, which are in addition to our periodic purchases of customer contracts, have allowed us to increase the scale at which we operate, which in turn affords us the ability to increase our operating leverage, extend our network, and broaden our customer base. The accompanying consolidated financial statements include the operations of the acquired entities from their respective acquisition dates.

Access Point

In October 2018, we acquired Access Point, Inc. ("Access Point"). We paid \$36.3 million cash consideration, of which \$1.0 million was net cash acquired, and issued 115,194 unregistered shares of our common stock valued at \$4.6 million at closing. The results of Access Point have been included from October 1, 2018. The acquisition was considered a stock purchase for tax purposes.

Interoute

In February 2018, we entered into an Agreement for the Sale and Purchase of Interoute Communications Holdings S.A. ("Interoute"), a Luxembourg public limited liability company (the "Interoute Purchase Agreement") for €1,915.2 million in cash consideration, or \$2,335.0 million using the exchange rate in effect on the date we entered into the Interoute Purchase Agreement.

In February 2018, we also entered into a deal-contingent foreign currency hedge arrangement with a total notional amount of €1.260 billion at a spot rate of \$1.23 to €1.00 to fix a portion of the purchase price. Fees associated with this arrangement were payable upon closing of the acquisition based on a pre-defined schedule in the hedge agreement.

On May 31, 2018, we closed on the transaction and acquired Interoute. We paid the €1,915.2 million, or \$2,239.3 million in cash consideration using the exchange rate in effect at closing (which at \$1.17 to €1.00 was lower than at announcement) of which \$66.1 million was net cash acquired, and assumed \$27.7 million in debt. Concurrent with closing of the acquisition, and as a result of the decline in exchange rate, we settled the deal-contingent foreign currency hedge arrangement for \$105.8 million, inclusive of fees. The \$105.8 million has been recorded as a loss in the statement of operations within other expense.

The combination of the consideration paid at closing plus the settlement of the hedge were consistent with the total expected price of the transaction as announced in February 2018.

The results of Interoute have been included from June 1, 2018. The acquisition was considered a stock purchase for tax purposes.

We partially funded the purchase price through the issuance of 9,589,094 shares of common stock to a group of institutional investors for proceeds of \$425.0 million substantially concurrently with the closing of the Interoute acquisition. We also entered into a credit agreement to fund the remainder of the purchase price.

Accelerated Connections

In March 2018, we acquired Accelerated Connections, Inc. ("Accelerated Connections"). We paid \$35.0 million cash consideration, of which \$0.8 million was net cash acquired, and issued 79,930 unregistered shares of our common stock valued at \$4.2 million at closing. The results of Accelerated Connections have been included from March 1, 2018. The acquisition was considered a stock purchase for tax purposes.

Custom Connect

In December 2017, we acquired Custom Connect International B.V. ("Custom Connect"). We paid \$28.9 million in cash consideration, of which \$0.6 million was net cash acquired, and issued 49,941 unregistered shares of our common stock valued at \$2.2 million at closing. The results of Custom Connect have been included from December 31, 2017. The acquisition was considered a stock purchase for tax purposes.

Transbeam

In October 2017, we acquired Transbeam, Inc. ("Transbeam"). We paid \$26.4 million, of which \$0.8 million was net cash acquired, and \$2.0 million was deferred as holdback consideration for a 12-month period, subject to reduction for any indemnification claims made by us prior to such date. As of December 31, 2018, the remaining holdback consideration to be paid was \$0.2 million. The results of Transbeam have been included from October 1, 2017. The acquisition was considered a stock purchase for tax purposes.

Global Capacity

In September 2017, we acquired Global Capacity for \$104.0 million in cash consideration, of which \$4.0 million was net cash acquired, and issued 1,850,000 unregistered shares of our common stock valued at \$53.6 million at closing. The results of Global Capacity have been included from September 15, 2017. The acquisition was considered an asset purchase for tax purposes.

Perseus

In June 2017, we acquired Perseus Telecom ("Perseus"). We paid \$37.5 million in cash consideration, of which \$0.1 million was net cash acquired, and assumed \$1.9 million in capital leases. The results of Perseus have been included from June 1, 2017. The acquisition was considered a stock purchase for tax purposes.

Hibernia

In January 2017, we acquired Hibernia Networks ("Hibernia") for \$529.6 million in cash consideration, of which \$14.6 million was net cash acquired, and issued 3,329,872 unregistered shares of our common stock, initially valued at \$75.0 million on the date of announcement, and ultimately valued at \$86.1 million at closing. The results of Hibernia have been included from January 1, 2017. The acquisition was considered an asset purchase for tax purposes.

Telnes

In February 2016, we completed the acquisition of Telnes Broadband ("Telnes"). We paid \$15.5 million in cash and issued 178,202 unregistered shares of our common stock valued at \$2.0 million. The results of Telnes have been included from February 1, 2016. The acquisition was considered an asset purchase for tax purposes.

The acquisition of Access Point, Interoute, and Accelerated Connections are collectively referred to as "2018 Acquisitions," the acquisitions of Custom Connect, Transbeam, Global Capacity, Perseus, and Hibernia are collectively referred to as "2017

Acquisitions," and the acquisition of Telnes is referred to as the "2016 Acquisition" for purposes of explaining our results of operations.

Asset Purchases

Periodically we acquire customer contracts that we account for as an asset purchase and record a corresponding intangible asset that is amortized over its assumed useful life.

During 2018, we did not acquire any such customer contracts. During 2017 and 2016, we acquired customer contracts for an aggregate purchase price of \$37.4 million and \$41.3 million, respectively.

Indebtedness

The following summarizes our long-term debt at December 31, 2018 and 2017 (amounts in millions):

	December 31, 2018	December 31, 2017
US Term loan	\$ 1,761.2	\$ 693.0
EMEA Term loan	857.6	—
7.875% Senior unsecured notes	575.0	575.0
Revolving line of credit	59.0	—
Other secured loans	18.1	—
Total debt obligations	3,270.9	1,268.0
Unamortized debt issuance costs	(31.6)	(33.8)
Unamortized original issuance (discount) premium, net	(47.8)	9.3
Carrying value of debt	3,191.5	1,243.5
Less current portion	(39.9)	(7.0)
Long-term debt less current portion	\$ 3,151.6	\$ 1,236.5

2018 Credit Agreement

In May 2018, we entered into a credit agreement (the "2018 Credit Agreement") that provides for (1) a \$1,770.0 million term loan B facility (the "US Term Loan Facility"), (2) a €750.0 million term loan B facility (the "EMEA Term Loan Facility"), and (3) a \$200.0 million revolving credit facility (the "Revolving Line of Credit Facility") (which includes a \$50.0 million letter of credit facility). In addition, we may request incremental term loan commitments and/or incremental revolving loan commitments in an aggregate amount not to exceed the sum of \$575.0 million and an unlimited amount that is subject to pro forma compliance with a net secured leverage ratio test. The US Term Loan Facility was issued at an original issuance discount of \$8.9 million and the EMEA Term Loan Facility was issued at an original issuance discount of €3.8 million.

The maturity date of the US Term Loan Facility and the EMEA Term Loan Facility (collectively the "Term Loan Facilities") is May 31, 2025 and the maturity date of the Revolving Line of Credit Facility is May 31, 2023. Each maturity date may be extended per the terms of the 2018 Credit Agreement. If within six months after entering into the 2018 Credit Agreement certain prepayments are made or any amendment reduces the "effective yield" applicable to all or a portion of such term loans, such prepayment or repriced portions of the term loans will be subject to a penalty equal to 1.00% of the outstanding term loans being prepaid or repriced. No such prepayments or amendments were made through December 31, 2018.

The principal amounts of the US Term Loan Facility and EMEA Term Loan Facility are payable in equal quarterly installments of \$4.425 million and €1.875 million, respectively, commencing on September 30, 2018 and continuing thereafter until the maturity date when the remaining balances of outstanding principal amount is payable in full.

We may prepay loans under the 2018 Credit Agreement at any time, subject to certain notice requirements, LIBOR breakage costs, and prepayment fees noted above.

At our election, the US Term Loan Facility may be made as either Base Rate Loans or Eurocurrency Loans. The EMEA Term Loan Facility will bear interest at the European Money Markets Institute EURIBO Rate plus the applicable margin. The applicable

margin for the US Term Loan Facility is 1.75% for Base Rate Loans and 2.75% for Eurocurrency Loans, subject to a “LIBOR floor” of 0.00%. The applicable margin for the EMEA Term Loan Facility is 3.25%, subject to a “EURIBOR floor” of 0.00%. The applicable margin for revolving loans under the Revolving Line of Credit Facility is 1.75% for Base Rate Loans, 2.75% for Eurocurrency Loans denominated in U.S. Dollars and certain other approved currencies other than Euros, and 3.25% for revolving loans denominated in Euros.

The proceeds from the US Term Loan Facility and EMEA Term Loan Facility were used to finance the Interoute acquisition, to repay amounts outstanding under our prior term loan facility, and to pay costs associated with such transactions.

The unused and available amount of the Revolving Line of Credit Facility at December 31, 2018 was as follows (amounts in millions):

Committed capacity	\$	200.0
Borrowings outstanding		(59.0)
Letters of credit issued		(11.5)
Unused and available	\$	<u>129.5</u>

The 2018 Credit Agreement does not contain a financial covenant for the US Term Loan Facility or the EMEA Term Loan Facility, but it does include a maximum Consolidated Net Secured Leverage Ratio applicable to the Revolving Line of Credit Facility in the event that utilization exceeds 30% of the revolving loan facility commitment. If triggered, the covenant requires the Company to maintain a Consolidated Net Secured Leverage Ratio, on a Pro Forma Basis, below the maximum ratio specified as follows:

Fiscal Quarter Ending	Maximum Ratio
December 31, 2018	6.50:1.00
March 31, 2019	6.50:1.00
June 30, 2019	6.50:1.00
September 30, 2019	6.25:1.00
December 31, 2019	6.25:1.00
March 31, 2020	6.00:1.00
June 30, 2020	6.00:1.00
September 30, 2020	5.50:1.00
December 31, 2020	5.50:1.00
March 31, 2021	5.50:1.00
June 30, 2021	5.00:1.00
September 30, 2021	5.00:1.00
December 31, 2021	4.50:1.00
March 31, 2022	4.50:1.00
June 30, 2022 and thereafter	4.25:1.00

Interest Rate Swaps

During 2018, we entered into the following interest rate swap arrangements to partially mitigate the variability of cash flows due to changes in the Eurodollar rate, specifically related to interest payments on our term loans under the 2018 Credit Agreement:

Trade date	April 6, 2018	May 17, 2018	May 17, 2018	May 17, 2018
Notional amount (in millions)	\$ 500.0	\$ 200.0	\$ 300.0	€ 317.0
Term (years)	5	7	3	7
Effective date	4/30/2018	6/29/2018	6/29/2018	6/29/2018
Termination date	4/30/2023	5/31/2025	6/30/2021	5/31/2025
Fixed rate	2.6430%	3.0370%	2.8235%	0.8900%
Floating rate	1-month LIBOR	1-month LIBOR	1-month LIBOR	1-month EURIBOR

The interest rate swaps do not qualify for hedge accounting.

The fair value of the interest rate swaps at December 31, 2018 was as follows (in millions):

Derivative Instrument	Aggregate Notional Amount	Effective Date	Maturity Date	Fair Value	
				Asset Derivatives	Liability Derivatives
Interest rate swap	\$ 500.0	4/30/2018	4/30/2023	\$ —	\$ (4.4)
Interest rate swap	\$ 200.0	6/29/2018	5/31/2025	—	(6.9)
Interest rate swap	\$ 300.0	6/29/2018	6/30/2021	—	(2.8)
Interest rate swap	€ 317.0	6/29/2018	5/31/2025	—	(8.3)
				\$ —	\$ (22.4)

We record the fair value of interest rate swaps in our consolidated balance sheets within prepaid expenses and other current assets when in an asset position and within accrued expenses and other current liabilities when in a liability position. During the year ended December 31, 2018, we recognized a loss of \$22.4 million in other expense, net due to the change in fair value of our interest rate swaps.

2017 Credit Agreement

In January 2017, we entered into a credit agreement (the "2017 Credit Agreement") that provided a \$700.0 million term loan facility and a \$75.0 million revolving line of credit facility (which included a \$25.0 million letter of credit facility). Amounts outstanding under the 2017 Credit Agreement were paid in full at the closing of the 2018 Credit Agreement. The previous term loan facility was issued at an original issuance discount of \$3.5 million.

7.875% Senior Unsecured Notes

During 2016 and 2017, we completed three private offerings for \$575.0 million aggregate principal amount of our 7.875% senior unsecured notes due in 2024 (collectively the "7.875% Senior Unsecured Notes"). Each offering was treated as a single series of debt securities. The 7.875% Senior Unsecured Notes have identical terms other than the issuance date and offering price. The 7.875% Senior Unsecured Notes were issued at a combined premium of \$16.5 million. In connection with the offerings, the Company incurred debt issuance costs of \$17.3 million, of which \$0.5 million was incurred in 2016 and the remainder was incurred in 2017.

Other Secured Loans

In connection with the Interoute acquisition in May 2018 the Company acquired other loans secured by certain network assets. The balance of other secured loans at December 31, 2018 was \$18.1 million.

Effective Interest Rate

The effective interest rate on the long-term debt at December 31, 2018 and December 31, 2017 was 5.3% and 4.5%, respectively. The effective interest rate at December 31, 2018 considers the impact of the interest rate swaps.

Results of Operations of the Company

Year Ended December 31, 2018 Compared to Years Ended December 31, 2017 and 2016

Overview. The information presented in the tables below is comprised of the consolidated financial information for the years ended December 31, 2018, 2017, and 2016 (amounts in millions):

	Year Ended December 31,			Year-over-Year	
	2018	2017	2016	2018 to 2017	2017 to 2016
Revenue:					
Telecommunications services	\$ 1,490.8	\$ 827.9	\$ 527.3	80.1%	57.0 %
Operating expenses:					
Cost of telecommunications services	819.4	432.1	279.6	89.6%	54.5 %
Selling, general and administrative expenses	383.2	215.4	143.2	77.9%	50.4 %
Severance, restructuring and other exit costs	37.1	22.4	0.9	65.6%	2,388.9 %
Depreciation and amortization	211.4	132.6	62.8	59.4%	111.1 %
Total operating expenses	1,451.1	802.5	486.5	80.8%	65.0 %
Operating income	39.7	25.4	40.8	56.3%	(37.7)%
Other expense:					
Interest expense, net	(146.9)	(71.2)	(29.4)	106.3%	142.2 %
Loss on debt extinguishment	(13.8)	(8.6)	(1.6)	*	*
Other (expense) income, net	(127.9)	0.2	(0.6)	*	*
Total other expense	(288.6)	(79.6)	(31.6)	262.6%	151.9 %
(Loss) income before income taxes	(248.9)	(54.2)	9.2	*	*
(Benefit from) provision for income taxes	(5.5)	17.3	3.9	*	*
Net (loss) income	\$ (243.4)	\$ (71.5)	\$ 5.3	*	*

* Not meaningful

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Revenue

Our revenue increased by \$662.9 million, or 80.1%, from \$827.9 million for the year ended December 31, 2017 to \$1,490.8 million for the year ended December 31, 2018. Recurring revenue was approximately 93% and 94% of total revenue for the year ended December 31, 2018 and 2017, respectively. The increase in revenue was primarily due to the 2017 Acquisitions and 2018 Acquisitions.

On a constant currency basis using the average exchange rates in effect during the year ended December 31, 2017, revenue would have been lower by \$24.1 million for the year ended December 31, 2018.

Cost of Telecommunications Services

Cost of telecommunications services increased by \$387.3 million, or 89.6%, from \$432.1 million for the year ended December 31, 2017 to \$819.4 million for the year ended December 31, 2018. Recurring cost of telecommunications services was approximately 94% and 95% of total cost of telecommunications services for the year ended December 31, 2018 and 2017, respectively. Consistent

with our increase in revenue, the increase in cost of telecommunications services was principally driven by the 2017 Acquisitions and 2018 Acquisitions.

On a constant currency basis using the average exchange rates in effect during the year ended December 31, 2017, cost of telecommunications services would have been lower by \$12.2 million for the year ended December 31, 2018.

Operating Expenses

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased by \$167.8 million, or 77.9%, from \$215.4 million for the year ended December 31, 2017 to \$383.2 million for the year ended December 31, 2018. The following table summarizes the major categories of selling, general and administrative expenses for the years ended December 31, 2018 and 2017 (amounts in millions):

	Year Ended December 31,			
	2018	2017	\$ Variance	% Change
Employee related compensation (excluding share-based compensation)	\$ 191.0	\$ 97.3	\$ 93.7	96.3%
Share-based compensation	34.4	22.2	12.2	55.0%
Transaction and integration expense	40.5	19.1	21.4	112.0%
Other SG&A ⁽¹⁾	117.3	76.8	40.5	52.7%
Total	\$ 383.2	\$ 215.4	\$ 167.8	77.9%

⁽¹⁾Includes bad debt expense, professional fees, marketing costs, facilities, and other general support costs.

Employee related compensation increased primarily due to the 2017 Acquisitions and 2018 Acquisitions. Share-based compensation expense increases were driven by the recognition of share-based compensation for performance awards and an increase in the aggregate value of employee equity awards due to an overall increase in employees and an increase in fair value of the awards. Transaction and integration expense increases were driven by the 2018 Acquisitions. Other SG&A expense increases were principally driven by the 2017 Acquisitions and 2018 Acquisitions.

On a constant currency basis using the average exchange rates in effect during the year ended December 31, 2017, selling, general and administrative expenses would have been lower by \$5.7 million for the year ended December 31, 2018.

Severance, Restructuring and Other Exit Costs. For the year ended December 31, 2018, we incurred severance, restructuring and other exit costs of \$37.1 million relating to the 2018 Acquisitions. We incurred severance, restructuring and other exit costs of \$22.4 million for the year ended December 31, 2017 relating to the 2017 Acquisitions.

Depreciation and Amortization. Amortization of intangible assets increased \$17.4 million or 25.2%, from \$69.0 million for the year ended December 31, 2017 to \$86.4 million for the year ended December 31, 2018, primarily due to the additional definite-lived intangible assets recorded in connection with the 2017 Acquisitions and 2018 Acquisitions. Depreciation expense increased \$61.4 million, or 96.5% from \$63.6 million to \$125.0 million for the year ended December 31, 2018, primarily due to assets acquired from the Interoute acquisition.

Other Expense

Other expense increased by \$209.0 million, or 262.6% from \$79.6 million for the year ended December 31, 2017 to \$288.6 million for the year ended December 31, 2018. This is primarily attributed to higher interest expense due to higher debt levels driven by the 2017 Acquisitions and 2018 Acquisitions, loss on derivative financial instruments of \$128.6 million primarily related to the cost of the currency hedge for the Interoute acquisition of \$105.8 million, loss due to changes in fair value on the interest rate swaps of \$22.4 million, and a loss on debt extinguishment of \$13.8 million.

Benefit from (Provision for) Income Taxes

Our benefit from income taxes for the year ended December 31, 2018 was \$5.5 million. Our effective tax rate was lower than the U.S. federal statutory rate of 21% primarily due to a valuation allowance recorded against U.S. and certain foreign net deferred tax assets which also offset the impacts of tax expense associated with uncertain tax positions and the tax benefit from finalizing the 2017 impacts of the Tax Act.

The provision for income taxes for the year ended December 31, 2017 was \$17.3 million. Our effective tax rate for the year ended December 31, 2017 differed from the U.S. federal statutory rate of 35% due to the recording of a \$29.0 million valuation

allowance against U.S. deferred tax assets and the one-time adjustments related to the Tax Act for which we recorded a provisional estimate of \$17.3 million.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Revenue

Our revenue increased by \$300.6 million, or 57.0%, from \$527.3 million for the year ended December 31, 2016 to \$827.9 million for the year ended December 31, 2017. Recurring revenue was approximately 94% and 92% of total revenue for the year ended December 31, 2017 and 2016, respectively. The increase in revenue was primarily due to the 2017 Acquisitions and the purchase of certain customer contracts.

On a constant currency basis using the average exchange rates in effect during the year ended December 31, 2016, revenue would have been higher by \$3.5 million for the year ended December 31, 2017.

Cost of Telecommunications Services

Cost of telecommunications services increased by \$152.5 million, or 54.5%, from \$279.6 million for the year ended December 31, 2016 to \$432.1 million for the year ended December 31, 2017. Recurring cost of telecommunications services was approximately 95% and 94% of total cost of telecommunications services for the year ended December 31, 2017 and 2016, respectively. Consistent with our increase in revenue, the increase in cost of telecommunications services was principally driven by the 2017 Acquisitions and the purchase of certain customer contracts.

On a constant currency basis using the average exchange rates in effect during the year ended December 31, 2016, cost of telecommunications services would have been higher by \$1.0 million for the year ended December 31, 2017.

Operating Expenses

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased by \$72.2 million, or 50.4%, from \$143.2 million for the year ended December 31, 2016 to \$215.4 million for the year ended December 31, 2017. The following table summarizes the major category of selling, general and administrative expenses for the years ended December 31, 2017 and 2016 (amounts in millions):

	Year Ended December 31,			
	2017	2016	\$ Variance	% Change
Employee related compensation (excluding share-based compensation)	\$ 97.3	\$ 83.1	\$ 14.2	17.1%
Share-based compensation	22.2	15.8	6.4	40.5%
Transaction and integration expense	19.1	4.8	14.3	297.9%
Other SG&A ⁽¹⁾	76.8	39.5	37.3	94.4%
Total	\$ 215.4	\$ 143.2	\$ 72.2	50.4%

⁽¹⁾Includes bad debt expense, professional fees, marketing costs, facilities, and other general support costs.

Employee related compensation increased primarily due to the Hibernia acquisition. Share-based compensation expense increases were driven by the recognition of share-based compensation for performance awards and an increase in the aggregate value of employee equity awards. Transaction and integration expense increases were driven by the 2017 Acquisitions. Other SG&A expense increases were principally driven by the acquisition of Hibernia.

On a constant currency basis using the average exchange rates in effect during the year ended December 31, 2016, selling, general and administrative expenses would have been higher by \$0.3 million for the year ended December 31, 2017.

Severance, Restructuring and Other Exit Costs. Severance, restructuring and other exit costs increased by \$21.5 million, or 2,388.9% from \$0.9 million for the year ended December 31, 2016 to \$22.4 million for year ended December 31, 2017. The increase was due to the 2017 Acquisitions.

Depreciation and Amortization. Amortization of intangible assets increased \$28.3 million, or 69.5%, from \$40.7 million for the year ended December 31, 2016 to \$69.0 million for the year ended December 31, 2017, primarily due to the addition of definite-lived intangible assets recorded in the Hibernia acquisition. Depreciation expense increased \$41.5 million, or 187.8%, from \$22.1

million for the year ended December 31, 2016 to \$63.6 million for the year ended December 31, 2017, primarily due to the assets acquired from the Hibernia acquisition.

Other Expense

Other expense increased by \$48.0 million, or 151.9%, from \$31.6 million for the year ended December 31, 2016 to \$79.6 million for the year ended December 31, 2017. This is primarily attributable to higher interest expense related to increased debt levels to fund the 2017 Acquisitions as well as a loss on debt extinguishment of \$8.6 million incurred in connection with the 2017 Credit Agreement and Repricing Amendment.

Provision for Income Taxes

Our provision for income taxes for the year ended December 31, 2017 was \$17.3 million. This included \$11.8 million of provisional tax expense related to the reduction of the U.S. corporate income tax rate from 35% to 21% under the Tax Act, \$5.5 million of tax expense for the one-time transition on deemed repatriation under the Tax Act, and \$29.0 million of tax expense related to the recording of a valuation allowance against net U.S. deferred tax assets, partially offset by \$19.0 million of tax benefit for the current year tax loss at the statutory rate and \$9.3 million of tax benefit related to foreign tax rate differential.

Liquidity and Capital Resources

Our primary sources of liquidity have been cash provided by operations, equity offerings, and debt financing. Our principal uses of cash have been for acquisitions, working capital, capital expenditures, and debt service requirements. We anticipate that our principal uses of cash in the future will be for acquisitions, capital expenditures, working capital, and debt service.

Management monitors cash flow and liquidity requirements on a regular basis, including an analysis of the anticipated working capital requirements for the next 12 months. This analysis assumes our ability to manage expenses, capital expenditures, indebtedness, and the anticipated growth of revenue. If our operating performance differs significantly from our forecasts, we may be required to reduce our operating expenses and curtail capital spending, and we may not remain in compliance with our debt covenants. In addition, if we are unable to fully fund our cash requirements through operations and current cash on hand, we may need to obtain additional financing through a combination of equity and debt financings and/or renegotiation of terms of our existing debt. If any such activities become necessary, there can be no assurance that we would be successful in obtaining additional financing or modifying our existing debt terms.

Our capital expenditures increased by \$35.7 million, or 85.0%, from \$42.0 million (5.1% of revenue) for the year ended December 31, 2017 to \$77.7 million (5.2% of revenue) for the year ended December 31, 2018. The increase in capital expenditures was due mainly to 2017 Acquisitions and 2018 Acquisitions. We anticipate that we will incur capital expenditures of approximately 7% of revenue going forward. We continue to expect that our capital expenditures will be primarily success-based, i.e., in support of specific revenue opportunities.

We believe that our cash flows from operating activities, in addition to cash on hand and available capacity on the Revolving Line of Credit Facility, will be sufficient to fund our operating activities and capital expenditures for the foreseeable future, and in any event for at least the next 12 to 18 months. However, no assurance can be given that this will be the case.

Cashflows

The following table summarizes the components of our cash flows for the years ended December 31, 2018, 2017, and 2016.

Consolidated Statements of Cash Flows Data

(amounts in millions)

	Year Ended December 31,		
	2018	2017	2016
Net cash provided by operating activities	\$ 82.4	\$ 63.4	\$ 60.4
Net cash used in investing activities	(2,426.3)	(764.7)	(58.3)
Net cash provided by financing activities	2,304.3	469.7	318.6

Cash Provided by Operating Activities

Our largest source of cash provided by operating activities is monthly recurring revenue from our customers. Our primary uses of cash are payments to network suppliers, compensation related costs, interest expense, and payments to third-party vendors such as agents, contractors, and professional service providers.

Net cash flows provided by operating activities increased by \$19.0 million, from \$63.4 million for the year ended December 31, 2017 to \$82.4 million for the year ended December 31, 2018. This increase was primarily due to the 2017 Acquisitions and 2018 Acquisitions, partially offset by higher interest expense, as well as non-recurring cash payments for severance and exit costs, and for transaction and integration costs.

Net cash flows provided by operating activities increased by \$3.0 million, from \$60.4 million for the year ended December 31, 2016 to \$63.4 million for the year ended December 31, 2017. This increase was primarily due to the 2017 Acquisitions and the purchase of certain customer contracts, partially offset by non-recurring cash payments for severance and exit costs, and for transaction and integration costs.

Cash provided by operating activities during the year ended December 31, 2018 included \$34.7 million cash paid for severance and exit costs and \$34.3 million cash paid for transaction and integration costs. Cash provided by operating activities during the year ended December 31, 2017 included \$15.9 million cash paid for severance and exit costs and \$19.1 million cash paid for transaction and integration costs. Cash provided by operating activities during the year ended December 31, 2016 included \$4.5 million cash paid for severance and exit costs and \$4.8 million cash paid for transaction and integration costs.

Cash Used in Investing Activities

Our primary uses of cash include acquisitions, purchase of customer contracts, and capital expenditures.

Net cash flows used in investing activities increased by \$1,661.6 million, from \$764.7 million for the year ended December 31, 2017 to \$2,426.3 million for the year ended December 31, 2018. Net cash flows from investing activities increased by \$706.4 million, from \$58.3 million for the year ended December 31, 2016 to \$764.7 million for the year ended December 31, 2017.

Cash used in investing activities for the year ended December 31, 2018 primarily consisted of \$2,242.7 million for the 2018 Acquisitions, as well as capital expenditures of approximately \$77.7 million.

Cash used in investing activities for the year ended December 31, 2017 primarily consisted of \$706.3 million for the 2017 Acquisitions, as well as the purchase of certain customer contracts for which we paid \$14.9 million, and capital expenditures of approximately \$42.0 million.

Cash used in investing activities for the year ended December 31, 2016 primarily consisted of \$14.1 million for the 2016 Acquisition, as well as the purchase of certain customer contracts for which we paid \$20.0 million, and capital expenditures of approximately \$24.2 million.

Cash Provided by Financing Activities

Our primary sources of cash from financing activities are proceeds from debt and equity issuances. Our primary use of cash for financing activities is the refinancing of our debt and repayment of principal pursuant to the debt agreements.

Net cash flows provided by financing activities increased by \$1,834.6 million, from \$469.7 million for the year ended December 31, 2017 to \$2,304.3 million for the year ended December 31, 2018. Net cash flows from financing activities increased by \$151.1 million, from \$318.6 million for the year ended December 31, 2016 to \$469.7 million for the year ended December 31, 2017.

Net cash flows provided by financing activities for the year ended December 31, 2018 was \$2,304.3 million, consisting primarily of net proceeds from the new US Term Loan Facility and EMEA Term Loan Facility, proceeds from net equity issuance, partially offset by repayment of the prior term loan and payment of holdbacks.

Net cash provided by financing activities for the year ended December 31, 2017 was \$469.7 million consisting primarily of net proceeds from the term loan and issuance of senior notes to fund the 2017 Acquisitions.

Net cash provided by financing activities for the year ended December 31, 2016 was \$318.6 million, consisting primarily of \$300.0 million in proceeds from the issuance of senior notes to fund the Hibernia Networks acquisition.

Supplemental cash flows

During the years ended December 31, 2018, 2017 and 2016, we made cash payments for interest totaling \$158.8 million, \$47.2 million, and \$26.3 million, respectively. The increase in interest payments is a result of the incremental debt associated with

acquisitions, as discussed further in Note 9 - Debt of the notes to the consolidated financial statements (Part II, Item 8 of this Form 10-K). The cash payments for interest expense are directly correlated to our outstanding indebtedness.

During the years ended December 31, 2018, 2017 and 2016, we made cash payments for taxes totaling \$5.3 million, \$1.7 million, and \$1.0 million, respectively. The increase in cash taxes paid in 2018 is primarily due to one-time events including a \$1.5 million settlement of prior year uncertain tax positions and a \$2.4 million payment related to an obligation inherited from a 2018 acquisition.

Contractual Obligations and Commitments

The following table summarizes our significant contractual obligations as of December 31, 2018 (amounts in millions):

	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Term loans	\$ 2,618.8	\$ 26.3	\$ 52.7	\$ 52.7	\$ 2,487.1
7.875% senior note	575.0	—	—	—	575.0
Revolving line of credit	59.0	—	—	59.0	—
Other secured loans	18.1	13.6	4.5	—	—
Operating leases	128.0	24.5	40.3	23.7	39.5
Capital leases	41.8	6.7	9.1	5.6	20.4
Network supplier agreements ⁽¹⁾	1,576.5	602.8	667.8	102.7	203.2
Other ⁽²⁾	6.7	2.8	3.9	—	—
	<u>\$ 5,023.9</u>	<u>\$ 676.7</u>	<u>\$ 778.3</u>	<u>\$ 243.7</u>	<u>\$ 3,325.2</u>

⁽¹⁾Excludes contracts where the initial term has expired and we are currently in month-to-month status.

⁽²⁾Primarily consists of vendor contracts associated with network monitoring and maintenance services.

Off-Balance Sheet Arrangements

As of December 31, 2018, we did not have any off-balance sheet arrangements, other than those disclosed under contractual obligations, that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources that is material to investors.

Non-GAAP Financial Measures

In addition to financial measures prepared in accordance with accounting principles generally accepted in the United States ("GAAP"), from time to time we may use or publicly disclose certain "non-GAAP financial measures" in the course of our financial presentations, earnings releases, earnings conference calls, and otherwise. For these purposes, the SEC defines a "non-GAAP financial measure" as a numerical measure of historical or future financial performance, financial positions, or cash flows that (i) exclude amounts, or is subject to adjustments that effectively exclude amounts, included in the most directly comparable measure calculated and presented in accordance with GAAP in financial statements, and (ii) include amounts, or is subject to adjustments that effectively include amounts, that are excluded from the most directly comparable measure so calculated and presented.

Non-GAAP financial measures are provided as additional information to investors to provide an alternative method for assessing our financial condition and operating results. We believe that these non-GAAP measures, when taken together with our GAAP financial measures, allow us and our investors to better evaluate our performance and profitability. These measures are not in accordance with, or a substitute for, GAAP, and may be different from or inconsistent with non-GAAP financial measures used by other companies. These measures should be used in addition to and in conjunction with results presented in accordance with GAAP, and should not be relied upon to the exclusion of GAAP financial measures.

Pursuant to the requirements of Regulation G, whenever we refer to a non-GAAP financial measure, we will also present the most directly comparable financial measure calculated and presented in accordance with GAAP, along with a reconciliation of the differences between the non-GAAP financial measure we reference with such comparable GAAP financial measure.

Adjusted Earnings before Interest, Taxes, Depreciation and Amortization ("Adjusted EBITDA")

Adjusted EBITDA is defined as net income/(loss) before interest, income taxes, depreciation and amortization ("EBITDA") adjusted to exclude severance, restructuring and other exit costs, acquisition-related transaction and integration costs, losses on extinguishment of debt, share-based compensation, and from time to time, other non-cash or non-recurring items.

We use Adjusted EBITDA to evaluate operating performance, and this financial measure is among the primary measures we use for planning and forecasting future periods. We further believe that the presentation of Adjusted EBITDA is relevant and useful for investors because it allows investors to view results in a manner similar to the method used by management and makes it easier to compare our results with the results of other companies that have different financing and capital structures. In addition, we have debt covenants that are based on a leverage ratio that utilizes a modified EBITDA calculation, as defined in our Credit Agreement. The modified EBITDA calculation is similar to our definition of Adjusted EBITDA; however, it includes the pro forma Adjusted EBITDA of and expected cost synergies from the companies acquired by us during the applicable reporting period. Finally, Adjusted EBITDA results, along with other quantitative and qualitative information, are utilized by management and our compensation committee for purposes of determining bonus payouts to our employees.

The following is a reconciliation of Adjusted EBITDA from Net (loss) income:

<i>(Amounts in millions)</i>	Year Ended December 31,		
	2018	2017	2016
		<i>(Unaudited)</i>	
Adjusted EBITDA			
Net (loss) income	\$ (243.4)	\$ (71.5)	\$ 5.3
(Benefit from) provision for income taxes	(5.5)	17.3	3.9
Interest and other expense, net	274.8	71.0	30.0
Loss on debt extinguishment	13.8	8.6	1.6
Depreciation and amortization	211.4	132.6	62.8
Severance, restructuring and other exit costs	37.1	22.4	0.9
Transaction and integration costs	40.5	19.1	4.8
Share-based compensation	34.4	22.2	15.8
Adjusted EBITDA	\$ 363.1	\$ 221.7	\$ 125.1

Adjusted Free Cash Flow and Adjusted Unlevered Free Cash Flow

Adjusted Free Cash Flow is defined as net cash provided by operating activities less purchases of property and equipment, adjusted to exclude cash paid for severance, restructuring and other exit costs, and acquisition-related transaction and integration costs. Adjusted Unlevered Free Cash Flow is defined as Adjusted Free Cash Flow before interest. Adjusted Free Cash Flow and Adjusted Unlevered Free Cash Flow are not a measurement of our financial performance under GAAP and should not be considered in isolation or as alternatives to net cash flows provided by operating activities, total net cash flows, or any other performance measure derived in accordance with GAAP.

We use Adjusted Free Cash Flow as a measure to evaluate cash generated through normal operating activities. We believe that the presentation of Adjusted Free Cash Flow is relevant and useful to investors because it provides a measure of cash available to pay the principal on our debt and pursue acquisitions of businesses or other strategic investments or uses of capital. We use Adjusted Unlevered Free Cash Flow as a measure to evaluate cash generated through normal operating activities prior to debt service as our debt capital structure will change over time. We believe that the presentation of Adjusted Unlevered Free Cash Flow is relevant and useful for investors because it allows investors to view results in a manner similar to the method used by management and makes it easier to compare our results with the results of other companies that have different financing and capital structures.

The following is a reconciliation of Adjusted Free Cash Flow and Adjusted Unlevered Free Cash Flow from Cash provided by operating activities (amounts in millions):

	Year Ended December 31,		
	2018	2017	2016
Net cash provided by operating activities	\$ 82.4	\$ 63.4	\$ 60.4
Purchases of property and equipment	(77.7)	(42.0)	(24.2)
Severance, restructuring and other exit costs	34.7	15.9	4.5
Transaction and integration costs	34.3	19.1	4.8
Adjusted Free Cash Flow	73.7	56.4	45.5
Cash paid for interest ⁽¹⁾	158.8	47.2	26.3
Adjusted Unlevered Free Cash Flow	\$ 232.5	\$ 103.6	\$ 71.8

(1) Cash paid for interest for the year ended December 31, 2018 includes three semi-annual interest payments on the 7.875% Senior Unsecured Notes.

Critical Accounting Policies and Estimates

The discussion of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with GAAP. In the preparation of our consolidated financial statements, we are required to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, as well as the related disclosures of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. The results of our analysis form the basis for making assumptions about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions, and the impact of such differences may be material to our consolidated financial statements. Our critical accounting policies have been discussed with the Audit Committee of our Board of Directors. We believe that the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements, and believe that an understanding of these policies is important to a proper evaluation of the reported consolidated financial results. Our significant accounting policies are described in Note 2 – Significant Accounting Policies of the notes to the consolidated financial statements (Part II, Item 8 of this Form 10-K).

Certain prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications had no effect on reported results of operations.

Segment Reporting

We report operating results and financial data in one operating and reporting segment. Our Chief Executive Officer is the chief operating decision maker and manages our business as a single profit center in order to promote collaboration, provide comprehensive service offerings across our entire customer base, and provide incentives to employees based on the success of the organization as a whole. Although certain information regarding selected products or services is discussed for purposes of promoting an understanding of our complex business, the chief operating decision maker manages our business and allocates resources at the consolidated level. Additionally, integration efforts related to Interoute are nearing completion, but have not currently changed the manner in which the chief operating decision maker has managed the consolidated business. These integration efforts are designed to establish scale and align Interoute's network assets and product offerings within our existing business.

Revenue Recognition

Our revenue is derived primarily from telecommunications services, which includes both revenue from contracts with customers and lease revenues. Lease revenue services include dark fiber, duct, and colocation services. All other services are considered revenue from contracts with customers. Revenue from contracts with customers is recognized when services are provided to the customer, in an amount that reflects the consideration we expect to receive in exchange for those services. Lease revenue represents an arrangement where the customer has the right to use an identified asset for a specified term and such revenue is recognized over the term the customer is given exclusive access to the asset.

We deliver five primary services to our customers — wide area networking; transport & infrastructure services; internet; managed services; and voice.

Our services are provided under contracts that typically include an installation or provisioning charge along with payments of recurring charges on a monthly basis for use of the services over a committed term. Our contracts with customers specify the terms

and conditions for providing such services, including installation date, recurring and non-recurring fees, payment terms, and length of term. These contracts call for us to provide the service in question (e.g., data transmission between point A and point Z), to manage the activation process, and to provide ongoing support (in the form of service maintenance and trouble-shooting) during the service term. The contracts do not typically provide the customer any rights to use specifically identifiable assets. Furthermore, the contracts generally provide us with discretion to engineer (or re-engineer) a particular network solution to satisfy each customer's data transmission requirement, and typically prohibit physical access by the customer to the network infrastructure used by us and our suppliers to deliver the services.

Fees charged for ongoing services are generally fixed in price and billed on a recurring monthly basis (one month in advance) for a specified term. Fees may also be based on specific usage of the related services, or usage above a fixed threshold, which are billed monthly in arrears. The usage based fees represent variable consideration, however, the nature of the fees are such that we are not able to estimate these amounts with a high degree of certainty and therefore the usage based fees are excluded from the transaction price and are instead recognized as revenue based on actual usage charges billed using the rates and/or thresholds specified in each contract. At the end of the term, most contracts provide for a continuation of services on the same terms, either for a specified renewal period (e.g., one year) or on a month-to-month basis. Revenue is generally recognized over time for these contracts as the customers simultaneously receive and consume the benefit of the service as we perform. Fees may also be billed for early terminations based on contractually stated amounts. The early termination fees represent variable consideration. We estimate the amount of variable consideration we expect to be entitled to receive for such arrangements using the expected value method.

Primary geographical market. Our operations are located primarily in the United States and Europe. The nature and timing of revenue from contracts with customers across geographic markets is similar.

Contracts with multiple performance obligations. The majority of our contracts with customers have a single performance obligation - telecommunication services. The related installation services are generally considered not material within the context of the contract and we do not recognize these immaterial promised services as a separate performance obligation. Certain contracts with customers may include multiple performance obligations, specifically when the Company sells its connectivity services in addition to customer premise equipment ("CPE"). For such arrangements, revenue is allocated to each performance obligation based on its relative standalone selling price. The standalone selling price for each performance obligation is based on observable prices charged to customers in similar transactions or using expected cost plus margin.

We apply certain permitted practical expedients to our revenue recognition. We do not adjust the promised amount of consideration for the effects of a significant financing component if we expect, at contract inception, that the period between when we transfer a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

Prepaid Capacity Sales and Indefeasible Right to Use. We sell capacity on a long-term basis, where a certain portion of the contracted revenue is prepaid upon acceptance of the service by the customer. This prepaid amount is initially recorded as deferred revenue and amortized ratably over the term of the contract. Certain of these prepaid capacity sales are in the form of Indefeasible Rights to Use ("IRUs"), where the customer has the right to use the capacity of the fiber optic cable for a specified term. We record revenues from these prepaid leases of fiber optic cable IRUs over the term that the customer is given exclusive access to the assets.

Universal Service Fund ("USF"), Gross Receipts Taxes and Other Surcharges. We are liable in certain cases for collecting regulatory fees and/or certain sales taxes from its customers and remitting the fees and taxes to the applicable governing authorities. Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by us from a customer, are excluded from revenue. Conversely, USF contributions are assessed to us by and paid to the Universal Service Administration Company ("USAC") and are based on our interstate and inter-nation end-user revenues. We may assess our customers a separate fee to recoup our USF expense. These fees are included in telecommunications services revenue and costs of telecommunications services.

Share-Based Compensation

We issue three types of grants under our share-based compensation plan: time-based restricted stock, time-based stock options, and performance-based restricted stock. The time-based restricted stock and stock options generally vest over a four-year period, contingent upon meeting the requisite service period requirement. Performance awards typically vest over a shorter period, e.g., one to two years, starting when the performance criteria established in the grant have been met and maintained.

The share price of our common stock as reported on the NYSE on the date of grant is used as the fair value for all restricted stock. We use the Black-Scholes option-pricing model to determine the estimated fair value for stock options. Critical inputs into

the Black-Scholes option-pricing model include the following: option exercise price, fair value of the stock price, expected life of the option, annualized volatility of the stock, annual rate of quarterly dividends on the stock, and risk-free interest rate.

Implied volatility is calculated as of each grant date based on our historical stock price volatility along with an assessment of a peer group. Other than the expected life of the option, volatility is the most sensitive input to our option grants. The risk-free interest rate used in the Black-Scholes option-pricing model is determined by referencing the U.S. Treasury yield curve rates with the remaining term equal to the expected life assumed at the date of grant. Forfeitures are estimated based on our historical analysis of attrition levels. Forfeiture estimates are updated quarterly for actual forfeitures.

The share-based compensation expense for time-based restricted stock and stock options is recognized on a straight-line basis over the vesting period. We begin recognizing share-based compensation expense for performance awards when we consider the achievement of the performance criteria to be probable through the expected vesting period.

Income Taxes

Income taxes are accounted for under the asset and liability method pursuant to GAAP. Under this method, deferred tax assets and liabilities are recognized for the expected future consequences attributable to the differences between the financial statement carrying amounts and the tax basis of assets and liabilities. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the period of the change. Further, deferred tax assets are recognized for the expected realization of available net operating loss and tax credit carryforwards. A valuation allowance is recorded on gross deferred tax assets when it is "more likely than not" that such asset will not be realized. When evaluating the realizability of deferred tax assets, all evidence, both positive and negative, is evaluated. Items considered in this analysis include the ability to carry back losses, the reversal of temporary differences, tax planning strategies, and expectations of future earnings. We review our deferred tax assets on a quarterly basis to determine if a valuation allowance is required based upon these factors. Changes in our assessment of the need for a valuation allowance could give rise to a change in such allowance, potentially resulting in additional expense or benefit in the period of change.

Our income tax provision includes U.S. federal, state, local, and foreign income taxes and is based on pre-tax income or loss. In determining the annual effective income tax rate, we analyzed various factors, including our annual earnings and taxing jurisdictions in which the earnings were generated, the impact of state and local income taxes, and our ability to use tax credits and net operating loss carryforwards.

Under GAAP, the amount of tax benefit to be recognized is the amount of benefit that is "more likely than not" to be sustained upon examination. We analyze our tax filing positions in all of the U.S. federal, state, local, and foreign tax jurisdictions where we are required to file income tax returns, as well as for all open tax years in these jurisdictions. If, based on this analysis, we determine that uncertainties in tax positions exist, a liability is established in the consolidated financial statements. We recognize accrued interest and penalties related to unrecognized tax positions in the provision for income taxes.

Estimating Allowances

Allowance for Doubtful Accounts

We establish an allowance for bad debts for accounts receivable amounts that may not be collectible. We state our accounts receivable balances at amounts due from the customer net of an allowance for doubtful accounts. We determine this allowance by considering a number of factors, including the length of time receivables are past due, the customer's payment history, and current ability to pay its obligation to the Company, and the condition of the general economy. The allowance for doubtful accounts was \$11.1 million and \$5.1 million as of December 31, 2018 and 2017, respectively.

Allowance for Vendor Disputes

In the normal course of business, we identify errors by suppliers with respect to the billing of services. We perform bill verification procedures to ensure that errors in our suppliers' billed invoices are identified and resolved. If we conclude that a vendor has billed us inaccurately, we will record a liability only for the amount that we believe is owed. As of December 31, 2018 and 2017, we had \$9.1 million and \$5.3 million, respectively, in disputed billings from suppliers that were not accrued because we do not believe we owe them.

Deferred Costs

Installation costs related to provisioning of recurring communications services that we incur from third-party suppliers, directly attributable and necessary to fulfill a particular service contract, and which costs would not have been incurred but for the occurrence of that service contract, are recorded as deferred costs and expensed ratably over the contractual term of service in the same manner as the deferred revenue arising from that contract. Based on historical experience, we believe the initial contractual term is the best estimate for the period of earnings. If any installation costs exceed the amount of corresponding deferred revenue, the excess cost is recognized in the current period.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of the net identifiable assets acquired in a business combination. Goodwill is reviewed for impairment at least annually, in October, or more frequently if a triggering event occurs between impairment testing dates. We operate as a single operating segment and as a single reporting unit for the purpose of evaluating goodwill impairment. Our impairment assessment begins with a qualitative assessment to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying value. The qualitative assessment includes comparing our overall financial performance against the planned results used in the last quantitative goodwill impairment test. Additionally, we assess the fair value in light of certain events and circumstances, including macroeconomic conditions, industry and market considerations, cost factors, and other relevant entity and Company specific events. The selection and assessment of qualitative factors used to determine whether it is more likely than not that the fair value of a reporting unit exceeds the carrying value involves significant judgments and estimates. If it is determined under the qualitative assessment that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then a two-step quantitative impairment test is performed. Under the first step, the estimated fair value of the Company would be compared with our carrying value (including goodwill). If the fair value of the Company exceeds the carrying value, step two does not need to be performed. If the estimated fair value of the Company is less than the carrying value, an indication of goodwill impairments exists and we would need to perform step two of the impairment test. Under step two, an impairment loss would be recognized for any excess of the carrying amount of our goodwill over the implied fair value of that goodwill. The fair value under the two-step assessment is determined using a combination of both income and market-based approaches. There were no goodwill impairments identified for the years ended December 31, 2018, 2017, and 2016.

Intangible assets arising from business combinations, such as acquired customer contracts and relationships, (collectively "customer relationships"), trade names, or intellectual property, are initially recorded at fair value. We amortize these intangible assets over the determined useful life, which generally ranges from three to twenty years. We review the intangible assets for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be fully recoverable. If the total of the expected undiscounted future cash flows is less than the carrying amount of the asset, an impairment loss is recognized for the difference between fair value and the carrying value of the asset. There were no intangible asset impairments recognized for the years ended December 31, 2018, 2017, and 2016.

Further information is available in Note 4 – Goodwill and Intangible Assets of the notes to the consolidated financial statements (Part II, Item 8 of this Form 10-K).

Business Combinations and Asset Purchases

We allocate the fair value of purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated acquisition date fair values. The excess of the fair value of the purchase consideration over the fair values of the identifiable assets acquired and liabilities assumed is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, we make significant estimates and assumptions, especially with respect to intangible assets.

We recognize the purchase of assets and the assumption of liabilities as an asset purchase if the transaction does not constitute a business combination. The excess of the fair value of the purchase consideration is allocated on a relative fair value basis to the identifiable assets acquired and liabilities assumed. No goodwill is recorded in an asset purchase.

Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows from customer relationships and developed technology, discount rates, and terminal values. Our estimate of fair value is based upon assumptions believed to be reasonable, but actual results may differ from estimates.

Other estimates associated with the accounting for acquisitions may change as additional information becomes available regarding the assets acquired and liabilities assumed, as more fully discussed in Note 3 – Business Acquisitions of the notes to the consolidated financial statements (Part II, Item 8 of this Form 10-K).

Recent Accounting Pronouncements

Refer to Note 2 – Significant Accounting Policies of the notes to the consolidated financial statements (Part II, Item 8 of this Form 10-K) for further discussion.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to certain market risks. These risks, which include interest rate risk and foreign currency exchange risk, arise in the normal course of business rather than from trading activities.

Interest Rate Sensitivity

Our exposure to market risk for changes in interest rates is primarily related to our outstanding term loans and revolving loans. As of December 31, 2018, we had \$2,618.8 million in term loans and \$59.0 million in revolving loans with variable interest rates. The interest expense associated with our term loan and revolving loan will vary with market rates.

The US Term Loan Facility carries an interest rate equal to either Base Rate Loans with applicable margin at 1.75% or Eurocurrency Loans at 2.75%, subject to a floor of 0.00%. Based on current rates, a hypothetical 100 basis point increase in Eurodollar rate would increase annual interest expense by approximately \$17.6 million, which would decrease our income and cash flows by the same amount. This sensitivity analysis takes into account the impact of the LIBOR-based interest rate swaps entered into during 2018.

The EMEA Term Loan Facility carries an interest rate equal to the European Money Markets Institute EURIBOR Rate plus the applicable margin of 3.25%, subject to a EURIBOR floor of 0.00%. Based on current rates, a hypothetical 100 basis point increase in EURIBOR rate would increase annual interest expense by approximately €4.7 million, which would decrease our income and cash flows by the same amount. This sensitivity analysis takes into account the impact of the EURIBOR-based interest rate swap entered into during 2018.

We may enter into additional derivative financial instruments in the future.

Exchange Rate Sensitivity

Our exposure to market risk for changes in foreign currency rate relates to our global operations. Our consolidated financial statements are denominated in U.S. Dollars, but a portion of our revenue and expenses are generated in the local currency of our foreign subsidiaries. Accordingly, changes in exchange rates between the applicable foreign currency and the U.S. Dollar will affect the translation of each foreign subsidiary's financial results into U.S. Dollars for purposes of reporting consolidated financial results. The following is a summary of our revenues and expenses generated by non-US entities for the three months ended December 31, 2018:

	Three Months Ended December 31, 2018				
	Revenues	Cost of Telecommunication Services	Selling, general and administrative expenses	Depreciation and amortization	Interest expense, net
EUR	36 %	27 %	32 %	10 %	27 %
GBP	12 %	17 %	4 %	6 %	— %
Other	3 %	3 %	3 %	3 %	— %
Total non-US	51%	47%	39%	19%	27%

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Reference is made to the consolidated financial statements, the notes thereto, and the report thereon, commencing on page F-1 of this Annual Report, which consolidated financial statements, notes, and report are incorporated herein by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer (CEO) and chief financial officer (CFO), has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act)), as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our CEO and CFO have concluded that as of December 31, 2018, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Our evaluation excluded Interoute which was acquired in May 2018. As of and for the year ended December 31, 2018 Interoute represented approximately 64% of total assets and 31% of revenue. In accordance with guidance issued by the SEC, companies are allowed to exclude acquisitions from their assessment of internal controls over financial reporting during the first year subsequent to the acquisition while integrating with acquired operations.

The effectiveness of our or any system of disclosure controls and procedures is subject to certain limitations, including the exercise of judgment in designing, implementing and evaluating the controls and procedures, the assumptions used in identifying the likelihood of future events and the inability to eliminate misconduct completely. As a result, there can be no assurance that our disclosure controls and procedures will detect all errors or fraud. By their nature, our or any system of disclosure controls and procedures can provide only reasonable assurance regarding management's control objectives.

Remediation of Material Weakness in Internal Control Over Financial Reporting

As previously disclosed, the Company's management, including our CEO and CFO, identified a material weakness in the Company's internal control over financial reporting during the three months ended March 31, 2018. The Company's operating effectiveness of controls over accounting for complex and unusual transactions failed to operate during the quarter ended March 31, 2018 in that the Company failed to correctly account for a deal-contingent foreign currency hedge as a derivative. This derivative was entered into during the quarter ended March 31, 2018, in which we entered into the Agreement for Sale and Purchase of Interoute, and the derivative was settled at the closing of the Interoute acquisition on May 31, 2018. The fair value of this derivative was correctly recorded in the condensed consolidated financial statements as of and for the three months ended March 31, 2018, and subsequent changes to the fair value through the settlement date were correctly recorded as of and for the three months ended June 30, 2018.

To address the material weakness described above, the Company designed and implemented new and enhanced controls to ensure that complex and unusual transactions are accounted for correctly and that in-house accounting personnel have training to ensure they have the relevant expertise related to complex and unusual transactions, including derivative contracts. The enhanced controls were implemented during the second quarter of 2018, and the Company's management, including our CEO and CFO, determined that we fully remediated the material weakness as of December 31, 2018. We will continue to monitor the effectiveness of these controls and will make any further changes management determines appropriate.

Management's Report on Internal Control over Financial Reporting and Audit Report of the Registered Public Accounting Firm

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013). Based on the assessment, management has concluded that its internal control over financial reporting was effective as of December 31, 2018, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP. The effectiveness of our internal control over financial reporting as of December 31, 2018, has been audited by CohnReznick LLP, an independent registered public accounting firm, as stated in their report, which appears herein.

Changes in Internal Control Over Financial Reporting

Except for the 1) Company's design and implementation of new and enhanced controls to remediate the material weakness described above, and 2) the implementation of certain internal controls related to the adoption of the new leasing standard (Topic 842), there were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended December 31, 2018, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. The Company implemented new controls as part of its effort to adopt Topic 842. The adoption of Topic 842 required the implementation of new accounting processes, which changed the Company's internal controls over lease accounting. We implemented these internal controls to ensure we adequately evaluated our leases and properly assessed the impact of Topic 842 on our financial statements to facilitate its adoption in 2019.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of GTT Communications, Inc.

Opinion on Internal Control over Financial Reporting

We have audited GTT Communications, Inc. and subsidiaries' (the "Company's") internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control-Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). As described in Management's Report on Internal Control Over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Interoute, which was acquired on May 31, 2018 and whose financial statements constitute 64% of total assets and 31% of total revenues of the consolidated financial statement amounts as of and for the year ended December 31, 2018. Accordingly, our audit did not include the internal control over financial reporting at Interoute. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (the "PCAOB"), the consolidated balance sheets and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows of the Company and our report dated March 1, 2019 expressed an unqualified opinion.

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 and, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ CohnReznick LLP

New York, New York
March 1, 2019

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2019 Annual Meeting of Stockholders.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2019 Annual Meeting of Stockholders.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2019 Annual Meeting of Stockholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2019 Annual Meeting of Stockholders.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2019 Annual Meeting of Stockholders.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements

1. Financial Statements are listed in the Index to Financial Statements on page F-1 of this annual report.
2. Financial Statement Schedules. The Financial Statement Schedule described below is filed as part of this report.

Description

Schedule II - Valuation and Qualifying Accounts.

All other financial statement schedules are not required under the relevant instructions or are inapplicable and therefore have been omitted.

(b) Exhibits

The following exhibits, which are numbered in accordance with Item 601 of Regulation S-K, are filed herewith or, as noted, incorporated by reference herein:

2.1	Agreement for the Sale and Purchase of the entire issued share capital of Interoute Communications Holdings S.A., dated February 23, 2018, by and among Emasan AG, Turbo Holdings Lux II Sarl, Interoute Communications Holdings S.A., GTT Americas, LLC, as Purchaser, and GTT Communications, Inc., as Purchaser Guarantor (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed February 27, 2018).
2.2	Management Warranty Deed, dated February 23, 2018, by and among the Management Warrantors, as named therein, and GTT Americas, LLC (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed February 27, 2018).
3.1	Second Amended and Restated Certificate of Incorporation, dated October 16, 2006 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed October 19, 2006).
3.2	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation, dated December 31, 2013 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed January 6, 2014).
3.3	Amended and Restated Bylaws, dated October 15, 2006 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed October 19, 2006).
3.4	Amendment to Amended and Restated Bylaws, dated May 7, 2007 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed May 10, 2007).
4.1	Specimen of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed November 14, 2006).
4.2	Form of Registration Rights Agreement, dated as of 2005, among the Registrant, Universal Telecommunications, Inc., Hackman Family Trust, Charles Schwab & Company Custodian FBO David Ballarini IRA and Mercator Capital L.L.C. (incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form S-1 (File No. 333-122303) filed January 26, 2005).
4.3	Registration Rights Agreement, dated April 30, 2012, among the Registrant, Jordon Lowe and Daniel Brosk Trust dated December 22, 2006 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed May 4, 2012).
4.4	Amended and Restated Securities Purchase Agreement, dated as of February 23, 2018, by and between GTT Communications, Inc., a Delaware corporation, and The Spruce House Partnership LP, a Delaware limited partnership (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed February 27, 2018).
4.5	Amended and Restated Securities Purchase Agreement, dated as of February 23, 2018, by and among GTT Communications, Inc., a Delaware corporation, Acacia Partners, L.P and the funds affiliated with Acacia Partners, L.P. named therein (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed February 27, 2018).

4.6	Securities Purchase Agreement, dated as of March 25, 2018, by and between GTT Communications, Inc., a Delaware corporation, and Aleph Tiger Investors LP, a Guernsey limited partnership (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed March 27, 2018).
4.7	Amended and Restated Securities Purchase Agreement, dated as of May 30, 2018, by and between GTT Communications, Inc. and The Spruce House Partnership LP (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed June 6, 2018).
4.8	Amended and Restated Securities Purchase Agreement, dated as of May 30, 2018, by and among GTT Communications, Inc., Acacia Partners, L.P and the funds affiliated with Acacia Partners, L.P. named therein (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed June 6, 2018).
4.9	Investor Rights Agreement, dated as of May 31, 2018, by and among GTT Communications, Inc., The Spruce House Partnership LP, Acacia Partners, L.P. and the funds affiliated with Acacia Partners, L.P. named therein (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed June 6, 2018).
4.10	Investor Rights Agreement, dated as of May 31, 2018, by between GTT Communications, Inc. and Aleph Tiger Investors LP (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed June 6, 2018).
4.11	Indenture, dated as of December 22, 2016, by and between GTT Escrow Corporation and Wilmington Trust, National Association, as trustee December 22, 2016 (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed December 22, 2016).
4.12	First Supplemental Indenture, dated as of January 9, 2017, by and among the Registrant, the Guaranteeing Subsidiaries party thereto and Wilmington Trust, National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed January 13, 2017).
10.1 +	2006 Employee, Director and Consultant Stock Plan, as amended (incorporated by reference to Annex E to the Registrant's Definitive Proxy Statement on Schedule 14A filed October 2, 2006).
10.2 +	2011 Employee, Director and Consultant Stock Plan (incorporated by reference to Annex A to the Registrant's Definitive Proxy Statement on Schedule 14A filed April 29, 2011).
10.3 +	2015 Stock Option and Incentive Plan (incorporated by reference to Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed April 30, 2015).
10.4 +	GTT Communications, Inc. 2018 Stock Option and Incentive Plan (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed on April 30, 2018 (file number 001-35965)).
10.5 +	Employment Agreement for H. Brian Thompson, dated October 15, 2006 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed October 19, 2006).
10.6 +	Employment Agreement for Richard D. Calder, Jr., dated May 7, 2007 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed May 10, 2007).
10.7 +	Amendment No. 1 to the Employment Agreement for Richard D. Calder, Jr., dated July 18, 2008 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed August 4, 2008).
10.8 +	Amendment No. 2 to the Employment Agreement for Richard D. Calder, Jr., dated September 7, 2011 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed September 16, 2011).
10.9 +	Amendment No. 3 to the Employment Agreement for Richard D. Calder, Jr., dated May 4, 2017 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 10-Q filed May 9, 2017).
10.10 +	Employment Agreement for Christopher McKee, dated September 12, 2011 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed September 16, 2011).
10.11 +	Amendment No. 1 to the Employment Agreement for Christopher McKee, dated May 4, 2017 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 10-Q filed May 9, 2017).
10.12 +	Employment Agreement for Michael Sicoli, dated as of April 13, 2015 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015).
10.13 +	Amendment No. 1 to the Employment Agreement for Michael Sicoli, dated May 4, 2017 (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 10-Q filed May 9, 2017).
10.14	Credit Agreement, dated as of May 31, 2017, by and among by and among (1) the Company, as U.S. Borrower, (2) GTT Communications B.V., a subsidiary of the Company formed under the laws of The Netherlands, as EMEA Borrower, (3) KeyBank National Association, as administrative agent and letter of credit issuer, and (4) the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 6, 2018).

10.15	Credit Agreement, dated as of January 9, 2017, by and among (1) the Registrant, as borrower, (2) KeyBank National Association, as the administrative agent and as an LC Issuer, (3) KeyBanc Capital Markets Inc., Credit Suisse Securities (USA) LLC and SunTrust Robinson Humphrey, Inc., as joint lead arrangers and joint bookrunners, (4) Credit Suisse AG, Cayman Islands Branch, and SunTrust Bank, as the syndication agents, (5) Citizens Bank, Wells Fargo Bank, National Association, and ING Capital LLC, as the documentation agents and (6) the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 13, 2017).
10.16	Amendment No. 1, dated as of July 10, 2017, among GTT Communications, Inc., a Delaware corporation, as the borrower, the lenders party thereto, and KeyBank National Association, as the administrative agent and as the Additional Tranche B Term Loan Lender (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed July 14, 2017).
10.17	Credit Agreement, dated as of October 22, 2015, among: (i) the Registrant, as the borrower; (ii) the lenders from time to time party hereto; (iii) KeyBank National Association, as the administrative agent, as the Swing Line Lender, and as LC Issuer, (iv) SunTrust Bank, as a Lender and as the syndication agent; (v) KeyBank Capital Markets Inc. and SunTrust Robinson Humphrey, Inc., as joint lead arrangers and joint bookrunners; and (vi) MUFG Union Bank, N.A., Pacific Western Bank, CIT Bank, N.A., ING Capital LLC, Société Générale and CoBank, ACB as Co-Documentation Agents (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed October 27, 2015).
10.18	Incremental Term Loan Assumption Agreement, dated as of May 3, 2016, among (1) the Registrant, as the borrower, (2) KeyBank National Association, as the administrative agent, and (3) KeyBank National Association, as the Initial Term Lender (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed May 5, 2016).
10.19	Amendment No. 1, dated as of June 28, 2016, to the October 15, 2015 Credit Agreement among the Registrant, as the borrower, the lenders party thereto, and KeyBank National Association, as the administrative agent and as the Additional Tranche B Term Loan Lender (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 29, 2016).
10.20	Incremental Revolving Credit Assumption Agreement, dated as of October 12, 2017, among GTT Communications, Inc., a Delaware corporation, as the borrower, KeyBank National Association, as the administrative agent, and the Incremental Revolving Credit Lenders party hereto (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 10-Q filed November 3, 2017).
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of CohnReznick LLP.
24.1*	Power of Attorney (included on the signature page to this Annual Report).
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934.
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated under the Securities Exchange Act of 1934.
32.1*	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.
32.2*	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.
99.1 +	2016 Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8 (File No. 333-210488) filed March 30, 2016).
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF** XBRL Taxonomy Extension Definition Linkbase Document
101.LAB** XBRL Taxonomy Extension Label Linkbase Document
101.PRE** XBRL Taxonomy Extension Presentation Linkbase Document
101.INS** XBRL Instance Document

* Filed herewith

Pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability.

+ Denotes a management or compensatory plan or arrangement.

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.

GTT COMMUNICATIONS, INC.

By: /s/ Richard D. Calder, Jr.

Richard D. Calder, Jr.

President and Chief Executive Officer

Date: March 1, 2019

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard D. Calder, Jr. and Michael T. Sicoli, jointly and severally, his attorney-in-fact, each with the full power of substitution, for such person, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might do or could do in person hereby ratifying and confirming all that each of said attorneys-in-fact and agents, or his substitute, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed on or before March 1, 2019 by the following persons on behalf of the registrant and in the capacities indicated.

Signature	Title
<u>/s/ Richard D. Calder, Jr.</u> Richard D. Calder, Jr.	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Michael T. Sicoli</u> Michael T. Sicoli	Chief Financial Officer (Principal Financial Officer)
<u>/s/ Daniel M. Fraser</u> Daniel M. Fraser	Vice President and Controller (Principal Accounting Officer)
<u>/s/ H. Brian Thompson</u> H. Brian Thompson	Chairman of the Board and Executive Chairman
<u>/s/ Nicola A. Adamo</u> Nicola A. Adamo	Director
<u>/s/ S. Joseph Bruno</u> S. Joseph Bruno	Director
<u>/s/ Julius Erving</u> Julius Erving	Director
<u>/s/ Rhodric C. Hackman</u> Rhodric C. Hackman	Director
<u>/s/ Howard Janzen</u> Howard Janzen	Director
<u>/s/ Elizabeth Satin</u> Elizabeth Satin	Director
<u>/s/ Theodore B. Smith, III</u> Theodore B. Smith, III	Director

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GTT Communications, Inc.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of GTT Communications, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of GTT Communications, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and the schedule listed in the index at 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (the "PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control-Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") and our report dated March 1, 2019, expressed an unqualified opinion.

Basis for Opinion

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

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

/s/ CohnReznick LLP

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

New York, New York
March 1, 2019

GTT Communications, Inc.
Consolidated Balance Sheets
(Amounts in millions, except for share and per share data)

ASSETS	December 31, 2018	December 31, 2017
Current assets:		
Cash and cash equivalents	\$ 55.3	\$ 101.2
Accounts receivable, net of allowances of \$11.1 and \$5.1, respectively	174.5	90.0
Prepaid expenses and other current assets	49.2	24.1
Total current assets	279.0	215.3
Property and equipment, net	1,870.4	499.3
Intangible assets, net	552.4	417.1
Goodwill	1,738.0	644.5
Other long-term assets	97.8	9.2
Total assets	\$ 4,537.6	\$ 1,785.4
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 89.2	\$ 22.5
Accrued expenses and other current liabilities	226.8	103.0
Current portion of capital lease obligations	6.7	1.5
Current portion of long-term debt	39.9	7.0
Deferred revenue	84.2	40.9
Total current liabilities	446.8	174.9
Capital lease obligations, long-term portion	35.1	0.3
Long-term debt	3,151.6	1,236.5
Deferred revenue, long-term portion	287.0	108.0
Deferred tax liabilities	176.2	26.3
Other long-term liabilities	26.2	8.0
Total liabilities	4,122.9	1,554.0
Commitments and contingencies		
Stockholders' equity:		
Common stock, par value \$.0001 per share, 80,000,000 shares authorized, 55,625,149 and 44,531,905 shares issued and outstanding as of December 31, 2018 and December 31, 2017, respectively	—	—
Additional paid-in capital	809.9	360.2
Accumulated deficit	(368.3)	(124.9)
Accumulated other comprehensive income (loss)	(26.9)	(3.9)
Total stockholders' equity	414.7	231.4
Total liabilities and stockholders' equity	\$ 4,537.6	\$ 1,785.4

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

GTT Communications, Inc.
Consolidated Statements of Operations
(Amounts in millions, except for share and per share data)

	Year Ended December 31,		
	2018	2017	2016
Revenue:			
Telecommunications services	\$ 1,490.8	\$ 827.9	\$ 527.3
Operating expenses:			
Cost of telecommunications services	819.4	432.1	279.6
Selling, general and administrative expenses	383.2	215.4	143.2
Severance, restructuring and other exit costs	37.1	22.4	0.9
Depreciation and amortization	211.4	132.6	62.8
Total operating expenses	1,451.1	802.5	486.5
Operating income	39.7	25.4	40.8
Other expense:			
Interest expense, net	(146.9)	(71.2)	(29.4)
Loss on debt extinguishment	(13.8)	(8.6)	(1.6)
Other (expense) income, net	(127.9)	0.2	(0.6)
Total other expense	(288.6)	(79.6)	(31.6)
(Loss) income before income taxes	(248.9)	(54.2)	9.2
(Benefit from) provision for income taxes	(5.5)	17.3	3.9
Net (loss) income	\$ (243.4)	\$ (71.5)	\$ 5.3
(Loss) income per share:			
Basic	\$ (4.80)	\$ (1.71)	\$ 0.14
Diluted	\$ (4.80)	\$ (1.71)	\$ 0.14
Weighted average shares:			
Basic	50,718,279	41,912,952	37,055,663
Diluted	50,718,279	41,912,952	37,568,915

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

GTT Communications, Inc.
Consolidated Statements of Comprehensive (Loss) Income
(Amounts in millions)

	Year Ended December 31,		
	2018	2017	2016
Net (loss) income	\$ (243.4)	\$ (71.5)	\$ 5.3
Other comprehensive (loss) income:			
Foreign currency translation adjustment	(23.0)	1.0	(2.5)
Comprehensive (loss) income	<u>\$ (266.4)</u>	<u>\$ (70.5)</u>	<u>\$ 2.8</u>

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

GTT Communications, Inc.
Consolidated Statements of Stockholders' Equity
(Amounts in millions, except for share data)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount				
Balance, December 31, 2015	36,533,634	\$ —	\$ 182.8	\$ (69.9)	\$ (2.4)	\$ 110.5
Share-based compensation for options issued	—	—	1.8	—	—	1.8
Share-based compensation for restricted stock issued	408,108	—	14.0	—	—	14.0
Tax withholding related to the vesting of restricted stock	(276,365)	—	(5.7)	—	—	(5.7)
Shares issued in connection with employee stock purchase plan	77,279	—	1.2	—	—	1.2
Shares issued in connection with acquisition	178,202	—	2.0	—	—	2.0
Stock options exercised	307,286	—	1.2	—	—	1.2
Net income	—	—	—	5.3	—	5.3
Foreign currency translation	—	—	—	—	(2.5)	(2.5)
Balance, December 31, 2016	37,228,144	—	197.3	(64.6)	(4.9)	127.8
Share-based compensation for options issued	—	—	1.4	—	—	1.4
Share-based compensation for restricted stock issued	1,864,265	—	20.6	—	—	20.6
Tax withholding related to the vesting of restricted stock	(257,613)	—	(4.0)	—	—	(4.0)
Stock issued in connection with employee stock purchase plan	28,958	—	0.9	—	—	0.9
Stock issued in connection with acquisitions	5,229,813	—	141.9	—	—	141.9
Stock options exercised	438,338	—	2.1	—	—	2.1
Cumulative effect of adjustment for unrecognized windfall benefits	—	—	—	11.2	—	11.2
Net loss	—	—	—	(71.5)	—	(71.5)
Foreign currency translation	—	—	—	—	1.0	1.0
Balance, December 31, 2017	44,531,905	—	360.2	(124.9)	(3.9)	231.4
Share-based compensation for options issued	—	—	1.1	—	—	1.1
Share-based compensation for restricted stock issued	1,590,042	—	33.3	—	—	33.3
Tax withholding related to the vesting of restricted stock	(478,320)	—	(21.0)	—	—	(21.0)
Stock issued in connection with employee stock purchase plan	34,616	—	1.3	—	—	1.3
Stock issued in connection with acquisitions	195,124	—	8.8	—	—	8.8
Equity offerings, net of issuance costs	9,589,094	—	424.5	—	—	424.5
Stock options exercised	162,688	—	1.7	—	—	1.7
Net loss	—	—	—	(243.4)	—	(243.4)
Foreign currency translation	—	—	—	—	(23.0)	(23.0)
Balance, December 31, 2018	55,625,149	\$ —	\$ 809.9	\$ (368.3)	\$ (26.9)	\$ 414.7

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

GTT Communications, Inc.
Consolidated Statements of Cash Flows
(Amounts in millions)

	Year Ended December 31,		
	2018	2017	2016
Cash flows from operating activities:			
Net (loss) income	\$ (243.4)	\$ (71.5)	\$ 5.3
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	211.4	132.6	62.8
Share-based compensation	34.4	22.2	15.8
Debt discount amortization	3.5	0.4	0.9
Loss on debt extinguishment	13.8	8.6	1.6
Amortization of debt issuance costs	4.4	3.8	1.5
Change in fair value of derivative financial liability	128.5	—	—
Excess tax benefit from share-based compensation	(5.9)	(6.2)	—
Deferred income taxes	0.1	16.5	2.2
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable, net	4.5	14.2	(14.9)
Prepaid expenses and other current assets	26.1	6.2	5.3
Other long-term assets	14.9	1.0	(4.0)
Accounts payable	(7.7)	(22.7)	(12.3)
Accrued expenses and other current liabilities	(74.5)	7.7	(7.1)
Deferred revenue	(14.2)	(39.7)	3.3
Other long-term liabilities	(13.5)	(9.7)	—
Net cash provided by operating activities	82.4	63.4	60.4
Cash flows from investing activities:			
Acquisition of businesses, net of cash acquired	(2,242.7)	(706.3)	(14.1)
Purchase of customer contracts	(0.1)	(14.9)	(20.0)
Settlement of deal-contingent foreign currency hedge	(105.8)	—	—
Purchases of property and equipment	(77.7)	(42.0)	(24.2)
Purchases of intangible assets	—	(1.5)	—
Net cash used in investing activities	(2,426.3)	(764.7)	(58.3)
Cash flows from financing activities:			
Proceeds from revolving line of credit	96.5	50.0	47.0
Repayment of revolving line of credit	(37.5)	(70.0)	(32.0)
Proceeds from term loans	2,633.7	696.5	29.9
Repayment of term loans	(706.2)	(432.8)	(4.2)
Proceeds from senior note	—	291.5	300.0
Repayment of other secured borrowings	(9.7)	—	—
Payment of holdbacks	(13.0)	(28.7)	(15.6)
Debt issuance costs paid to third parties and lenders	(63.3)	(34.0)	(1.4)
Proceeds from equity issuance, net of issuance costs	424.5	—	—
Repayment of capital leases	(2.7)	(1.6)	(1.8)
Proceeds from issuance of common stock under employee stock purchase plan	1.3	0.7	1.2
Tax withholding related to the vesting of restricted stock	(21.0)	(4.0)	(5.7)
Exercise of stock options	1.7	2.1	1.2
Net cash provided by financing activities	2,304.3	469.7	318.6
Effect of exchange rate changes on cash	(6.3)	(1.2)	(1.4)
Net (decrease) increase in cash, cash equivalents, and restricted cash	(45.9)	(232.8)	319.3
Cash, cash equivalents, and restricted cash at beginning of period	101.2	334.0	14.7

Cash, cash equivalents, and restricted cash at end of period	\$	55.3	\$	101.2	\$	334.0
Supplemental disclosure of cash flow information:						
Cash paid for interest	\$	158.8	\$	47.2	\$	26.3
Cash paid for income taxes, net of refunds	\$	5.3	\$	1.7	\$	1.0
Supplemental disclosure of non-cash investing and financing activities:						
Fair value of current assets acquired	\$	249.6	\$	76.8	\$	0.9
Fair value of non-current assets acquired*	\$	1,687.4	\$	772.0	\$	53.4
Fair value of current liabilities assumed	\$	355.7	\$	87.7	\$	0.6
Fair value of non-current liabilities assumed	\$	423.0	\$	215.5	\$	—
Shares issued in connection with acquisition	\$	8.8	\$	141.9	\$	2.0

* Excludes goodwill

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

GTT Communications, Inc.
Notes to Consolidated Financial Statements

NOTE 1 — ORGANIZATION AND BUSINESS

Organization and Business

GTT Communications, Inc. ("GTT" or the "Company") is redefining global communications to serve a cloud-based future, with a powerful purpose of connecting people across organizations, around the world, and to every application in the cloud. GTT serves large enterprise and carrier clients with complex national and global networking needs, and differentiate itself from the competition by providing an outstanding service experience built on its core values of simplicity, speed and agility. The Company operates a global Tier 1 internet network ranked among the largest in the industry, and own a fiber network that includes an expansive pan-European footprint and subsea cables. The Company's global network includes over 600 points of presence ("PoPs") spanning six continents, and the Company provides services in more than 140 countries.

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation of Consolidated Financial Statements and Use of Estimates

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation.

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Significant estimates are used when establishing allowances for doubtful accounts, accruals for billing disputes and exit activities, determining useful lives for depreciation and amortization, assessing the need for impairment charges (including those related to intangible assets and goodwill), determining the fair values of assets acquired and liabilities assumed in business combinations, assessing the fair value of derivative financial instruments, accounting for income taxes and related valuation allowances against deferred tax assets, and estimating the grant date fair values used to compute the share-based compensation expense. Management evaluates these estimates and judgments on an ongoing basis and makes estimates based on historical experience, current conditions, and various other assumptions that are believed to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions.

Changes in Basis of Presentation and Accounting

Certain prior period amounts in the consolidated statement of cash flows have been reclassified to conform with the current period presentation to reflect the total change in deferred revenue into a single line item as well as changes in operating assets and liabilities to more closely align with the related consolidated balance sheet caption.

Certain prior period amounts in the consolidated balance sheet have been reclassified to conform with the current period presentation to reflect a reduction in deferred revenue for billings in advance of the performance criteria where no cash has been received, as well as changes in operating assets and liabilities to more closely align with the related balance sheet caption.

Segment Reporting

The Company reports operating results and financial data in one operating and reportable segment. The Company's Chief Executive Officer is the chief operating decision maker and manages the Company as a single profit center in order to promote collaboration, provide comprehensive service offerings across its entire customer base, and provide incentives to employees based on the success of the organization as a whole. Although certain information regarding selected products or services is discussed for purposes of promoting an understanding of the Company's complex business, the chief operating decision maker manages the Company and allocates resources at the consolidated level. Additionally, integration efforts related to Interoute Communications Holdings, S.A. ("Interoute") are nearing completion, but have not currently changed the manner in which the chief operating decision maker has managed the consolidated business. These integration efforts are designed to establish scale and align Interoute's network assets and product offerings within the existing business.

Revenue Recognition

The Company's revenue is derived primarily from telecommunications services, which includes both revenue from contracts with customers and lease revenues. Lease revenue services include dark fiber, duct, and colocation services. All other services are considered revenue from contracts with customers. Revenue from contracts with customers is recognized when services are provided to the customer, in an amount that reflects the consideration the Company expects to receive in exchange for those services. Lease revenue represents an arrangement where the customer has the right to use an identified asset for a specified term and such revenue is recognized over the term the customer is given exclusive access to the asset.

The Company's comprehensive portfolio of cloud networking services includes: wide area networking; transport & infrastructure services; internet services; managed services; and voice services.

The Company's services are provided under contracts that typically include an installation or provisioning charge along with payments of recurring charges on a monthly basis for use of the services over a committed term. The Company's contracts with customers specify the terms and conditions for providing such services, including installation date, recurring and non-recurring fees, payment terms, and length of term. These contracts call for the Company to provide the service in question (e.g., data transmission between point A and point Z), to manage the activation process, and to provide ongoing support (in the form of service maintenance and trouble-shooting) during the service term. The contracts do not typically provide the customer any rights to use specifically identifiable assets. Furthermore, the contracts generally provide the Company with discretion to engineer (or re-engineer) a particular network solution to satisfy each customer's data transmission requirement, and typically prohibit physical access by the customer to the network infrastructure used by the Company and its suppliers to deliver the services.

Fees charged for ongoing services are generally fixed in price and billed on a recurring monthly basis (one month in advance) for a specified term. Fees may also be based on specific usage of the related services, or usage above a fixed threshold, which are billed monthly in arrears. The usage based fees represent variable consideration, however, the nature of the fees are such that the Company is not able to estimate these amounts with a high degree of certainty and therefore the usage based fees are excluded from the transaction price and are instead recognized as revenue based on actual usage charges billed using the rates and/or thresholds specified in each contract. At the end of the term, most contracts provide for a continuation of services on the same terms, either for a specified renewal period (e.g., one year) or on a month-to-month basis. Revenue is generally recognized over time for these contracts as the customers simultaneously receive and consume the benefit of the service as the Company performs. Fees may also be billed for early terminations based on contractually stated amounts. The early termination fees represent variable consideration. The Company estimates the amount of variable consideration it expects to be entitled to receive for such arrangements using the expected value method.

The Company does not disclose information about remaining performance obligations that have original expected durations of one year or less.

Primary geographical market. The Company's operations are located primarily in the United States and Europe. The nature and timing of revenue from contracts with customers across geographic markets is similar. The following table presents the Company's revenue from contracts with customers disaggregated by primary geographic market based on legal entities (in millions):

	Year Ended December 31, 2018	
Primary geographic market		
United States	\$	785.4
Europe		598.7
Other		46.2
Total revenue from contracts with customers		1,430.3
Lease revenue		60.5
Total telecommunications services revenue	\$	1,490.8

Contracts with multiple performance obligations. The majority of the Company's contracts with customers have a single performance obligation - telecommunication services. The related installation services are generally considered not material within the context of the contract and the Company does not recognize these immaterial promised services as a separate performance obligation. Certain contracts with customers may include multiple performance obligations, specifically when the Company sells its connectivity services in addition to customer premise equipment ("CPE"). For such arrangements, revenue is allocated to each

performance obligation based on its relative standalone selling price. The standalone selling price for each performance obligation is based on observable prices charged to customers in similar transactions or using expected cost plus margin.

The Company applies certain permitted practical expedients to its revenue recognition. The Company does not adjust the promised amount of consideration for the effects of a significant financing component if the Company expects, at contract inception, that the period between when the Company transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

Prepaid Capacity Sales and Indefeasible Right to Use. The Company sells capacity on a long-term basis, where a certain portion of the contracted revenue is prepaid upon acceptance of the service by the customer. This prepaid amount is initially recorded as deferred revenue and amortized ratably over the term of the contract. Certain of these prepaid capacity sales are in the form of Indefeasible Rights to Use ("IRUs"), where the customer has the right to use the capacity of the fiber optic cable for a specified term. The Company records revenues from these prepaid leases of fiber optic cable IRUs over the term that the customer is given exclusive access to the assets.

Universal Service Fund ("USF"), Gross Receipts Taxes and Other Surcharges. The Company is liable in certain cases for collecting regulatory fees and/or certain sales taxes from its customers and remitting the fees and taxes to the applicable governing authorities. Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer, are excluded from revenue. Conversely, USF contributions are assessed to the Company by and paid to the Universal Service Administration Company ("USAC") and are based on the Company's interstate and inter-nation end-user revenues. The Company may assess its customers a separate fee to recoup its USF expense. These fees are included in telecommunications services revenue and costs of telecommunications services. USF fees and other surcharges billed to customers and recorded on a gross basis (as service telecommunications services revenue and cost of telecommunications services) were \$23.4 million, \$17.5 million, and \$5.6 million for the year ended December 31, 2018, 2017, and 2016 respectively.

Contract balances. Contract assets consist of conditional or unconditional rights to consideration. Accounts receivable represent amounts billed to customers where the Company has an enforceable right to payment for performance completed to date (i.e., unconditional rights to consideration). The Company does not have contract assets that represent conditional rights to consideration. The Company's accounts receivable balance at December 31, 2018 includes \$157.6 million related to contracts with customers. There were no other contract assets as of January 1, 2018 or December 31, 2018.

Contract liabilities are generally limited to deferred revenue. Deferred revenue is a contract liability, representing advance consideration received from customers primarily related to the pre-paid capacity sales noted above, where transfer of control occurs over time, and therefore revenue is recognized over the related contractual service period. The Company's contract liabilities were \$75.7 million and \$59.5 million as of December 31, 2018 and January 1, 2018, respectively. The change in contract liabilities during the year ended December 31, 2018 included \$17.7 million for revenue recognized that was included in the contract liability balance as of January 1, 2018, \$33.6 million for increases due to business combinations net of amounts recognized as revenue during the period, and \$0.3 million for new contract liabilities net of amounts recognized as revenue during the period.

The following table includes estimated revenue from contracts with customers expected to be recognized for each of the years subsequent to December 31, 2018 related to performance obligations that are unsatisfied (or partially unsatisfied) at December 31, 2018 and have an original expected duration of greater than one year (amounts in millions):

2019	\$	26.2
2020		10.9
2021		9.2
2022		8.7
2023		8.0
2024 and beyond		12.7
	<u>\$</u>	<u>75.7</u>

Deferred costs to obtain a contract. The Company defers sales commissions earned by its sales force when they are considered to be incremental and recoverable costs of obtaining a contract with a customer. These costs are deferred and then amortized over a period of benefit which is determined by taking into consideration the Company's customer contracts and other factors. Amortization of sales commissions expense is included in selling, general and administrative expenses. Installation costs related to provisioning of communications services that the Company incurs from third-party suppliers, directly attributable and necessary to fulfill particular

service contract, and which costs would not have been incurred but for the occurrence of that service contract, are recorded as deferred contract costs and expensed ratably over the contractual term of service in the same manner as the deferred revenue arising from that contract. Based on historical experience, the Company believes the initial contractual term is the best estimate for the period of earnings.

Deferred sales commissions were \$3.4 million as of December 31, 2018. There were no other significant amounts of assets recorded related to contract costs as of December 31, 2018.

Cost of Telecommunications Services

Cost of telecommunications services includes direct costs incurred in accessing other telecommunications providers' networks in order to maintain the Company's global Tier 1 IP network and provide telecommunications services to the Company's customers including access, co-location, usage-based charges, and certain excise taxes and surcharges recorded on a gross basis.

Marketing and Advertising Costs

Costs related to marketing and advertising are expensed as incurred and included in selling, general and administrative expenses in the consolidated statements of operations. Third-party marketing and advertising expense was \$9.8 million, \$3.3 million, and \$2.2 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Share-Based Compensation

The Company issues three types of equity grants under its share-based compensation plan: time-based restricted stock, time-based stock options, and performance-based restricted stock. The time-based restricted stock and stock options generally vest over a four-year period, contingent upon meeting the requisite service period requirement. Performance awards typically vest over a shorter period, e.g. one to two years, starting when the performance criteria established in the grant have been met and maintained.

The share price of our common stock as reported on the NYSE on the date of grant is used as the fair value for all restricted stock. The Company uses the Black-Scholes option-pricing model to determine the estimated fair value for stock options. Critical inputs into the Black-Scholes option-pricing model include the following: option exercise price, fair value of the stock price, expected life of the option, annualized volatility of the stock, annual rate of quarterly dividends on the stock, and risk-free interest rate.

Implied volatility is calculated as of each grant date based on our historical stock price volatility along with an assessment of a peer group. Other than the expected life of the option, volatility is the most sensitive input to our option grants. The risk-free interest rate used in the Black-Scholes option-pricing model is determined by referencing the U.S. Treasury yield curve rates with the remaining term equal to the expected life assumed at the date of grant. Forfeitures are estimated based on our historical analysis of attrition levels. Forfeiture estimates are updated quarterly for actual forfeitures.

The share-based compensation expense for time-based restricted stock and stock options is recognized on a straight-line basis over the vesting period. The Company begins recognizing share-based compensation expense for performance awards when the Company considers the achievement of the performance criteria to be probable through the expected vesting period.

Income Taxes

Income taxes are accounted for under the asset and liability method pursuant to GAAP. Under this method, deferred tax assets and liabilities are recognized for the expected future consequences attributable to the differences between the financial statement carrying amounts and the tax basis of assets and liabilities. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the period of the change. Further, deferred tax assets are recognized for the expected realization of available net operating loss and tax credit carryforwards. A valuation allowance is recorded on gross deferred tax assets when it is "more likely than not" that such asset will not be realized. When evaluating the realizability of deferred tax assets, all evidence, both positive and negative, is evaluated. Items considered in this analysis include the ability to carry back losses, the reversal of temporary differences, tax planning strategies, and expectations of future earnings. The Company reviews its deferred tax assets on a quarterly basis to determine if a valuation allowance is required based upon these factors. Changes in the Company's assessment of the need for a valuation allowance could give rise to a change in such allowance, potentially resulting in additional expense or benefit in the period of change.

The Company's income tax provision includes U.S. federal, state, local, and foreign income taxes and is based on pre-tax income or loss. In determining the annual effective income tax rate, the Company analyzed various factors, including its annual

earnings and taxing jurisdictions in which the earnings were generated, the impact of state and local income taxes, and its ability to use tax credits and net operating loss carryforwards.

Under GAAP, the amount of tax benefit to be recognized is the amount of benefit that is "more likely than not" to be sustained upon examination. The Company analyzes its tax filing positions in all of the U.S. federal, state, local, and foreign tax jurisdictions where it is required to file income tax returns, as well as for all open tax years in these jurisdictions. If, based on this analysis, the Company determines that uncertainties in tax positions exist, a liability is established in the consolidated financial statements. The Company recognizes accrued interest and penalties related to unrecognized tax positions in the provision for income taxes.

Comprehensive (Loss) Income

In addition to net (loss) income, comprehensive (loss) income includes charges or credits to equity occurring other than as a result of transactions with stockholders. For the Company, this consists of foreign currency translation adjustments.

(Loss) Earnings Per Share

Basic (loss) earnings per share is computed by dividing net (loss) income available to common stockholders by the weighted average number of common shares outstanding. Diluted (loss) earnings per share reflect, in periods with earnings and in which they have a dilutive effect, the effect of common shares issuable upon exercise of stock options and warrants.

The table below details the calculations of earnings (loss) per share (in millions, except for share and per share amounts):

	Year Ended December 31,		
	2018	2017	2016
Numerator for basic and diluted EPS – net loss available to common stockholders	\$ (243.4)	\$ (71.5)	\$ 5.3
Denominator for basic EPS – weighted average shares	50,718,279	41,912,952	37,055,663
Effect of dilutive securities	—	—	513,252
Denominator for diluted EPS – weighted average shares	50,718,279	41,912,952	37,568,915
(Loss) income per share:			
Basic	\$ (4.80)	\$ (1.71)	\$ 0.14
Diluted	\$ (4.80)	\$ (1.71)	\$ 0.14

All of the stock options were anti-dilutive as of December 31, 2018 and 2017 due to the net loss incurred during the periods. There were no anti-dilutive common shares excluded from the computation of earnings per share as of December 31, 2016 as all stock options were dilutive.

Cash and Cash Equivalents

Cash and cash equivalents may include deposits with financial institutions as well as short-term money market instruments, certificates of deposit and debt instruments with maturities of three months or less when purchased.

The Company invests its cash and cash equivalents and short-term investments in accordance with the terms and conditions of its Credit Agreement, which seeks to ensure both liquidity and safety of principal. The Company's policy limits investments to instruments issued by the U.S. government and commercial institutions with strong investment grade credit ratings, and places restrictions on the length of maturity. As of December 31, 2018, the Company held no direct investments in auction rate securities, collateralized debt obligations, structured investment vehicles, or non-government guaranteed mortgage-backed securities.

Restricted Cash and Cash Equivalents

Cash and cash equivalents that are contractually restricted from operating use are classified as restricted cash and cash equivalents. In December 2016, the Company completed a private offering of \$300.0 million aggregate principal amount of 7.875% senior unsecured notes due in 2024. The proceeds of the private offering plus 60 days of prepaid interest were deposited into escrow, where the funds remained until all the escrow release conditions were satisfied, specifically the closing of the acquisition of Hibernia

Networks ("Hibernia") that occurred in January 2017. The proceeds were released from escrow at closing to fund the Hibernia acquisition.

Accounts Receivable, Net

Accounts receivable balances are stated at amounts due from the customer net of an allowance for doubtful accounts. Credit extended is based on an evaluation of the customer's financial condition and is granted to qualified customers on an unsecured basis.

The Company, pursuant to its standard service contracts, is entitled to impose a finance charge of a certain percentage per month with respect to all amounts that are past due. The Company's standard terms require payment within 30 days of the date of the invoice. The Company treats invoices as past due when they remain unpaid, in whole or in part, beyond the payment date set forth in the applicable service contract.

The Company determines its allowance for doubtful accounts by considering a number of factors, including the length of time trade receivables are past due, the customer's payment history and current ability to pay its obligation to the Company, and the condition of the general economy. Specific reserves are also established on a case-by-case basis by management. Credit losses have historically been within management's expectations. Actual bad debts, when determined, reduce the allowance, the adequacy of which management then reassesses. The Company writes off accounts after a determination by management that the amounts at issue are no longer likely to be collected, following the exercise of reasonable collection efforts, and upon management's determination that the costs of pursuing collection outweigh the likelihood of recovery. The allowance for doubtful accounts was \$11.1 million and \$5.1 million as of December 31, 2018 and 2017, respectively.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation on these assets is computed on a straight-line basis over the estimated useful lives of the assets. Assets are recorded at acquired cost. Costs associated with the initial customer installations and upgrade of services and acquiring and deploying customer premise equipment, including materials, internal labor costs, and related indirect labor costs are also capitalized. Indirect and overhead costs include payroll taxes, insurance, and other benefits. Capitalized labor costs include the direct costs of engineers and service delivery technicians involved in the installation and upgrades of services, and the costs of support personnel directly involved in capitalizable activities, such as project managers and supervisors. Internal labor costs are based on standards developed by position for the percentage of time spent on capitalizable projects while overhead costs are capitalized based on standards developed from historical information. Costs for repairs and maintenance, disconnecting service, or reconnecting service are expensed as incurred. The Company capitalized labor costs, including indirect and overhead costs, of \$14.9 million, \$5.6 million, and \$1.6 million for the years ended December 31, 2018, 2017, and 2016 respectively. Assets and liabilities under capital leases are recorded at the lesser of the present value of the aggregate future minimum lease payments or the fair value of the assets under lease. Leasehold improvements and assets under capital leases are amortized over the shorter of the term of the lease, excluding optional extensions, or the useful life. Expenditures for maintenance and repairs are expensed as incurred. Depreciable lives used by the Company for its classes of assets are as follows:

Freehold buildings	30 years
Furniture and fixtures	7 years
Fiber optic cable and duct	20 - 40 years
Fiber optic network equipment	3 - 15 years
Leasehold improvements	up to 10 years
Computer hardware and software	3-5 years

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If the carrying amount of an asset were to exceed its estimated future undiscounted cash flows, the asset would be considered to be impaired. Impairment losses would then be measured as the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of, if any, are reported at the lower of the carrying amount or fair value less costs to sell.

Software Capitalization

Software development costs include costs to develop software to be used solely to meet the Company's internal needs. The Company capitalizes development costs related to these software applications once the preliminary project stage is complete and

it is probable that the project will be completed. Subsequent additions, modifications, or upgrades to internal-use software are capitalized only to the extent that they allow the software to perform a function it previously did not perform. Software maintenance, data conversion, and training costs are expensed in the period in which they are incurred. The Company capitalized software costs of \$4.7 million, \$2.1 million, and \$1.5 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of the net identifiable assets acquired in a business combination. Goodwill is reviewed for impairment at least annually, in October, or more frequently if a triggering event occurs between impairment testing dates. The Company operates as a single operating segment and as a single reporting unit for the purpose of evaluating goodwill impairment. The Company's impairment assessment begins with a qualitative assessment to determine whether it is more likely than not that fair value of the reporting unit is less than its carrying value. The qualitative assessment includes comparing the overall financial performance of the Company against the planned results used in the last quantitative goodwill impairment test. Additionally, the Company's fair value is assessed in light of certain events and circumstances, including macroeconomic conditions, industry and market considerations, cost factors, and other relevant entity and Company specific events. The selection and assessment of qualitative factors used to determine whether it is more likely than not that the fair value of a reporting unit exceeds the carrying value involves significant judgment and estimates. If it is determined under the qualitative assessment that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then a two-step quantitative impairment test is performed. Under the first step, the estimated fair value of the Company would be compared with its carrying value (including goodwill). If the fair value of the Company exceeds its carrying value, step two does not need to be performed. If the estimated fair value of the Company is less than its carrying value, an indication of goodwill impairment exists for the Company and it would need to perform step two of the impairment test. Under step two, an impairment loss would be recognized for any excess of the carrying amount of the Company's goodwill over the implied fair value of that goodwill. Fair value of the Company under the two-step assessment is determined using a combination of both income and market-based approaches. There were no goodwill impairments identified for the years ended December 31, 2018, 2017, and 2016.

Intangible assets arising from business combinations, such as acquired customer contracts and relationships, (collectively "customer relationships"), trade names, or intellectual property are initially recorded at fair value. The Company amortizes these intangible assets over the determined useful life, which ranges from 3 to 20 years. The Company reviews its intangible assets for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be fully recoverable. If the total of the expected undiscounted future cash flows is less than the carrying amount of the asset, an impairment loss is recognized for the difference between fair value and the carrying value of the asset. There were no intangible asset impairments recognized for the years ended December 31, 2018, 2017, and 2016.

Business Combinations

The Company includes the results of operations of the businesses that it acquires as of the respective dates of acquisition. The Company allocates the fair value of the purchase price of its acquisitions to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the fair value of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill.

Asset Purchases

Periodically we acquire customer contracts that we account for as an asset purchase and record a corresponding intangible asset that is amortized over its assumed useful life. Any excess of the fair value of the purchase price over the fair value of the identifiable assets and liabilities is allocated on a relative fair value basis. No goodwill is recorded in an asset acquisition.

During the year ended December 31, 2018, the Company did not acquire any such customer contracts. During the years ended December 31, 2017 and 2016, the Company acquired customer contracts for an aggregate purchase price of \$37.4 million and \$41.3 million, respectively.

Disputed Supplier Expenses

In the normal course of business, the Company identifies supplier errors with respect to the billing of services. The Company performs bill verification procedures to ensure that errors in the Company's suppliers' billed invoices are identified and resolved. If the Company concludes that a vendor has billed inaccurately, the Company will record a liability only for the amount that it believes is owed. As of December 31, 2018 and 2017, the Company had open disputes not accrued for of \$9.1 million and \$5.3 million, respectively.

Acquisition Holdbacks

Acquisition holdbacks represent fixed deferred consideration to be paid out at some point in the future, typically on the one-year anniversary of an acquisition. The portion of the deferred consideration due within one year is recorded as a current liability until paid, and any consideration due beyond one year is recorded in other long-term liabilities.

Debt Issuance Costs

Debt issuance costs represent costs that qualify for deferral associated with the issuance of new debt or the modification of existing debt facilities. The unamortized balance of debt issuance costs is presented as a reduction to the carrying value of long-term debt. Debt issuance costs are amortized and recognized on the consolidated statements of operations as interest expense. The unamortized debt issuance costs were \$31.6 million and \$33.8 million as of December 31, 2018 and 2017, respectively.

Original Issuance Discounts and Premiums

Original issuance discounts and premiums ("OID") is the difference between the face value of debt and the amount of principal received when the loan was originated. When the debt reaches maturity, the face value of the debt is payable. The Company recognizes OID by accretion of the discount or premium as interest expense, net over the term of the debt. The unamortized portion of the OID was a \$47.8 million net discount and a \$9.3 million net premium as of December 31, 2018 and 2017, respectively.

Translation of Foreign Currencies

For non-U.S. subsidiaries, the local currency is the functional currency for financial reporting purposes. These consolidated financial statements have been reported in U.S. Dollars by translating asset and liability amounts of foreign subsidiaries at the closing currency exchange rate, equity amounts at historical rates, and the results of operations and cash flow at the average currency exchange rate prevailing during the periods reported. The net effect of such translation gains and losses are reflected in accumulated other comprehensive income (loss) in the stockholders' equity section of the consolidated balance sheets.

Transactions denominated in foreign currencies other than a subsidiary's functional currency are recorded at the rates of exchange prevailing at the time of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the rate of exchange prevailing at the balance sheet date. Exchange differences arising upon settlement of a transaction are reported in the consolidated statements of operations in other expense, net. The Company recognized net exchange (gains) losses of \$2.5 million, \$(0.3) million, and \$0.6 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Derivative Financial Instruments

The Company may use derivatives to partially offset its business exposure to foreign currency or interest rate risk on expected future cash flows. There can be no assurance the hedges will offset more than a portion of the financial impact resulting from movements in foreign currency exchange or interest rates. The Company does not hold derivatives for trading purposes.

The Company's use of derivative financial instruments exposes it to credit risk to the extent that the counterparties may be unable to meet the terms of the agreements. The Company mitigates such risk on these transactions by limiting its counterparties to major, creditworthy financial institutions.

As of December 31, 2018, the Company had derivative financial instruments in the form of interest rate swaps outstanding. The interest rate swaps were not designated as hedges and therefore do not qualify for hedge accounting. Refer to Note 9 - Debt for further information. There were no derivative financial instruments outstanding as of December 31, 2017. Additionally, during the year ended December 31, 2018 the Company settled a derivative financial instrument to hedge foreign currency rates. Refer to Note 3 - Business Acquisitions for further information on the terms of the arrangement.

Derivatives that are not designated as hedging instruments are adjusted to fair value through earnings on the consolidated statement of operations as other expense, net. During the year ended December 31, 2018, the Company recognized a loss of \$128.6 million in other expense, net, due to the change in fair value of its derivative financial instruments.

The Company records the fair value of its derivative financial instruments in the consolidated balance sheet as a component of prepaid expenses and other current assets when in a net asset position and as a component of accrued expenses and other current liabilities when in a net liability position.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. The Company classifies certain assets and liabilities based on the following hierarchy of fair value:

Level 1: Quoted prices for identical assets or liabilities in active markets that can be assessed at the measurement date.

Level 2: Inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3: Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. The inputs are unobservable in the market and significant to the instrument's valuation.

When determining the fair value measurements for assets and liabilities required to be recorded at fair value, management considers the principal or most advantageous market in which it would transact and considers risks, restrictions, or other assumptions that market participants would use when pricing the asset or liability.

Recurring Fair Value Measurements

In accordance with GAAP, certain assets and liabilities are required to be recorded at fair value on a recurring basis. For the Company, the only assets or liabilities adjusted to fair value on a recurring basis are its derivative financial instruments.

The Company measures all derivatives at fair value and recognizes them as either assets or liabilities in its consolidated balance sheets. The Company's derivative financial instruments are valued primarily using models based on readily observable market parameters for all substantial terms of our derivative contracts, and therefore have been classified as Level 2. None of the Company's derivative financial instruments qualify for hedge accounting, and therefore all changes in the fair values of derivative instruments are recognized in earnings in the current period.

The following table presents the Company's financial assets and liabilities that are required to be measured and recognized at fair value on a recurring basis classified under the appropriate level of the fair value hierarchy as of December 31, 2018. There were no financial assets or liabilities that were required to be measured and recognized at fair value on a recurring basis as of December 31, 2017. There were no transfers between Level 1 and Level 2 during the year ended December 31, 2018.

(amounts in millions)	December 31, 2018			
	Total	Quoted Prices in	Significant Other	Significant
		Active Markets	Observable Inputs	Unobservable Inputs
		Level 1	Level 2	Level 3
Assets:				
Interest rate swap agreements	\$ —	\$ —	\$ —	\$ —
Liabilities:				
Interest rate swap agreements	\$ (22.4)	\$ —	\$ (22.4)	\$ —

Non-recurring Fair Value Measurements

In addition to assets and liabilities that are recorded at fair value on a recurring basis, the Company records assets and liabilities at fair value on a non-recurring basis as required by GAAP.

Assets measured at fair value on a non-recurring basis include goodwill, tangible assets, and intangible assets. Such assets are reviewed quarterly for impairment indicators. If a triggering event has occurred, the assets are re-measured when the estimated fair value of the corresponding asset group is less than the carrying value. The fair value measurements, in such instances, are based on significant unobservable inputs (Level 3).

Other Fair Value Measurements

As of December 31, 2018 and 2017, the carrying amounts reflected in the accompanying consolidated balance sheets for cash and cash equivalents, accounts receivable, accounts payable, accrued expenses and other current liabilities approximated fair value due to the short-term nature of these instruments.

The table below presents the fair values for the Company's long-term debt as well as the input level used to determine these fair values. The carrying amounts exclude any debt issuance costs or original issuance discount:

(amounts in millions)	Total Carrying Value in Consolidated Balance Sheet		Fair Value Measurement Using Unadjusted Quoted Prices in Active Markets for Identical Assets or Liabilities ⁽¹⁾	
			(Level 1)	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<i>Liabilities not recorded at fair value in the Financial Statements:</i>				
Long-term debt, including the current portion:				
US Term loan	\$ 1,761.2	\$ 693.0	\$ 1,648.9	\$ 697.3
EMEA Term loan	857.6	—	827.5	—
7.875% Senior unsecured notes	575.0	575.0	488.8	608.1
Revolving line of credit	59.0	—	59.0	—
Other secured loans	18.1	—	18.1	—
Total long-term debt, including current portion	\$ 3,270.9	\$ 1,268.0	\$ 3,042.3	\$ 1,305.4

⁽¹⁾ Fair value based on the bid quoted price, except for other secured loans for which carrying value approximates fair value.

Concentrations of Credit Risk

Financial instruments potentially subject to concentration of credit risk consist primarily of cash and cash equivalents, restricted cash and cash equivalents, and trade accounts receivable. At times during the periods presented, the Company had funds in excess of \$250,000 insured by the U.S. Federal Deposit Insurance Corporation, or in excess of similar Deposit Insurance programs outside of the United States, on deposit at various financial institutions. Management believes the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

The Company's trade accounts receivable are unsecured and geographically dispersed. No single customer's trade accounts receivable balance as of December 31, 2018 and 2017, exceeded 10% of the Company's consolidated accounts receivable, net. No single customer accounted for more than 5% of revenue for the years ended December 31, 2018, 2017, and 2016.

Newly Adopted Accounting Principles

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* as modified by subsequently issued ASUs 2015-14, 2016-08, 2016-10, 2016-12, and 2016-20 (collectively ASU 2014-09). The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company has adopted this new standard as of January 1, 2018 using the modified retrospective method. The adoption of the new standard did not have a material impact on the Company's consolidated balance sheets, statements of operations, comprehensive (loss) income, stockholders' equity, or cash flows as of the adoption date or for the year ended December 31, 2018, and therefore no tabular reconciliation has been provided as there was no material effect on any financial statement line item. As part of the adoption, the Company has not retrospectively restated the contract revenue for those modifications in accordance with the contract modification guidance in paragraphs ASC 606-10-25-12 and 25-13. Instead, the Company reflected the aggregate effect of all modifications when identifying the satisfied and unsatisfied performance obligations, determining the transaction price and allocating the transaction price. The impact of this practical expedient had no significant impact on the Company's final conclusions. The Company has included the disclosures required by ASU No. 2014-09 above.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments*, which is intended to reduce diversity in practice of how certain transactions are classified and presented in the statement of cash flows in accordance with ASC 230. The ASU amends or clarifies guidance on eight specific cash flow issues, some of which include classification on debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, and separately identifiable cash flows and application of the predominance principle. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those periods. The guidance requires application using a retrospective transition method. The Company adopted the guidance as of January 1, 2018, and the provisions of the new guidance did not have a material impact on its consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which requires that restricted cash and restricted cash equivalents during the period should be included in the beginning and ending cash and cash equivalents balance reconciliation on the statement of cash flows. When cash, cash equivalents, restricted cash, or restricted cash equivalents are presented in more than one line item within the statement of financial position, an entity shall calculate a total cash amount in a narrative or tabular format that agrees to the amount shown on the statement of cash flows. Details on the nature and amounts of restricted cash should also be disclosed. The guidance is effective for public business entities for fiscal years beginning after December 15, 2017, including interim periods within that reporting period and should be applied using a retrospective transition method to each period presented. The Company adopted the guidance as of January 1, 2018. The impact of the implementation is as follows:

	Year Ended December 31,	
	2017	2016
Net cash used in investing activities (prior to the adoption of ASU 2016-18)	\$ (460.4)	\$ (362.6)
Impact of including restricted cash within cash and cash equivalents	(304.3)	304.3
Net cash used in investing activities (after adoption of ASU 2016-18)	<u>\$ (764.7)</u>	<u>\$ (58.3)</u>

In May 2017, the FASB issued ASU No. 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting*, which clarifies when changes to the terms or conditions of share-based equity awards must be accounted for as modifications. Entities will apply the modification accounting guidance if the value, vesting conditions, or classification of the award are not the same immediately before and after the modification. The guidance is effective prospectively for public business entities for fiscal years beginning after December 15, 2017, including interim periods within that reporting period. The Company adopted the guidance as of January 1, 2018, and the provisions of the new guidance did not have a material impact on its consolidated financial statements.

In December 2017, the SEC issued Staff Accounting Bulletin ("SAB") No. 118 (as further clarified by FASB ASU 2018-05, *Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118*), which provides guidance for companies that may not have completed their accounting for the income tax effects of the Tax Cut and Jobs Act ("Tax Act") in the period of enactment, which is the period that includes December 22, 2017. SAB No. 118 provides for a provisional one year measurement period for entities to finalize their accounting for certain income tax effects related to the Tax Act. The Company finalized its provisional amounts within the one year measurement period. Refer to Note 10 - Income Taxes for additional disclosure.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)*, which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a cloud-based services arrangement with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update specifies that the capitalized implementation costs are amortized over the term of the service arrangement and are presented in the same line item in the statement of operations as the service contract. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2019, and interim periods within those periods, and early adoption is permitted and can be applied either retrospectively or prospectively. The Company early adopted this guidance as of October 1, 2018 under the prospective transition method. The early adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, which requires most leases (with the exception of leases with terms of less than one year) to be recognized on the balance sheet as an asset and a lease liability. Leases will be classified as an operating lease or a financing lease. Operating leases are expensed using the straight-line method, whereas financing leases will be treated similarly to a capital lease under the current standard. The guidance is effective for interim and annual reporting periods beginning after December 15, 2018, and early adoption is permitted. The new standard must be presented using the modified retrospective method. However, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides an additional (and optional) transition method to adopt the new leases standard. The modified retrospective method is applied to all prior reporting periods presented with a cumulative-effect adjustment recorded in the earliest comparative period, while the optional transition relief method is applied beginning in the period of adoption with a cumulative-effect adjustment recorded to the opening balance of retained earnings in the period of adoption without adjustment to the financial statements for periods prior to adoption. The Company will adopt the standard as of January 1, 2019 using the optional transition relief method.

Upon adoption, the Company expects to recognize lease right-of-use assets ranging from approximately \$475.0 million to \$530.0 million and lease liabilities ranging from \$475.0 million to \$530.0 million in its consolidated balance sheets. However, the Company does not believe adoption will have a material impact on its consolidated statements of operations. While the Company is continuing to assess all potential impacts of the new standard, the Company currently believes the most significant impact relates to its accounting for office space, colocation operating leases, and embedded leases within its dark fiber and duct supplier contracts. The Company expects its accounting for capital leases to remain substantially unchanged under the new standard.

The Company will elect the package of practical expedients available in the standard, and therefore will not reassess the classification of existing leases or any initial direct costs associated with those leases. The Company will not utilize the hindsight practical expedient in its adoption of the new standard. The Company will make an accounting policy election not to apply the accounting requirements of the new leasing standard to leases with an initial term of 12 months or less.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, and subsequent amendment to the initial guidance, ASU 2018-19, in November 2018. The updated guidance introduces a new forward-looking approach, based on expected losses, to estimate credit losses on certain types of financial instruments, including trade receivables. The updated guidance is to be applied using a modified retrospective transition approach and is effective for annual and interim reporting periods beginning after December 15, 2021, and early adoption is permitted. The Company is currently assessing the impact the updated guidance will have on its consolidated financial statements.

In March 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which simplifies the accounting for goodwill impairment by eliminating the requirement to calculate the implied fair value of goodwill (Step 2) to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value (as determined in Step 1). The guidance is effective prospectively for public business entities for fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company does not expect the new guidance to have a material impact on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows for reclassification of stranded tax effects on items resulting from the Tax Act from accumulated other comprehensive income (loss) to retained earnings. The guidance will be effective for the Company for interim and annual reporting periods beginning after December 31, 2018, and early adoption is permitted. The Company is currently evaluating the effect of the new guidance on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. The guidance will be effective for the Company interim and annual reporting periods beginning after December 15, 2019, and early adoption permitted. The removed and modified disclosures will be adopted on a retrospective basis and the new disclosures will be adopted on a prospective basis. The Company does not anticipate the updated guidance will have a material impact on its consolidated financial statements.

In August 2018, the SEC issued several final rules, including but not limited to SEC Final Rule Release No. 33-10532 *Disclosure Update and Simplification* ("Final Rule"), which amends certain redundant, duplicative, outdated, superseded or overlapping disclosure requirements. This Final Rule is intended to facilitate disclosure information provided to investors and simplify compliance without significantly impacting the mix of information provided to investors. The amendments also expand the disclosure

requirements regarding the analysis of stockholders' equity for interim financial statements, in which entities will be required to present a reconciliation for each period for which a statement of comprehensive income is required to be filed. The Final Rule is effective on November 5, 2018, however the SEC staff announced that it would not object if the filer's first presentation of the changes in stockholders' equity is included in its Form 10-Q for the quarter that begins after the effective date of the amendments. As such, the Company plans to use the new presentation of a consolidated statement of stockholders equity within its interim financial statements beginning in its Form 10-Q for the quarter ending March 31, 2019. Other than the new presentation, the Company does not anticipate any material impact to its consolidated financial statements and related disclosures upon adoption.

Other recent accounting pronouncements issued by the FASB during 2018 and through the filing date did not and are not believed by management to have a material impact on the Company's present or historical consolidated financial statements.

NOTE 3 — BUSINESS ACQUISITIONS

Since its formation, the Company has consummated a number of transactions accounted for as business combinations as part of its growth strategy. The acquisitions of these businesses, which are in addition to periodic purchases of customer contracts, have allowed the Company to increase the scale at which it operates, which in turn affords the Company the ability to increase its operating leverage, extend its network, and broaden its customer base.

The accompanying consolidated financial statements include the operations of the acquired entities from their respective acquisition dates. All of the acquisitions noted below have been accounted for as a business combination. Accordingly, consideration paid by the Company to complete the acquisitions is initially allocated to the respective assets and liabilities based upon their estimated acquisition date fair values. The recorded amounts for assets acquired and liabilities assumed are provisional and subject to change during the measurement period, which is up to 12 months from the date of acquisition.

The following is a list of material business combinations the Company completed during 2018, 2017, and 2016, respectively.

2018 Acquisitions

Access Point

In October 2018, the Company acquired Access Point, Inc. ("Access Point"). The Company paid \$36.3 million cash consideration, of which \$1.0 million was net cash acquired, and issued 115,194 unregistered shares of our common stock valued at \$4.6 million at closing. The results of Access Point have been included from October 1, 2018. Pro forma results of operations for this acquisition have not been presented as it is not material to the consolidated results of operations. The acquisition was considered a stock purchase for tax purposes.

Interoute

In May 2018, the Company acquired Interoute, a Luxembourg public limited liability company. The Company paid \$2,239.3 million in cash consideration at closing, of which \$66.1 million was net cash acquired, and assumed \$27.7 million in debt. The results of Interoute have been included from June 1, 2018. The acquisition was considered a stock purchase for tax purposes.

The Company partially funded the purchase price through the issuance of 9,589,094 shares of common stock to a group of institutional investors for proceeds of \$425.0 million concurrently with the closing of the Interoute acquisition. The Company also entered into a credit agreement to fund the remainder of the purchase price. Refer to Note 9 - Debt for further information.

In February 2018, the Company also entered into a deal-contingent foreign currency hedge arrangement with a total notional amount of €1.260 billion at a spot rate of \$1.23 to €1.00. Fees associated with this arrangement were payable upon closing of the acquisition based on a pre-defined schedule in the hedge agreement. The Company recognized a loss of \$105.8 million upon settlement of the deal-contingent foreign currency hedge arrangement.

Accelerated Connections

In March 2018, the Company acquired Accelerated Connections, Inc. ("Accelerated Connections"). The Company paid \$35.0 million cash consideration, of which \$0.8 million was net cash acquired, and issued 79,930 unregistered shares of the Company's common stock valued at \$4.2 million at closing. Substantially all of the consideration was allocated to goodwill and identifiable intangible assets. The results of Accelerated Connections have been included from March 1, 2018. Pro forma results of operations for this acquisition have not been presented as it is not material to the consolidated results of operations. The acquisition was considered a stock purchase for tax purposes.

2017 Acquisitions

Custom Connect

In December 2017, the Company acquired Custom Connect International B.V. ("Custom Connect"). The Company paid \$28.9 million in cash consideration, of which \$0.6 million was net cash acquired, and issued 49,941 unregistered shares of the Company's common stock valued at \$2.2 million at closing. The results of Custom Connect have been included from December 31, 2017. Pro forma results of operations for this acquisition have not been presented as it is not material to the consolidated results of operations. The acquisition was considered a stock purchase for tax purposes.

Transbeam

In October 2017, the Company acquired Transbeam, Inc. ("Transbeam"). The Company paid \$26.4 million in cash consideration, of which \$0.8 million was net cash acquired, and \$2.0 million was deferred as holdback consideration for a 12-month period, subject to reduction for any indemnification claims made by the Company prior to such date. As of December 31, 2018, the remaining holdback consideration to be paid was \$0.2 million. The results of Transbeam have been included from October 1, 2017. Pro forma results of operations for this acquisition have not been presented as it is not material to the consolidated results of operations. The acquisition was considered a stock purchase for tax purposes.

Global Capacity

In September 2017, the Company acquired Global Capacity. The Company paid \$104.0 million in cash consideration, of which \$4.0 million was net cash acquired, and issued 1,850,000 unregistered shares of the Company's common stock valued at \$53.6 million at closing. The results of Global Capacity have been included from September 15, 2017. The acquisition was considered an asset purchase for tax purposes.

Perseus

In June 2017, the Company acquired Perseus Telecom ("Perseus"). The Company paid \$37.5 million in cash consideration, of which \$0.1 million was net cash acquired, and assumed \$1.9 million in capital leases. The results of Perseus have been included from June 1, 2017. Pro forma results of operations for this acquisition have not been presented as it is not material to the consolidated results of operations. The acquisition was considered a stock purchase for tax purposes.

Hibernia

In January 2017, the Company acquired Hibernia. The Company paid \$529.6 million in cash consideration, of which \$14.6 million was net cash acquired, and issued 3,329,872 unregistered shares of the Company's common stock, initially valued at \$75.0 million on the date of announcement, and ultimately valued at \$86.1 million at closing. The results of Hibernia have been included from January 1, 2017. The acquisition was considered an asset purchase for tax purposes.

2016 Acquisition

Telnes

In February 2016, the Company completed the acquisition of Telnes Broadband ("Telnes"). The Company paid \$15.5 million in cash consideration and issued 178,202 unregistered shares of the Company's common stock valued at \$2.0 million at closing. The results of Telnes have been included from February 1, 2016. The acquisition was considered an asset purchase for tax purposes.

Purchase Price Allocation

The table below reflects the Company's preliminary estimates of the acquisition date fair values of the purchase consideration, assets acquired, and liabilities assumed for its material 2018 acquisition (amounts in millions):

	Interoute
Purchase Price	
Cash paid at closing	\$ 2,239.3
Purchase consideration	\$ 2,239.3
Purchase Price Allocation	
<i>Assets acquired:</i>	
Cash	\$ 66.1
Accounts receivable	86.6
Prepaid expenses and other current assets	51.3
Property and equipment	1,435.9
Other assets	24.5
Intangible assets - customer lists	171.5
Intangible assets - tradename	2.1
Intangible assets - other	15.4
Deferred tax assets	35.9
Goodwill	1,040.6
Total assets acquired	2,929.9
<i>Liabilities assumed:</i>	
Accounts payable	(75.5)
Accrued expenses and other current liabilities	(115.2)
Capital leases ⁽¹⁾	(42.4)
Debt	(27.7)
Deferred revenue	(243.0)
Deferred tax liabilities	(148.8)
Other long-term liabilities	(38.0)
Total liabilities assumed	(690.6)
Net assets acquired	\$ 2,239.3
(1) Includes \$38.8 million of assumed long-term building leases.	

The table below reflects the weighted average amortization period for intangible assets acquired in the Interoute acquisition (amounts in years):

	Interoute
Intangible assets - customer lists	14.7
Intangible assets - tradename	1.0
Intangible assets - other	7.0
Weighted average	13.9

Amortization expense related to intangible assets created as a result of the Interoute acquisition of \$10.1 million has been recorded for the year ended December 31, 2018. Estimated amortization expense related to intangible assets created as a result of the Interoute acquisition for each of the years subsequent to December 31, 2018 is as follows (amounts in millions):

2019	\$	16.1
2020		15.2
2021		15.2
2022		15.2
2023		15.2
2024 and beyond		98.9
Total	\$	175.8

The table below reflects the Company's estimates of the acquisition date fair values of the purchase consideration, assets acquired, and liabilities assumed for its material 2017 acquisition (amounts in millions):

	Hibernia	Global Capacity
Purchase Price		
Cash paid at closing	\$ 529.6	\$ 104.0
Common stock ⁽¹⁾	86.1	53.6
Purchase consideration	\$ 615.7	\$ 157.6
Purchase Price Allocation		
<i>Assets acquired:</i>		
Current assets	\$ 42.6	\$ 25.7
Property and equipment	432.5	34.4
Other assets	0.1	2.5
Intangible assets - customer lists	166.7	41.2
Intangible assets - tradename	0.7	—
Intangible assets - other	—	4.6
Goodwill	201.1	88.8
Total assets acquired	843.7	197.2
<i>Liabilities assumed:</i>		
Accounts payable		
Current liabilities	(40.6)	(24.1)
Deferred revenue	(163.3)	(15.5)
Deferred tax liabilities	(24.1)	—
Total liabilities assumed	(228.0)	(39.6)
Net assets acquired	\$ 615.7	\$ 157.6

(1) Common stock fair value for Hibernia equals the closing share price on the acquisition date of \$27.80 less a discount for lack of marketability. Common stock fair value for Global Capacity equals the closing share price on the acquisition date of \$30.85 less a discount for lack of marketability.

Goodwill is calculated as the excess of the consideration transferred over the net assets recognized and represents the estimated future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. Goodwill is not expected to be deductible for tax purposes. Goodwill will not be amortized but instead will be tested for impairment at least annually and more frequently if certain indicators of impairment are present.

Acquisition Method Accounting Estimates

The Company initially recognizes the assets and liabilities acquired from the aforementioned acquisitions based on its preliminary estimates of their acquisition date fair values. As additional information becomes known regarding the acquired assets and assumed liabilities, management may make adjustments to the opening balance sheet of the acquired company up to the end of the measurement period, which is a one-year period following the acquisition date. The determination of the fair values of the

acquired assets and liabilities assumed (and the related determination of estimated lives of depreciable tangible and identifiable intangible assets) requires significant judgment.

During the year ended December 31, 2018, certain measurement period adjustments were recorded to adjust provisional amounts for acquisitions completed during 2017 and 2018.

Transaction Costs

Transaction costs describe the broad category of costs the Company incurs in connection with signed and/or closed acquisitions. There are two types of costs that the Company accounts for:

- Severance, restructuring and other exit costs
- Transaction and integration costs

Severance, restructuring and other exit costs include severance and other one-time benefits for terminated employees, termination charges for leases and supplier contracts, and other costs incurred associated with an exit activity. These costs are reported separately in the consolidated statements of operations. Refer to Note 12 - Severance, Restructuring, and Other Exit Costs of these consolidated financial statements for further information on severance, restructuring and other exit costs.

Transaction and integration costs include expenses associated with legal, accounting, regulatory, and other transition services rendered in connection with acquisitions, travel expense, and other non-recurring direct expenses associated with acquisitions. Transaction and integration costs are expensed as incurred in support of the integration. The Company incurred transaction and integration costs of \$40.5 million, \$19.1 million, and \$4.8 million for the years ended December 31, 2018, 2017, and 2016, respectively. Transaction and integration costs have been included in selling, general and administrative expenses in the consolidated statements of operations and in cash flows from operating activities in the consolidated statements of cash flows during the years then ended.

Pro forma Financial Information (Unaudited)

The pro forma results presented below include the effects of the Company's material acquisitions during 2018 and 2017 as if the acquisitions occurred on January 1, 2017. The pro forma net income (loss) for the years ended December 31, 2018 and 2017 includes adjustments to revenue and cost of telecommunications services to eliminate inter-company activity, adjustments to deferred revenue and deferred cost from the acquired companies, and IFRS to US GAAP adjustments for Interoute. The pro forma adjustments are based on historically reported transactions by the acquired companies. The pro forma results do not include any anticipated synergies or other expected benefits of the acquisitions. The unaudited pro forma financial information below is not necessarily indicative of either future results of operations or results that might have been achieved had the acquisitions been consummated as of January 1, 2017.

	Year Ended December 31,	
	2018	2017
<i>(Amounts in millions, except per share and share data)</i>		
Revenue	\$ 1,836.0	\$ 1,760.4
Net (loss) income	\$ (91.1)	\$ (190.4)
(Loss) earnings per share:		
Basic	\$ (1.80)	\$ (3.70)
Diluted	\$ (1.80)	\$ (3.70)
Denominator for basic EPS – weighted average shares	50,718,279	51,502,046
Denominator for diluted EPS – weighted average shares	50,718,279	51,502,046

NOTE 4 — GOODWILL AND INTANGIBLE ASSETS

The goodwill balance was \$1,738.0 million and \$644.5 million as of December 31, 2018 and 2017, respectively. Additionally, the Company's intangible asset balance was \$552.4 million and \$417.1 million as of December 31, 2018 and 2017, respectively. The

additions to both goodwill and intangible assets during the year ended December 31, 2018 and 2017 relate to the 2017 Acquisitions and 2018 Acquisitions (see to Note 3 - Business Acquisitions).

The changes in the carrying amount of goodwill for the years ended December 31, 2018 and 2017 were as follows (amounts in millions):

Goodwill - December 31, 2016	\$ 280.6
Initial goodwill associated with 2017 business combinations	334.7
Adjustments to 2017 business combinations	28.9
Adjustments to prior year business combinations	0.3
Goodwill - December 31, 2017	644.5
Initial goodwill associated with 2018 business combinations	1,130.9
Adjustments to 2018 business combinations	(37.9)
Adjustments to prior year business combinations	22.2
Foreign currency translation adjustments	(21.7)
Goodwill - December 31, 2018	\$ 1,738.0

The following tables summarize the Company's intangible assets (amounts in millions):

	Amortization Period	December 31, 2018			December 31, 2017		
		Gross Asset Cost	Accumulated Amortization	Net Book Value	Gross Asset Cost	Accumulated Amortization	Net Book Value
Customer lists	3-20 years	\$ 757.7	\$ 233.7	\$ 524.0	\$ 552.8	\$ 155.1	\$ 397.7
Non-compete agreements	3-5 years	4.7	4.6	0.1	4.6	4.5	0.1
Intellectual property	10 years	38.6	11.3	27.3	23.7	5.2	18.5
Tradename	1-3 years	6.0	5.0	1.0	3.9	3.1	0.8
		<u>\$ 807.0</u>	<u>\$ 254.6</u>	<u>\$ 552.4</u>	<u>\$ 585.0</u>	<u>\$ 167.9</u>	<u>\$ 417.1</u>

Amortization expense was \$86.4 million, \$69.0 million, and \$40.7 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Estimated amortization expense related to intangible assets subject to amortization at December 31, 2018 in each of the years subsequent to December 31, 2018 is as follows (amounts in millions):

2019	\$ 85.6
2020	81.7
2021	80.1
2022	67.1
2023	54.6
2024 and beyond	183.3
Total	<u>\$ 552.4</u>

NOTE 5 — PROPERTY AND EQUIPMENT

The following table summarizes the Company's property and equipment as of December 31, 2018 and 2017 (amounts in millions):

	December 31,	
	2018	2017
Land and freehold buildings	\$ 14.1	\$ 14.2
Furniture and fixtures	6.4	1.9
Fiber optic cable and duct	1,447.5	411.0
Fiber optic network equipment	582.9	199.8
Leasehold improvements	58.1	5.0
Computer hardware and software	66.2	25.9
Property and equipment, gross	2,175.2	657.8
Less accumulated depreciation	(304.8)	(158.5)
Property and equipment, net	<u>\$ 1,870.4</u>	<u>\$ 499.3</u>

Depreciation expense associated with property and equipment, including amortization of capital lease assets, was \$125.0 million, \$63.6 million, and \$22.1 million for the years ended December 31, 2018, 2017, and 2016, respectively.

NOTE 6 — PREPAID EXPENSES AND OTHER CURRENT ASSETS

The following table summarizes the Company's prepaid expenses and other current assets as of December 31, 2018 and 2017 (amounts in millions):

	December 31,	
	2018	2017
Prepaid carrier costs	\$ 18.9	\$ 2.1
Prepaid selling, general and administrative	14.7	10.4
Short-term deposits	1.3	0.4
Taxes receivable	2.5	1.5
Deferred commissions	3.4	—
Other	8.4	9.7
	<u>\$ 49.2</u>	<u>\$ 24.1</u>

NOTE 7 — ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

The following table summarizes the Company's accrued expenses and other current liabilities as of December 31, 2018 and 2017 (amounts in millions):

	December 31,	
	2018	2017
Compensation and benefits	\$ 36.9	\$ 13.3
Carrier costs	101.1	13.8
Restructuring	25.6	9.7
Interest rate swaps	22.4	—
Interest	3.2	22.9
Acquisition holdbacks	6.7	14.0
Fiber pair repurchase	—	10.0
Accrued taxes	2.8	9.6
Selling, general and administrative	8.3	2.1
Accrued capital expenditures	7.7	—
Other	12.1	7.6
	<u>\$ 226.8</u>	<u>\$ 103.0</u>

NOTE 8 — DEFERRED REVENUE

The total deferred revenue as of December 31, 2018 and 2017 was \$371.2 million and \$148.9 million, respectively, consisting of unamortized prepaid services, IRUs, and deferred non-recurring revenue. Deferred revenue is recognized as current and noncurrent deferred revenue on the consolidated balance sheets.

Significant changes in deferred revenue balances during the year ended December 31, 2018 and 2017 are as follows (amounts in millions):

	Contract Term		Total
	Less than 1 Year	Greater than 1 Year	
Balance, December 31, 2016	\$ 13.2	\$ 3.4	\$ 16.6
Revenue recognized from beginning balance	(7.7)	(3.4)	(11.1)
Increase in deferred revenue, net	12.9	—	12.9
Business combinations (gross)	22.6	157.6	180.2
Revenue recognized from business combinations	(22.4)	(27.3)	(49.7)
Balance, December 31, 2017	\$ 18.6	\$ 130.3	\$ 148.9
Revenue recognized from beginning balance	(18.6)	(21.7)	(40.3)
Increase in deferred revenue, net	28.7	13.4	42.1
Business combinations (gross)	0.4	242.6	243.0
Revenue recognized from business combinations	(0.4)	(22.1)	(22.5)
Balance, December 31, 2018	\$ 28.7	\$ 342.5	\$ 371.2

The change in deferred revenue per the table above includes the non-cash impact of foreign currency translation adjustments of \$6.5 million for the year ended December 31, 2018.

Remaining amortization at December 31, 2018 and in each of the years subsequent to December 31, 2018 is as follows (amounts in millions):

	Contract Term		Total
	Less than 1 Year	Greater than 1 Year	
2019	\$ 28.7	\$ 55.5	\$ 84.2
2020	—	37.3	37.3
2021	—	34.4	34.4
2022	—	32.9	32.9
2023	—	32.1	32.1
2024 and beyond	—	150.3	150.3
	\$ 28.7	\$ 342.5	\$ 371.2

NOTE 9 — DEBT

Long-term debt is summarized as follows (amounts in millions):

	December 31,	
	2018	2017
US Term loan	\$ 1,761.2	\$ 693.0
EMEA Term loan	857.6	—
7.875% Senior unsecured notes	575.0	575.0
Revolving line of credit	59.0	—
Other secured loans	18.1	—
Total debt obligations	3,270.9	1,268.0
Unamortized debt issuance costs	(31.6)	(33.8)
Unamortized original issuance (discount) premium, net	(47.8)	9.3
Carrying value of debt	3,191.5	1,243.5
Less current portion	(39.9)	(7.0)
Long-term debt less current portion	<u>\$ 3,151.6</u>	<u>\$ 1,236.5</u>

2018 Credit Agreement

On May 31, 2018, the Company entered into a credit agreement (the "2018 Credit Agreement") that provides for (1) a \$1,770.0 million term loan B facility (the "US Term Loan Facility"), (2) a €750.0 million term loan B facility (the "EMEA Term Loan Facility"), and (3) a \$200.0 million revolving credit facility (the "Revolving Line of Credit Facility") (which includes a \$50.0 million letter of credit facility). In addition, the Company may request incremental term loan commitments and/or incremental revolving loan commitments in an aggregate amount not to exceed the sum of \$575.0 million and an unlimited amount that is subject to pro forma compliance with a net secured leverage ratio test. The US Term Loan Facility was issued at an original issuance discount of \$8.9 million and the EMEA Term Loan Facility was issued at an original issuance discount of €3.8 million.

The maturity date of the US Term Loan Facility and the EMEA Term Loan Facility (collectively the "Term Loan Facilities") is May 31, 2025 and the maturity date of the Revolving Line of Credit Facility is May 31, 2023. Each maturity date may be extended per the terms of the 2018 Credit Agreement. If within six months after entering into the 2018 Credit Agreement certain prepayments are made or any amendment reduces the "effective yield" applicable to all or a portion of such term loans, such prepayment or repriced portions of the term loans will be subject to a penalty equal to 1.00% of the outstanding term loans being prepaid or repriced. No such prepayments or amendments were made through December 31, 2018.

The principal amounts of the US Term Loan Facility and EMEA Term Loan Facility are payable in equal quarterly installments of \$4.425 million and €1.875 million, respectively, commencing on September 30, 2018 and continuing thereafter until the maturity date when the remaining balances of outstanding principal amount is payable in full.

The Company may prepay loans under the 2018 Credit Agreement at any time, subject to certain notice requirements, LIBOR breakage costs, and prepayment fees noted above.

At the Company's election, the US Term Loan Facility may be made as either Base Rate Loans or Eurocurrency Loans. The EMEA Term Loan Facility will bear interest at the European Money Markets Institute EURIBO Rate plus the applicable margin. The applicable margin for the US Term Loan Facility is 1.75% for Base Rate Loans and 2.75% for Eurocurrency Loans, subject to a "LIBOR floor" of 0.00%. The applicable margin for the EMEA Term Loan Facility is 3.25%, subject to a "EURIBOR floor" of 0.00%. The applicable margin for revolving loans under the Revolving Line of Credit Facility is 1.75% for Base Rate Loans, 2.75% for Eurocurrency Loans denominated in U.S. Dollars and certain other approved currencies other than Euros, and 3.25% for revolving loans denominated in Euros.

The proceeds from the US Term Loan Facility and EMEA Term Loan Facility were used to finance the Interoute acquisition, to repay amounts outstanding under the Company's prior term loan facility, and to pay costs associated with such transactions.

The unused and available amount of the Revolving Line of Credit Facility at December 31, 2018 was as follows (amounts in millions):

Committed capacity	\$	200.0
Borrowings outstanding		(59.0)
Letters of credit issued		(11.5)
Unused and available	\$	<u>129.5</u>

The obligations of the Company under the 2018 Credit Agreement are secured by the substantial majority of the tangible and intangible assets of the Company.

The 2018 Credit Agreement does not contain a financial covenant for the US Term Loan Facility or the EMEA Term Loan Facility, but it does include a maximum Consolidated Net Secured Leverage Ratio applicable to the Revolving Line of Credit Facility in the event that utilization exceeds 30% of the revolving loan facility commitment. If triggered, the covenant requires the Company to maintain a Consolidated Net Secured Leverage Ratio, on a Pro Forma Basis, below the maximum ratio specified as follows:

Fiscal Quarter Ending	Maximum Ratio
December 31, 2018	6.50:1.00
March 31, 2019	6.50:1.00
June 30, 2019	6.50:1.00
September 30, 2019	6.25:1.00
December 31, 2019	6.25:1.00
March 31, 2020	6.00:1.00
June 30, 2020	6.00:1.00
September 30, 2020	5.50:1.00
December 31, 2020	5.50:1.00
March 31, 2021	5.50:1.00
June 30, 2021	5.00:1.00
September 30, 2021	5.00:1.00
December 31, 2021	4.50:1.00
March 31, 2022	4.50:1.00
June 30, 2022 and thereafter	4.25:1.00

Interest Rate Swaps

During 2018, the Company entered into the following interest rate swap arrangements to partially mitigate the variability of cash flows due to changes in the Eurodollar rate, specifically related to interest payments on our term loans under the 2018 Credit Agreement:

Trade date	April 6, 2018	May 17, 2018	May 17, 2018	May 17, 2018
Notional amount (in millions)	\$ 500.0	\$ 200.0	\$ 300.0	€ 317.0
Term (years)	5	7	3	7
Effective date	4/30/2018	6/29/2018	6/29/2018	6/29/2018
Termination date	4/30/2023	5/31/2025	6/30/2021	5/31/2025
Fixed rate	2.6430%	3.0370%	2.8235%	0.8900%
Floating rate	1-month LIBOR	1-month LIBOR	1-month LIBOR	1-month EURIBOR

The interest rate swaps do not qualify for hedge accounting.

The fair value of the interest rate swaps at December 31, 2018 was as follows (in millions):

Derivative Instrument	Aggregate Notional Amount	Effective Date	Maturity Date	Fair Value	
				December 31, 2018	
				Asset Derivatives	Liability Derivatives
Interest rate swap	\$ 500.0	4/30/2018	4/30/2023	\$ —	\$ (4.4)
Interest rate swap	\$ 200.0	6/29/2018	5/31/2025	—	(6.9)
Interest rate swap	\$ 300.0	6/29/2018	6/30/2021	—	(2.8)
Interest rate swap	€ 317.0	6/29/2018	5/31/2025	—	(8.3)
				\$ —	\$ (22.4)

The Company records the fair value of interest rate swaps in its consolidated balance sheets within prepaid expenses and other current assets when in an asset position and within accrued expenses and other current liabilities when in a liability position. During the year ended December 31, 2018, the Company recognized a loss of \$22.4 million in other expense, net due to the change in fair value of its interest rate swaps.

Previous Debt Agreement - 2017 Credit Agreement

On January 9, 2017, the Company entered into a credit agreement (the "2017 Credit Agreement") that provided a \$700.0 million term loan facility and a \$75.0 million revolving line of credit facility (which included a \$25.0 million letter of credit facility). Amounts outstanding under the 2017 Credit Agreement were paid in full at the closing of the 2018 Credit Agreement. The previous term loan facility was issued at an original issuance discount of \$3.5 million.

7.875% Senior Unsecured Notes

During 2016 and 2017, the Company completed three private offerings for \$575.0 million aggregate principal amount of its 7.875% senior unsecured notes due in 2024 (collectively the "7.875% Senior Unsecured Notes"). Each offering was treated as a single series of debt securities. The 7.875% Senior Unsecured Notes have identical terms other than the issuance date and offering price. The 7.875% Senior Unsecured Notes were issued at a combined premium of \$16.5 million. In connection with the offerings, the Company incurred debt issuance costs of \$17.3 million, of which \$0.5 million was incurred in 2016 and the remainder was incurred in 2017.

Other Secured Loans

In connection with the Interoute acquisition in May 2018 the Company acquired other loans secured by certain network assets. The balance of other secured loans at December 31, 2018 was \$18.1 million.

Effective Interest Rate

The effective interest rate on the long-term debt at December 31, 2018 and December 31, 2017 was 5.3% and 4.5%, respectively. The effective interest rate at December 31, 2018 considers the impact of the interest rate swaps.

Long-term Debt Contractual Maturities

The aggregate contractual maturities of long-term debt (excluding unamortized debt issuance costs and unamortized OID) were as follows as of December 31, 2018 (amounts in millions):

	Total debt
2019	\$ 39.9
2020	30.6
2021	26.6
2022	26.3
2023	85.4
2024 and beyond	3,062.1
	<u>\$ 3,270.9</u>

Debt Issuance Costs and Original Issuance Discounts and Premiums

The following table summarizes the debt issuance costs activity for the years ended December 31, 2018 and 2017 (amounts in millions):

	US Term Loan	EMEA Term Loan	7.875% Senior Unsecured Notes	Revolving Line of Credit	Total
Balance, December 31, 2016	\$ (7.8)	\$ —	\$ (0.5)	\$ (1.0)	\$ (9.3)
Debt issuance costs incurred	(14.5)	—	(16.8)	(2.7)	(34.0)
Amortization	2.2	—	1.2	0.4	3.8
Loss on debt extinguishment	5.4	—	—	0.3	5.7
Balance, December 31, 2017	(14.7)	—	(16.1)	(3.0)	(33.8)
Debt issuance costs incurred	(4.7)	(3.4)	—	(0.6)	(8.7)
Amortization	1.8	0.2	1.8	0.6	4.4
Loss on debt extinguishment	6.1	—	—	0.4	6.5
Balance, December 31, 2018	<u>\$ (11.5)</u>	<u>\$ (3.2)</u>	<u>\$ (14.3)</u>	<u>\$ (2.6)</u>	<u>\$ (31.6)</u>

Debt issuance costs are presented on the consolidated balance sheets as a reduction to long-term debt. Interest expense associated with the amortization of debt issuance costs was \$4.4 million, \$3.8 million, and \$1.5 million for the years ended December 31, 2018, 2017, and 2016, respectively.

The following table summarizes the original issuance (discount) and premium activity for the years ended December 31, 2018 and 2017 (amounts in millions):

	US Term Loan	EMEA Term Loan	7.875% Senior Unsecured Notes	Total
Balance, December 31, 2016	\$ (7.0)	\$ —	\$ —	\$ (7.0)
New Original Issuance Discount	(3.5)	—	16.5	13.0
Amortization	1.1	—	(0.7)	0.4
Loss on debt extinguishment	2.9	—	—	2.9
Balance, December 31, 2017	(6.5)	—	15.8	9.3
New Original Issuance Discount	(8.9)	(4.4)	—	(13.3)
Fees paid to lenders	(35.2)	(19.4)	—	(54.6)
Amortization	3.5	1.8	(1.8)	3.5
Loss on debt extinguishment	7.3	—	—	7.3
Balance, December 31, 2018	<u>\$ (39.8)</u>	<u>\$ (22.0)</u>	<u>\$ 14.0</u>	<u>\$ (47.8)</u>

Original issuance discounts and premiums are presented on the consolidated balance sheets as a reduction to long-term debt. Amortization of original issuance discounts and premiums was \$3.5 million, \$0.4 million, and \$0.9 million for the years ended December 31, 2018, 2017, and 2016, respectively.

The Company expensed an aggregate of \$13.8 million, \$8.6 million, and \$1.6 million of debt issuance costs and OID that did not qualify for deferral as loss on debt extinguishment in the consolidated statements of operations for the years ended December 31, 2018, 2017, and 2016, respectively.

NOTE 10 — INCOME TAXES

The components of (loss) income before income taxes for the years ended December 31, 2018, 2017, and 2016 were as follows (amounts in millions):

	Year Ended December 31,		
	2018	2017	2016
Domestic	\$ (243.6)	\$ (87.1)	\$ 11.5
Foreign	(5.3)	32.9	(2.3)
Total	\$ (248.9)	\$ (54.2)	\$ 9.2

The components of the (benefit from) provision for income taxes for the years ended December 31, 2018, 2017, and 2016 were as follows (amounts in millions):

	Year Ended December 31,		
	2018	2017	2016
Current:			
Federal	\$ —	\$ (0.5)	\$ 0.4
State	0.2	—	—
Foreign	1.4	7.3	1.3
Total current	1.6	6.8	1.7
Deferred:			
Federal	(2.9)	8.0	2.4
State	(0.6)	0.4	0.7
Foreign	(3.6)	2.1	(0.9)
Total deferred	(7.1)	10.5	2.2
Income tax expense (benefit)	\$ (5.5)	\$ 17.3	\$ 3.9

The following is a reconciliation of the U.S. federal statutory income taxes to the amounts reported in the financial statements for the years ended December 31, 2018, 2017, and 2016 (amounts in millions):

	2018		2017		2016	
	Amount	Effective Rate	Amount	Effective Rate	Amount	Effective Rate
U.S. federal statutory income tax	\$ (52.3)	21.0 %	\$ (19.0)	35.0 %	\$ 3.2	34.8 %
Permanent items	0.2	(0.1)%	1.2	(2.2)%	(0.2)	(2.2)%
State taxes, net of federal benefit	(10.1)	4.1 %	(3.0)	5.5 %	0.4	4.3 %
Foreign tax rate differential	(0.5)	0.2 %	(9.3)	17.2 %	—	— %
Compensation related items	(3.3)	1.3 %	(5.1)	9.4 %	—	— %
Change in valuation allowance	59.0	(23.7)%	29.0	(53.5)%	—	— %
Unrecognized tax positions	6.2	(2.5)%	2.8	(5.2)%	—	— %
Prior year true-ups	6.8	(2.7)%	3.4	(6.3)%	0.5	5.4 %
Tax Cuts and Jobs Act	(11.5)	4.6 %	17.3	(31.9)%	—	— %
Total income tax (benefit) provision	\$ (5.5)	2.2 %	\$ 17.3	(32.0)%	\$ 3.9	42.3 %

The components of the Company's deferred tax assets and liabilities as of December 31, 2018 and 2017 are as follows (amounts in millions):

	December 31,	
	2018	2017
Deferred tax assets:		
Tax loss and credit carryforwards	\$ 306.2	\$ 56.5
Reserves and allowances	3.9	1.2
Share-based compensation	5.1	4.2
Other	—	(0.2)
Total deferred tax assets before valuation allowance	315.2	61.7
Less: Valuation allowance	(162.9)	(39.2)
Total deferred tax assets	152.3	22.5
Deferred tax liabilities:		
Intangible assets and goodwill	(66.4)	(30.0)
Property and equipment	(219.7)	(12.1)
Other	(3.6)	(6.7)
Total deferred tax liabilities	(289.7)	(48.8)
Net deferred tax liabilities ⁽¹⁾	\$ (137.4)	\$ (26.3)

(1) The 2018 net deferred tax liability is reflected on the consolidated balance sheet as a deferred tax liability of \$176.2 million, partially offset by a deferred tax asset of \$38.8 million included as a component of Other long-term assets on the consolidated balance sheet.

The Tax Act was enacted on December 22, 2017. Among other things, the Tax Act reduced the U.S. federal corporate tax rate from 35% to 21% and required companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred. The Company reasonably estimated the effects of the Tax Act and recorded provisional amounts in the fourth quarter of 2017 totaling \$17.3 million. In 2018, the Company finalized the 2017 impacts of the Tax Act, specifically the remeasurement of its U.S. Federal deferred tax assets and liabilities and the post-1986 earnings and profits transition tax, which resulted in a \$11.5 million benefit.

In January 2018, the FASB released guidance on the accounting for tax on the global intangible low-taxed income ("GILTI") provisions of the Tax Act. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The Company elected to treat any potential GILTI inclusions as a period cost.

As of December 31, 2018, the Company had \$216.5 million of U.S. federal net operating loss ("NOL") carryforwards net of limitations under Section 382 and tax-affected state NOL carryforwards of approximately \$8.4 million. The Company's U.S. federal NOL carryforwards generated in 2017 and prior, if not utilized to reduce taxable income in future years, will expire between 2021 and 2037.

As of December 31, 2018, the Company had foreign NOL carryforwards of \$911.2 million, the majority of which have no expiration date.

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets. A significant piece of objective negative evidence identified during management's evaluation was the cumulative loss incurred over the three-year period ended December 31, 2018. Such objective evidence limits the ability to consider other subjective evidence, such as our forecasts of future taxable income and tax planning strategies. On the basis of this evaluation as of December 31, 2018 and 2017, the Company recognized a valuation allowance against its net U.S. deferred tax assets under the criteria of ASC 740 of \$73.3 million and \$29.0 million, respectively, and the Company recognized a valuation allowance against its net foreign deferred tax assets under the criteria of ASC 740 of \$89.6 million and \$10.0 million, respectively. The amount of U.S. deferred tax asset considered realizable, has been recorded to recognize only the portion of the deferred tax asset that is more likely than not to be realized. The amount of the deferred tax asset considered realizable, however, could be adjusted if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as forecasted taxable income. The Company will continue to evaluate the need to record valuation allowances against deferred tax assets and will make adjustments in accordance with ASC 740.

As of December 31, 2018, the Company will continue to permanently reinvest undistributed earnings of its non-U.S. subsidiaries. If the Company were to repatriate indefinitely reinvested foreign funds, the Company would be required to accrue and pay any applicable withholding tax and U.S. state income tax liabilities and record foreign exchange rate impacts. Determination of the unrecorded deferred tax liability that would be incurred if such amounts were repatriated is not practicable due to multiple factors, including the complexity of non-U.S. tax laws and tax treaty interpretations and exchange rate fluctuations.

Accounting for Uncertainty in Income Taxes

The Company had unrecognized tax benefits of \$6.2 million and \$1.5 million as of December 31, 2018 and 2017, respectively. The unrecognized tax benefit was not material as of December 31, 2016. To the extent interest and penalties related to uncertain tax positions would be assessed on any underpayment of income tax, such accrued amounts are classified as a component of income tax expense. Changes in unrecognized tax benefits are set forth below (amounts in millions):

	2018	2017	2016
Balance, January 1	\$ 1.5	\$ —	
Changes for tax positions of prior years	—	2.8	—
Increases for tax positions related to the current year	6.2	—	—
Settlements and lapsing of statutes of limitations	(1.5)	(1.3)	—
Balance, December 31	<u>\$ 6.2</u>	<u>\$ 1.5</u>	<u>\$ —</u>

In the normal course of business, the Company is subject to examination by tax authorities throughout the world. Tax years that remain subject to examination vary by legal entity but are generally open in the U.S. for tax years ending after 2014 and outside of the U.S. for tax years ending after 2012.

NOTE 11 — SEVERANCE, RESTRUCTURING AND OTHER EXIT COSTS

The Company incurred severance, restructuring and other exit costs associated with the various acquisitions. These costs include employee severance costs, termination costs associated with facility leases and network agreements, and other exit costs related to the transactions. Transaction and integration costs are not included in exit costs, but are recorded as a component of selling, general and administrative expense.

The exit costs recorded and paid are summarized as follows for the year ended December 31, 2018 (amounts in millions):

	Balance, December 31, 2017	Charges	Acquired Costs	Payments	Foreign Currency Translation Adjustments	Balance, December 31, 2018
Employee termination benefits	\$ 5.5	\$ 19.2	\$ 6.0	\$ (23.2)	\$ (0.1)	\$ 7.4
Lease terminations	2.4	2.6	7.8	(3.5)	—	9.3
Other contract terminations	1.8	15.3	—	(8.0)	—	9.1
	<u>\$ 9.7</u>	<u>\$ 37.1</u>	<u>\$ 13.8</u>	<u>\$ (34.7)</u>	<u>\$ (0.1)</u>	<u>\$ 25.8</u>

The exit costs recorded and paid are summarized as follows for the year ended December 31, 2017 (amounts in millions):

	Balance, December 31, 2016	Charges	Payments	Balance, December 31, 2017
Employee termination benefits	\$ —	\$ 16.6	\$ (11.1)	\$ 5.5
Lease terminations	0.9	3.5	(2.0)	2.4
Other contract terminations	2.3	2.3	(2.8)	1.8
	<u>\$ 3.2</u>	<u>\$ 22.4</u>	<u>\$ (15.9)</u>	<u>\$ 9.7</u>

The exit costs recorded and paid are summarized as follows for the year ended December 31, 2016 (amounts in millions):

	Balance, December 31, 2015	Charges	Payments	Balance, December 31, 2016
Employee termination benefits	\$ 1.9	\$ 1.0	\$ (2.9)	\$ —
Lease terminations	1.5	—	(0.6)	0.9
Other contract terminations	3.4	(0.1)	(1.0)	2.3
	<u>\$ 6.8</u>	<u>\$ 0.9</u>	<u>\$ (4.5)</u>	<u>\$ 3.2</u>

NOTE 12 — SHARE-BASED COMPENSATION

Share-Based Compensation Plan

The Company grants share-based equity awards, including stock options and restricted stock, under the GTT Stock Plan. The GTT Stock Plan is limited to an aggregate 14,250,000 shares of which 10,216,417 have been issued and are outstanding as of December 31, 2018.

The GTT Stock Plan permits the granting of time-based stock options, time-based restricted stock, and performance-based restricted stock to employees and consultants of the Company, and non-employee directors of the Company.

Time-based options granted under the GTT Stock Plan have an exercise price of at least 100% of the fair market value of the underlying stock on the grant date and expire no later than 10 years from the grant date. The Company uses the Black-Scholes option-pricing model to determine the fair value of its stock option awards at the time of grant. The stock options generally vest over four years with 25% of the options becoming exercisable one year from the date of grant and the remaining vesting 75% annually or quarterly over the following three years.

Time-based restricted stock granted under the GTT Stock Plan is valued at the share price of our common stock as reported on the NYSE on the date of grant. Time-based restricted stock generally vests over four years with 25% of the shares becoming unrestricted one year from the date of grant and the remaining vesting 75% annually or quarterly over the following three years.

Performance-based restricted stock is granted under the GTT Stock Plan subject to the achievement of certain performance measures. Once achievement of these performance measures becomes probable, the Company starts to expense the fair value of

the grant over the vesting period. The performance-based restricted stock is valued at the share price of our common stock as reported on the NYSE on the date of grant. The performance grant vests quarterly over the vesting period once achievement of the performance measure has been met and approved by the Compensation Committee.

The Compensation Committee of the Board of Directors, as administrator of the GTT Stock Plan, has the discretion to authorize a different vesting schedule for any awards.

In 2019 the Company implemented a sell-to-cover program for employees who elect to sell shares to cover any withholding taxes due upon vesting. Previously the Company netted shares upon vesting and paid the withholding taxes directly.

Share-Based Compensation Expense

The following table summarizes the share-based compensation expense recognized as a selling, general and administrative expense in the consolidated statements of operations (amounts in millions):

	Year Ended December 31,		
	2018	2017	2016
Time-based stock options	\$ 1.0	\$ 1.4	\$ 1.8
Restricted stock ⁽¹⁾	33.1	20.6	13.7
ESPP	0.3	0.2	0.3
Total	\$ 34.4	\$ 22.2	\$ 15.8

⁽¹⁾Includes \$0.7 million and \$2.2 million for the years ended December 31, 2017 and 2016, respectively, related to the shares issued to the former employees of One Source for continued employment.

The following table summarizes the unrecognized compensation cost and the weighted average period over which the cost is expected to be amortized (amounts in millions):

	December 31, 2018	
	Unrecognized Compensation Cost	Weighted Average Remaining Period to be Recognized (Years)
Time-based stock options	\$ 0.6	0.85
Time-based restricted stock	55.0	2.44
Performance-based restricted stock ⁽¹⁾	12.3	1.37
Total	\$ 67.9	2.24

⁽¹⁾ Excludes \$30.0 million and \$16.2 million of unrecognized compensation cost related to the 2018 Performance Awards and 2017 Performance Awards, respectively as achievement of the performance criteria was not probable as of December 31, 2018.

Time-Based Stock Options

The Company uses the Black-Scholes option-pricing model method to calculate the fair value of the time-based stock options as of the grant date. The use of option valuation models requires the input by management of certain assumptions, including the expected stock price volatility, the expected life of the option term, and the forfeiture rate. These assumptions are utilized by the Company in determining the estimated fair value of the time-based stock options. There were no time-based stock options granted during the years ended December 31, 2018 and 2017. Assumptions used in the calculation of the fair value of the time-based stock options granted for the year ended December 31, 2016 were as follows:

	2016
Expected volatility	42.5% - 48.8%
Risk free interest rate	1.0% - 1.9%
Expected term (in years)	6.11
Dividend yield	0.0%
Forfeiture rate	4.0%

The following table summarizes our time-based stock option activity:

	Options	Weighted Average Exercise Price	Weighted Average Fair Value	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Balance, December 31, 2015	1,376,377	\$ 9.05	\$ 4.89		
Granted	158,958	13.76	6.10		
Exercised	(307,286)	3.83	2.29		
Forfeited or canceled	(64,141)	13.31	6.47		
Balance, December 31, 2016	1,163,908	10.84	5.66		
Granted	—	—	—		
Exercised	(438,338)	7.89	3.45		
Forfeited or canceled	(37,607)	16.44	7.82		
Balance, December 31, 2017	687,963	12.40	6.85		
Granted	—	—	—		
Exercised	(162,688)	10.12	5.26		
Forfeited or canceled	(5,989)	17.71	8.47		
Balance, December 31, 2018	519,286	\$ 13.06	\$ 7.33	5.78	\$ 5,491,614
Exercisable	442,962	\$ 12.60	\$ 6.68	5.59	\$ 4,901,260

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value (the difference between the Company's closing stock price on the last day of the year and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on December 31, 2018. The amount of aggregate intrinsic value will change based on the fair market value of the Company's stock.

As of December 31, 2018, the total vested portion of share-based compensation expense for time-based stock options was \$8.7 million.

Time-Based Restricted Stock

The following table summarizes our time-based restricted stock activity:

	Shares	Weighted Average Fair Value
Unvested balance, December 31, 2015	879,632	\$ 13.08
Granted	638,362	14.66
Forfeited	(83,293)	16.85
Vested	(385,731)	18.93
Unvested balance, December 31, 2016	1,048,970	11.59
Granted	1,035,496	30.19
Forfeited	(112,887)	22.27
Vested	(728,228)	31.61
Unvested balance, December 31, 2017	1,243,351	14.39
Granted	944,009	46.42
Forfeited	(196,920)	37.74
Vested	(667,402)	42.99
Unvested balance, December 31, 2018	1,323,038	\$ 19.33

The fair value of time-based restricted stock awarded totaled \$43.8 million, \$31.3 million and \$9.4 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Performance-Based Restricted Stock

The following table summarizes our performance-based restricted stock activity:

	Shares	Weighted Average Fair Value
Unvested balance, December 31, 2015	1,398,127	\$ 14.57
Granted	—	—
Forfeited	(19,687)	17.69
Vested	(450,004)	18.36
Unvested balance, December 31, 2016	928,436	12.66
Granted	930,000	35.15
Forfeited	—	—
Vested	(48,436)	28.74
Unvested balance, December 31, 2017	1,810,000	23.79
Granted	905,500	33.59
Forfeited	—	—
Vested	(673,503)	43.44
Unvested balance, December 31, 2018	2,041,997	\$ 21.65

The Company granted \$8.5 million of restricted stock during 2014 and early 2015 contingent upon the achievement of certain performance criteria (the "2014 Performance Awards"). The fair value of the 2014 Performance Awards was calculated using the value of GTT common stock on the grant date. The Company started recognizing share-based compensation expense for these grants when the achievement of the performance criteria became probable, which was in the third quarter of 2015. The 2014 Performance Awards started vesting in the fourth quarter of 2015 when the performance criteria were met and they continued to vest ratably through the third quarter of 2017. As of December 31, 2018, the 2014 Performance Awards were fully vested.

The Company granted \$17.4 million of restricted stock during 2015 and 2017 contingent upon the achievement of certain performance criteria (the "2015 Performance Awards"). The fair value of the 2015 Performance Awards was calculated using the value of GTT common stock on the respective grant dates. Upon announcement of the Hibernia acquisition in November 2016, the achievement of two of the four performance criteria became probable and the Company started recognizing share-based compensation expense for these grants. Expense recognition will continue through the first quarter of 2019. Additionally, upon announcement of the Global Capacity acquisition in June 2017, the achievement of the final two performance criteria became probable and the Company started recognizing share-based compensation expense for these grants. Expense recognition will continue through the fourth quarter of 2019. The Company recognized share-based compensation expense related to the 2015 Performance Awards of \$7.8 million and \$6.3 million for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018, unamortized compensation cost related to the unvested 2015 Performance Awards was \$1.4 million.

The Company granted \$32.6 million of restricted stock during 2017 and 2018 contingent upon the achievement of certain performance criteria (the "2017 Performance Awards"). The fair value of the 2017 Performance Awards was calculated using the value of GTT common stock on the grant date. Upon the closing of the Interoute acquisition in May 2018, the achievement of two of the four performance criteria became probable and the Company started recognizing share-based compensation expense for these grants. Expense recognition is expected to continue through the second quarter of 2020. The Company recognized share-based compensation expense related to the 2017 Performance Awards of \$5.4 million for the year ended December 31, 2018. No share-based compensation expense was recognized related to the 2017 Performance Awards during the 2017 period. As of December 31, 2018, unrecognized compensation cost related to the unvested 2017 Performance Awards was \$27.1 million, inclusive of unrecognized compensation cost where achievement of the performance criteria was not probable as of December 31, 2018.

The Company granted \$30.0 million of restricted stock during 2018 contingent upon the achievement of certain performance criteria (the "2018 Performance Awards"). The fair value of the 2018 Performance Awards was calculated using the value of GTT common stock on the grant date. As of December 31, 2018, achievement of the performance criteria was not probable. Accordingly, the Company recognized no share-based compensation expense for the year ended December 31, 2018. As of December 31, 2018, unrecognized compensation cost related to the unvested 2018 Performance Awards was \$30.0 million.

Employee Stock Purchase Plan

The Company has an Employee Stock Purchase Plan ("ESPP") that permits eligible employees to purchase common stock through payroll deductions at the lesser of the opening stock price or 85% of the closing stock price of the Company's common stock during each of the three-month offering periods. The offering periods generally commence on the first day and the last day of each quarter. At December 31, 2018, 396,317 shares were available for issuance under the ESPP.

NOTE 13 — DEFINED CONTRIBUTION PLAN

The Company has a defined contribution retirement plan under Section 401(k) of the Internal Revenue Code ("IRC") that covers substantially all U.S. based employees. The plan allows eligible employees to contribute from 1% to 100% of their pre-tax eligible earnings, subject to defined limits. The Company matches 50% of an employee's voluntary contributions per pay period up to the annual maximum as defined by the IRS. Employer's matching contributions under the Company's plan vest at a rate of 25% for each year of employment and are fully vested after four years of employment for all current and future contributions. During the years ended December 31, 2018, 2017, and 2016, the Company incurred 401(k) matching expense of \$3.9 million, \$1.7 million, and \$0.9 million, respectively.

NOTE 14 — COMMITMENTS AND CONTINGENCIES

Estimated annual commitments under contractual obligations are as follows at December 31, 2018 (amounts in millions):

	Network Supply⁽¹⁾	Office Space	Capital Leases	Other⁽²⁾
2019	\$ 602.8	\$ 24.5	\$ 6.7	\$ 2.8
2020	378.3	21.7	5.1	2.6
2021	289.5	18.6	4.0	1.3
2022	55.2	13.6	3.0	—
2023	47.5	10.1	2.6	—
2024 and beyond	203.2	39.5	20.4	—
	<u>\$ 1,576.5</u>	<u>\$ 128.0</u>	<u>\$ 41.8</u>	<u>\$ 6.7</u>

⁽¹⁾Excludes contracts where the initial term has expired and we are currently in month-to-month status.

⁽²⁾Primarily consists of vendor contracts associated with network monitoring and maintenance services.

Network Supply Agreements

As of December 31, 2018, the Company had purchase obligations of \$1,576.5 million associated with the telecommunications services that the Company has contracted to purchase from its suppliers. The Company's supplier agreements fall into two key categories, the Company's core IP backbone and customer specific locations (also referred to as 'last mile' locations). Supplier agreements associated with the Company's core IP backbone are typically contracted on a one-year term and do not relate to any specific underlying customer commitments. The short-term duration allows the Company to take advantage of favorable pricing trends.

Supplier agreements associated with the Company's customer specific locations, which represent the substantial majority of the Company's network spending, are typically contracted so the terms and conditions in both the vendor and customer contracts are substantially the same in terms of duration and capacity. The back-to-back nature of the Company's contracts means that its network supplier obligations are generally mirrored by its customers' commitments to purchase the services associated with those obligations.

Office Space and Leases

The Company is currently headquartered in McLean, Virginia and has 27 other offices throughout North America, 37 offices in Europe, six offices in Asia, two office in the Middle East, and one office in Brazil. The Company records rent expense using the straight-line method over the term of the lease agreement. Office facility rent expense was \$10.8 million, \$7.2 million and \$5.5 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Legal Proceedings

From time to time, the Company is a party to legal proceedings arising in the normal course of its business. The Company does not believe that it is a party to any current or pending legal action that could reasonably be expected to have a material adverse effect on its financial condition or results of operations and cash flow.

NOTE 15 — FOREIGN OPERATIONS

The Company's operations are located primarily in the United States and Europe. The following geographic area data is based upon the location of the legal entity reporting the revenue or long-lived assets (amounts in millions):

	Revenues			Long-lived Assets ⁽¹⁾	
	Year Ended December 31,			Year Ended December 31,	
	2018	2017	2016	2018	2017
United States	\$ 785.4	\$ 627.6	\$ 457.0	\$ 788.2	\$ 827.1
Europe	659.2	186.2	70.3	3,290.1	694.1
Other	46.2	14.1	—	82.5	39.7
Total	\$ 1,490.8	\$ 827.9	\$ 527.3	\$ 4,160.8	\$ 1,560.9

(1) Long-lived assets includes property and equipment, net, intangible assets, net, and goodwill.

NOTE 16 — QUARTERLY RESULTS OF OPERATIONS (UNAUDITED)

The following tables are unaudited consolidated quarterly results of operations for the years ended December 31, 2018 and 2017. The financial information presented should be read in conjunction with other information included in the Company's consolidated financial statements.

	Quarters Ended			
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
Revenue:	<i>(In millions)</i>			
Telecommunications services	\$ 260.7	\$ 326.7	\$ 448.6	\$ 454.8
Operating expenses:				
Cost of telecommunications services	141.5	179.3	247.4	251.2
Operating income	9.2	4.2	14.5	11.8
Net loss	(30.7)	(136.3)	(23.4)	(53.0)
Loss per share:				
Basic	\$ (0.69)	\$ (2.83)	\$ (0.43)	\$ (0.96)
Diluted	\$ (0.69)	\$ (2.83)	\$ (0.43)	\$ (0.96)
Weighted average shares:				
Basic	44,632,365	48,221,341	54,671,787	55,191,175
Diluted	44,632,365	48,221,341	54,671,787	55,191,175

	Quarters Ended			
	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Revenue:	<i>(In millions)</i>			
Telecommunications services	\$ 186.0	\$ 190.1	\$ 202.6	\$ 249.2
Operating expenses:				
Cost of telecommunications services	95.0	97.3	103.8	136.0
Operating (loss) income	(3.0)	14.6	2.9	10.9
Net (loss) income	(13.1)	0.6	(9.5)	(49.5)
(Loss) earnings per share:				
Basic	\$ (0.32)	\$ 0.02	\$ (0.23)	\$ (1.12)
Diluted	\$ (0.32)	\$ 0.02	\$ (0.23)	\$ (1.12)
Weighted average shares:				
Basic	40,410,554	41,244,595	41,762,693	44,135,789
Diluted	40,410,554	41,819,377	41,762,693	44,135,789

SCHEDULE II
GTT COMMUNICATIONS INC.
VALUATION AND QUALIFYING ACCOUNTS
(IN MILLIONS)

Year	Allowance for Doubtful Accounts				
	Balance at Beginning of Year	Charged to Cost and Expenses	Deductions	Other	Balance at End of Year
2016	\$ 1.0	\$ 6.0	\$ (4.3)	\$ —	\$ 2.7
2017	\$ 2.7	\$ 15.1	\$ (12.8)	\$ 0.1	\$ 5.1
2018	\$ 5.1	\$ 13.7	\$ (7.7)	\$ —	\$ 11.1

Year	Deferred Tax Asset Valuation Allowance				
	Balance at Beginning of Year	Charged to Cost and Expenses	Deductions	Other	Balance at End of Year
2016	\$ 0.3	\$ —	\$ —	\$ —	\$ 0.3
2017	\$ 0.3	\$ 29.0	\$ —	\$ 9.9	\$ 39.2
2018	\$ 39.2	\$ 34.1	\$ —	\$ 89.6	\$ 162.9

Subsidiaries of GTT Communications, Inc.

Name of Subsidiary	State or Other Jurisdiction of Incorporation or Organization
GTT Americas, LLC	Delaware
GTT-EMEA, Ltd.	United Kingdom
GTT Communications SRL	Italy
GTT Holdings UK Limited	United Kingdom
GTT Communications B.V.	Netherlands
GTT Communications GmbH	Germany
GTT Communications HK Limited	Hong Kong
GTT Brasil Telecomunicacoes Ltda	Brazil
GTT Communications d.o.o Beograd	Serbia
Hibernia Express (Ireland) Limited	Ireland
Hibernia Atlantic Communications (Canada) Company	Canada
Hibernia International Assets Inc.	Cayman
Hibernia Atlantic Communications Private Limited	India
Interoute Communications Holdings Limited	United Kingdom
Interoute Networks Limited	United Kingdom
Interoute Communications Limited	United Kingdom
Interoute Australia Pty Limited	Australia
Interoute Austria GmbH	Austria
Interoute Belgium NV	Belgium
Interoute Bulgaria JSCo	Bulgaria
Interoute (Shanghai) Information & Technology Co Ltd	China
Interoute Holdings (Cyprus) Limited	Cyprus
Interoute Czech s.r.o.	Czech Republic
Interoute Managed Services Denmark A/S	Denmark
Interoute Finland Oy	Finland
Interoute France SAS	France
Interoute Magyarország Távközlési Kft	Hungary
Interoute Managed Services Norge AS	Norway
Interoute Poland sp z.o.o	Poland
Interoute S.R.L	Romania
Interoute Communications LLC	Russia
Interoute Singapore Pte. Limited	Singapore
Interoute Slovakia s.r.o.	Slovak Republic
Interoute Iberia S.A.U.	Spain
Interoute Managed Services Sweden AB	Sweden
Interoute Managed Services Switzerland Sarl	Switzerland
Interoute İletisim Hizmetleri Limited Şirketi	Turkey
Interoute Ukraine LLC	Ukraine

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-194972) and Form S-8 (Nos. 333-225612, 333-210488, 333-210095, 333-194530, and 333-139356) of our reports dated March 1, 2019, with respect to the consolidated financial statements and schedule of GTT Communications, Inc. as of December 31, 2018 and 2017 and for each of the years in the three-year period ended December 31, 2018 and the effectiveness of internal control over financial reporting of GTT Communications, Inc. as of December 31, 2018 included in this Annual Report on Form 10-K of GTT Communications, Inc. for the year ended December 31, 2018.

/s/ CohnReznick LLP

March 1, 2019
New York, New York

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Richard D. Calder, Jr., certify that:

1. I have reviewed this annual report on Form 10-K of GTT Communications, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; and
 - (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; and
 - (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;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2019

/s/ Richard D. Calder, Jr.

Richard D. Calder, Jr.

President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Michael T. Sicoli, certify that:

1. I have reviewed this annual report on Form 10-K of GTT Communications, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2019

/s/ Michael T. Sicoli

Michael T. Sicoli
Chief 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**

In connection with the Annual Report on Form 10-K of GTT Communications, Inc. (the "Company") for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard D. Calder, Jr., Chief Executive Officer of the Company certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my best knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2019

/s/ Richard D. Calder, Jr.

Richard D. Calder, Jr.

President and Chief Executive Officer

**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**

In connection with the Annual Report on Form 10-K of GTT Communications, Inc. (the "Company") for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael T. Sicoli, Chief Financial Officer of the Company certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my best knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2019

/s/ Michael T. Sicoli

Michael T. Sicoli

Chief Financial Officer