

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549  
FORM 10-Q**

(Mark one)

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

For the quarterly period ended January 31, 2017

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-36250

**Ciena Corporation**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**23-2725311**

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

**7035 Ridge Road, Hanover, MD**

(Address of Principal Executive Offices)

**21076**

(Zip Code)

**(410) 694-5700**

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES  NO

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(do not check if smaller reporting company)

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

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

Class	Outstanding at March 3, 2017
common stock, \$0.01 par value	141,317,330

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

**CIENA CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share data)  
(unaudited)

	Quarter Ended January 31,	
	2017	2016
Revenue:		
Products	\$ 506,993	\$ 457,589
Services	114,504	115,526
Total revenue	621,497	573,115
Cost of goods sold:		
Products	286,811	260,482
Services	60,901	61,183
Total cost of goods sold	347,712	321,665
Gross profit	273,785	251,450
Operating expenses:		
Research and development	116,869	108,046
Selling and marketing	85,002	82,478
General and administrative	35,864	31,142
Acquisition and integration costs	—	1,299
Amortization of intangible assets	14,551	16,862
Restructuring costs	2,395	384
Total operating expenses	254,681	240,211
Income from operations	19,104	11,239
Interest and other income (loss), net	370	(8,776)
Interest expense	(15,203)	(12,710)
Income (loss) before income taxes	4,271	(10,247)
Provision for income taxes	410	1,299
Net income (loss)	\$ 3,861	\$ (11,546)
Basic net income (loss) per common share	\$ 0.03	\$ (0.08)
Diluted net income (loss) per potential common share	\$ 0.03	\$ (0.08)
Weighted average basic common shares outstanding	140,682	136,675
Weighted average dilutive potential common shares outstanding	142,184	136,675

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(in thousands)  
(unaudited)

	Quarter Ended January 31,	
	2017	2016
Net income (loss)	\$ 3,861	\$ (11,546)
Change in unrealized gain (loss) on available-for-sale securities, net of tax	(249)	22
Change in unrealized gain (loss) on foreign currency forward contracts, net of tax	1,425	(2,520)
Change in unrealized gain (loss) on forward starting interest rate swap, net of tax	4,492	(329)
Change in cumulative translation adjustments	490	(2,823)
Other comprehensive income (loss)	6,158	(5,650)
<b>Total comprehensive income (loss)</b>	<b>\$ 10,019</b>	<b>\$ (17,196)</b>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**CONDENSED CONSOLIDATED BALANCE SHEETS**  
(in thousands, except share data)  
(unaudited)

	January 31, 2017	October 31, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 693,853	\$ 777,615
Short-term investments	250,056	275,248
Accounts receivable, net	595,706	576,235
Inventories	284,595	211,251
Prepaid expenses and other	173,842	172,843
Total current assets	1,998,052	2,013,192
Long-term investments	109,934	90,172
Equipment, building, furniture and fixtures, net	293,150	288,406
Goodwill	267,169	266,974
Other intangible assets, net	127,847	146,711
Other long-term assets	63,942	68,120
Total assets	\$ 2,860,094	\$ 2,873,575
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 273,513	\$ 235,942
Accrued liabilities and other short-term obligations	264,555	310,353
Deferred revenue	113,371	109,009
Current portion of long-term debt	190,122	236,241
Total current liabilities	841,561	891,545
Long-term deferred revenue	78,565	73,854
Other long-term obligations	121,320	124,394
Long-term debt, net	1,019,755	1,017,441
Total liabilities	\$ 2,061,201	\$ 2,107,234
Commitments and contingencies (Note 21)		
Stockholders' equity:		
Preferred stock – par value \$0.01; 20,000,000 shares authorized; zero shares issued and outstanding	—	—
Common stock – par value \$0.01; 290,000,000 shares authorized; 141,262,606 and 139,767,627 shares issued and outstanding	1,413	1,398
Additional paid-in capital	6,737,996	6,715,478
Accumulated other comprehensive loss	(18,171)	(24,329)
Accumulated deficit	(5,922,345)	(5,926,206)
Total stockholders' equity	798,893	766,341
Total liabilities and stockholders' equity	\$ 2,860,094	\$ 2,873,575

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)  
(unaudited)

	Three Months Ended January 31,	
	2017	2016
<b>Cash flows provided by operating activities:</b>		
Net income (loss)	\$ 3,861	\$ (11,546)
<b>Adjustments to reconcile net income to net cash provided by (used in) operating activities:</b>		
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	16,699	14,449
Share-based compensation costs	12,825	14,477
Amortization of intangible assets	18,864	20,506
Provision for inventory excess and obsolescence	5,431	7,016
Provision for warranty	553	4,971
Other	4,452	11,087
<b>Changes in assets and liabilities:</b>		
Accounts receivable	(21,956)	63,332
Inventories	(78,749)	(22,134)
Prepaid expenses and other	(1,004)	6,761
Accounts payable, accruals and other obligations	4,037	(80,014)
Deferred revenue	8,737	(13,925)
Net cash provided by (used in) operating activities	(26,250)	14,980
<b>Cash flows used in investing activities:</b>		
Payments for equipment, furniture, fixtures and intellectual property	(25,706)	(28,873)
Purchase of available for sale securities	(89,897)	(134,869)
Proceeds from maturities of available for sale securities	95,000	30,000
Settlement of foreign currency forward contracts, net	440	(295)
Net cash used in investing activities	(20,163)	(134,037)
<b>Cash flows provided by financing activities:</b>		
Payment of long-term debt	(46,296)	(14,639)
Payment of debt and equity issuance costs	—	(797)
Payment of capital lease obligations	(605)	(1,627)
Proceeds from issuance of common stock	9,708	8,870
Net cash used in financing activities	(37,193)	(8,193)
Effect of exchange rate changes on cash and cash equivalents	(156)	(3,400)
Net decrease in cash and cash equivalents	(83,762)	(130,650)
Cash and cash equivalents at beginning of period	777,615	790,971
Cash and cash equivalents at end of period	\$ 693,853	\$ 660,321
<b>Supplemental disclosure of cash flow information</b>		
Cash paid during the period for interest	\$ 11,831	\$ 9,902
Cash paid during the period for income taxes, net	\$ 5,521	\$ 3,702
<b>Non-cash investing activities</b>		
Purchase of equipment in accounts payable	\$ 5,293	\$ 8,782
Equipment acquired under capital lease	\$ —	\$ 1,219
Construction in progress subject to build-to-suit lease	\$ —	\$ 11,522

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

**CIENA CORPORATION**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(unaudited)**

**(1) INTERIM FINANCIAL STATEMENTS**

The interim financial statements included herein for Ciena Corporation and its wholly owned subsidiaries ("Ciena") have been prepared by Ciena, without audit, pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). In the opinion of management, the financial statements included in this report reflect all normal recurring adjustments that Ciena considers necessary for the fair statement of the results of operations for the interim periods covered and of the financial position of Ciena at the date of the interim balance sheets. Certain information and footnote disclosures normally included in the annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") have been condensed or omitted pursuant to such rules and regulations. The Condensed Consolidated Balance Sheet as of October 31, 2016 was derived from audited financial statements, but does not include all disclosures required by GAAP. However, Ciena believes that the disclosures are adequate to understand the information presented herein. The operating results for interim periods are not necessarily indicative of the operating results for the entire year. These financial statements should be read in conjunction with Ciena's audited consolidated financial statements and the notes thereto included in Ciena's annual report on Form 10-K for the fiscal year ended October 31, 2016.

Ciena has a 52 or 53-week fiscal year, with quarters ending on the Saturday nearest to the last day of January, April, July and October, respectively, of each year. Fiscal 2017 and 2016 are 52-week fiscal years. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31, and the fiscal quarters are described as having ended on January 31, April 30 and July 31 of each fiscal year.

**(2) SIGNIFICANT ACCOUNTING POLICIES**

*Business Combinations*

Ciena records acquisitions using the purchase method of accounting. All of the assets acquired, liabilities assumed, contractual contingencies and contingent consideration are recognized at their fair value as of the acquisition date. The excess of the purchase price over the estimated fair values of the net tangible and net intangible assets acquired is recorded as goodwill. The application of the purchase method of accounting for business combinations requires management to make significant estimates and assumptions in the determination of the fair value of assets acquired and liabilities assumed in order to allocate purchase price consideration properly between assets that are depreciated and amortized from goodwill. These assumptions and estimates include a market participant's use of the asset and the appropriate discount rates for a market participant. Ciena's estimates are based on historical experience, information obtained from the management of the acquired companies and, when appropriate, include assistance from independent third-party appraisal firms. Significant assumptions and estimates can include, but are not limited to, the cash flows that an asset is expected to generate in the future, the appropriate weighted-average cost of capital, and the cost savings expected to be derived from acquiring an asset. These estimates are inherently uncertain and unpredictable. In addition, unanticipated events and circumstances may occur which may affect the accuracy or validity of such estimates.

*Use of Estimates*

The preparation of the financial statements and related disclosures in conformity with GAAP requires management to make estimates and judgments that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Estimates are used for selling prices for multiple element arrangements, shared-based compensation, convertible notes payable valuations, bad debts, valuation of inventories and investments, recoverability of intangible assets, other long-lived assets and goodwill, income taxes, warranty obligations, restructuring liabilities, derivatives, incentive compensation, contingencies and litigation. Ciena bases its estimates on historical experience and assumptions that it believes are reasonable. Actual results may differ materially from management's estimates.

*Cash and Cash Equivalents*

Ciena considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents. Any restricted cash collateralizing letters of credit is included in other current assets and other long-term assets depending upon the duration of the restriction.

*Investments*

Ciena's investments are classified as available-for-sale and are reported at fair value, with unrealized gains and losses recorded in accumulated other comprehensive income (loss). Ciena recognizes losses in the income statement when it determines that declines in the fair value of its investments below their cost basis are other-than-temporary. In determining whether a decline in fair value is other-than-temporary, Ciena considers various factors, including market price (when available), investment ratings, the financial condition and near-term prospects of the investee, the length of time and the extent to which the fair value has been less than Ciena's cost basis, and Ciena's intent and ability to hold the investment until maturity or for a period of time sufficient to allow for any anticipated recovery in market value. Ciena considers all marketable debt securities that it expects to convert to cash within one year or less to be short-term investments, with all others considered to be long-term investments.

Ciena has minority equity investments in privately held technology companies that are classified in other long-term assets. These investments are carried at cost because Ciena owns less than 20% of the voting equity and does not have the ability to exercise significant influence over the companies. Ciena monitors these investments for impairment and makes appropriate reductions to the carrying value when necessary. As of January 31, 2017, the combined carrying value of these investments was \$6.0 million. Ciena has not estimated the fair value of these cost method investments because determining the fair value is not practicable. Ciena has not evaluated these investments for impairment as there have not been any events or changes in circumstances that Ciena believes would have had a significant adverse effect on the fair value of these investments.

#### *Inventories*

Inventories are stated at the lower of cost or market, with cost computed using standard cost, which approximates actual cost, on a first-in, first-out basis. Ciena records a provision for excess and obsolete inventory when an impairment has been identified.

#### *Segment Reporting*

Ciena's chief operating decision maker, its chief executive officer, evaluates the Company's performance and allocates resources based on multiple factors, including measures of segment profit (loss). Operating segments are defined as components of an enterprise that engage in business activities that may earn revenue and incur expense, for which discrete financial information is available, and for which such information is evaluated regularly by the chief operating decision maker for purposes of allocating resources and assessing performance. Ciena considers the following to be its operating segments for reporting purposes: (i) Networking Platforms, (ii) Software and Software-Related Services, and (iii) Global Services. See Note 20 below.

#### *Goodwill*

Goodwill is the excess of the purchase price over the fair values assigned to the net assets acquired in a business combination. Ciena tests goodwill for impairment on an annual basis, which it has determined to be the last business day of fiscal September each year. Ciena also tests goodwill for impairment between annual tests if an event occurs or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value.

The first step in the process of assessing goodwill impairment is to compare the fair value of the reporting unit with the unit's carrying amount, including goodwill. If this test indicates that the fair value is less than the carrying value, then step two as amended by ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*, adopted by Ciena in the first quarter of fiscal 2017, requires goodwill impairments to be measured on the basis of the fair value of the reporting unit relative to the reporting unit's carrying amount. A non-cash goodwill impairment charge would have the effect of decreasing earnings or increasing losses in such period. If Ciena is required to take a substantial impairment charge, its operating results would be materially adversely affected in such period.

#### *Long-lived Assets*

Long-lived assets include: equipment, building, furniture and fixtures; intangible assets; and maintenance spares. Ciena tests long-lived assets for impairment whenever triggering events or changes in circumstances indicate that the asset's carrying amount is not recoverable from its undiscounted cash flows. An impairment loss is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value. Ciena's long-lived assets are assigned to asset groups that represent the lowest level for which cash flows can be identified.

#### *Equipment, Building, Furniture and Fixtures and Internal Use Software*



Equipment, building, furniture and fixtures are recorded at cost. Depreciation and amortization are computed using the straight-line method over useful lives of two to five years for equipment and furniture and fixtures and the shorter of useful life or lease term for leasehold improvements.

Ciena establishes assets and liabilities for the estimated construction costs incurred under build-to-suit lease arrangements to the extent that Ciena is involved in the construction of structural improvements or takes construction risk prior to commencement of a lease. See Notes 10 and 13 below.

Qualifying internal use software and website development costs incurred during the application development stage, which consist primarily of outside services and purchased software license costs, are capitalized and amortized straight-line over the estimated useful lives of two to five years.

#### *Intangible Assets*

Ciena has recorded finite-lived intangible assets as a result of several acquisitions. Finite-lived intangible assets are carried at cost less accumulated amortization. Amortization is computed using the straight-line method over the expected economic lives of the respective assets, up to seven years, which approximates the use of intangible assets.

Ciena has recorded in-process research and development projects acquired as the result of an acquisition as indefinite-lived intangible assets. Upon completion of the projects, the assets will be amortized on a straight-line basis over the expected economic life of the asset, which will be determined on that date. Should the project be determined to be abandoned, and the asset developed has no alternative use, the full value of the asset will be charged to expense.

#### *Maintenance Spares*

Maintenance spares are recorded at cost. Spares usage cost is expensed ratably over four years.

#### *Concentrations*

Substantially all of Ciena's cash and cash equivalents are maintained at a small number of major U.S. financial institutions. The majority of Ciena's cash equivalents consist of money market funds. Deposits held with banks may exceed the amount of insurance provided on such deposits. Because these deposits generally may be redeemed upon demand, management believes that they bear minimal risk.

Historically, a significant percentage of Ciena's revenue has been concentrated among sales to a small number of large communications service providers. Consolidation among Ciena's customers has increased this concentration. Consequently, Ciena's accounts receivable are concentrated among these customers. See Note 20 below.

Additionally, Ciena's access to certain materials or components is dependent upon sole or limited source suppliers. The inability of any of these suppliers to fulfill Ciena's supply requirements, or significant changes in supply cost, could affect future results. Ciena relies on a small number of contract manufacturers to perform the majority of the manufacturing for its products. If Ciena cannot effectively manage these manufacturers or forecast future demand, or if these manufacturers fail to deliver products or components on time, Ciena's business and results of operations may suffer.

#### *Revenue Recognition*

Ciena recognizes revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the price to the buyer is fixed or determinable; and collectibility is reasonably assured. Customer purchase agreements and customer purchase orders are generally used to determine the existence of an arrangement. Shipping documents and evidence of customer acceptance, when applicable, are used to verify delivery or services rendered. Ciena assesses whether the price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. Ciena assesses collectibility based primarily on the creditworthiness of the customer as determined by credit checks and analysis, as well as the customer's payment history. Revenue for maintenance services is deferred and recognized ratably over the period during which the services are performed. Shipping and handling fees billed to customers are included in revenue, with the associated expenses included in product cost of goods sold.

Software revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. In instances where final acceptance criteria of the software are specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

Ciena limits the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or refund privileges.

Revenue for multiple element arrangements is allocated to each unit of accounting based on the relative selling price of each delivered element, with revenue recognized for each delivered element when the revenue recognition criteria are met. Ciena determines the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, Ciena uses vendor-specific objective evidence ("VSOE") of selling price, if it exists, or third party evidence ("TPE") of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, Ciena uses its best estimate of selling price ("BESP") for that deliverable. For multiple element software arrangements where VSOE of undelivered maintenance does not exist, revenue for the entire arrangement is recognized over the maintenance term.

VSOE, when determinable, is established based on Ciena's pricing and discounting practices for the specific product or service when sold separately. In determining whether VSOE exists, Ciena requires that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. Ciena has been unable to establish TPE of selling price because its go-to-market strategy differs from that of others in its markets, and the extent of customization and differentiated features and functions varies among comparable products or services from its peers. Ciena determines BESP based upon management-approved pricing guidelines, which consider multiple factors including the type of product or service, gross margin objectives, competitive and market conditions, and the go-to-market strategy, all of which can affect pricing practices.

#### *Warranty Accruals*

Ciena provides for the estimated costs to fulfill customer warranty obligations upon recognition of the related revenue. Estimated warranty costs include estimates for material costs, technical support labor costs and associated overhead. Warranty is included in cost of goods sold and is determined based upon actual warranty cost experience, estimates of component failure rates and management's industry experience. Ciena's sales contracts do not permit the right of return of the product by the customer after the product has been accepted.

#### *Accounts Receivable, Net*

Ciena's allowance for doubtful accounts is based on its assessment, on a specific identification basis, of the collectibility of customer accounts. Ciena performs ongoing credit evaluations of its customers and generally has not required collateral or other forms of security from them. In determining the appropriate balance for Ciena's allowance for doubtful accounts, management considers each individual customer account receivable in order to determine collectibility. In doing so, management considers creditworthiness, payment history, account activity and communication with the customer. If a customer's financial condition changes, Ciena may be required to record an allowance for doubtful accounts for that customer, which could negatively affect its results of operations.

#### *Research and Development*

Ciena charges all research and development costs to expense as incurred. Types of expense incurred in research and development include employee compensation, prototype equipment, consulting and third party services, depreciation, facility costs and information technology.

#### *Advertising Costs*

Ciena expenses all advertising costs as incurred.

#### *Legal Costs*

Ciena expenses legal costs associated with litigation defense as incurred.

#### *Share-Based Compensation Expense*

Ciena measures and recognizes compensation expense for share-based awards based on estimated fair values on the date of grant. Ciena estimates the fair value of each option-based award on the date of grant using the Black-Scholes option-pricing model. This model is affected by Ciena's stock price as well as estimates regarding a number of variables, including expected stock price volatility over the expected term of the award and projected employee stock option exercise behaviors. Ciena estimates the fair value of each restricted stock unit award based on the fair value of the underlying common stock on the date of grant. In each case, Ciena only recognizes expense in its Condensed Consolidated Statement of Operations for those stock options or restricted stock units that are expected ultimately to vest. Ciena recognizes the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets, and the expense is adjusted accordingly. Ciena uses the straight-line method to record expense for share-based awards with only service-based vesting. See Note 19 below.

#### *Income Taxes*

Ciena accounts for income taxes using an asset and liability approach that recognizes deferred tax assets and liabilities for the expected future tax consequences attributable to differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases, and for operating loss and tax credit carryforwards. In estimating future tax consequences, Ciena considers all expected future events other than the enactment of changes in tax laws or rates. Valuation allowances are provided if, based upon the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

In the ordinary course of business, transactions occur for which the ultimate outcome may be uncertain. In addition, tax authorities periodically audit Ciena's income tax returns. These audits examine significant tax filing positions, including the timing and amounts of deductions and the allocation of income tax expenses among tax jurisdictions. Ciena is currently under audit in India for 2010 and 2012 through 2014 and in Canada for 2011 through 2013. Management does not expect the outcome of these audits to have a material adverse effect on Ciena's consolidated financial position, results of operations or cash flows. Ciena's major tax jurisdictions and the earliest open tax years are as follows: United States (2013), United Kingdom (2014), Canada (2011) India (2010) and Brazil (2012). Limited adjustments can be made to Federal U.S. tax returns in earlier years in order to reduce net operating loss carryforwards. Ciena classifies interest and penalties related to uncertain tax positions as a component of income tax expense.

Ciena has not provided for U.S. deferred income taxes on the cumulative unremitted earnings of its non-U.S. affiliates, as it plans to indefinitely reinvest cumulative unremitted foreign earnings outside the U.S., and it is not practicable to determine the unrecognized deferred income taxes. These cumulative unremitted foreign earnings relate to ongoing operations in foreign jurisdictions and are required to fund foreign operations, capital expenditures and future expansion requirements. See Note 21 below.

Ciena recognizes windfall tax benefits associated with the exercise of stock options or release of restricted stock units directly to stockholders' equity only when realized. A windfall tax benefit occurs when the actual tax benefit realized by Ciena upon an employee's disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that Ciena had recorded. When assessing whether a tax benefit relating to share-based compensation has been realized, Ciena follows the "with-and-without" method. Under the with-and-without method, the windfall is considered realized and recognized for financial statement purposes only when an incremental benefit is provided after considering all other tax benefits including Ciena's net operating losses. The with-and-without method results in the windfall from share-based compensation awards always being effectively the last tax benefit to be considered. Consequently, the windfall attributable to share-based compensation will not be considered realized in instances where Ciena's net operating loss carryover (that is unrelated to windfalls) is sufficient to offset the current year's taxable income before considering the effects of current-year windfalls.

#### *Loss Contingencies*

Ciena is subject to the possibility of various losses arising in the ordinary course of business. These may relate to disputes, litigation and other legal actions. Ciena considers the likelihood of loss or the incurrence of a liability, as well as Ciena's ability to reasonably estimate the amount of loss, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Ciena regularly evaluates current information available to it in order to determine whether any accruals should be adjusted and whether new accruals are required.

### *Fair Value of Financial Instruments*

The carrying value of Ciena's cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair market value due to the relatively short period of time to maturity. For information related to the fair value of Ciena's convertible notes and term loans, see Note 16 below.

Fair value for the measurement of financial assets and liabilities is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Ciena utilizes a valuation hierarchy for disclosure of the inputs for fair value measurement. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 inputs are quoted prices for identical or similar assets or liabilities in less active markets or model-derived valuations in which significant inputs are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; and
- Level 3 inputs are unobservable inputs based on Ciena's assumptions used to measure assets and liabilities at fair value.

By distinguishing between inputs that are observable in the marketplace, and therefore more objective, and those that are unobservable, and therefore more subjective, the hierarchy is designed to indicate the relative reliability of the fair value measurements. A financial asset's or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

### *Restructuring*

From time to time, Ciena takes actions to better align its workforce, facilities and operating costs with perceived market opportunities, business strategies and changes in market and business conditions. Ciena recognizes a liability for the cost associated with an exit or disposal activity in the period in which the liability is incurred, except for one-time employee termination benefits related to a service period, typically of more than 60 days, which are accrued over the service period. See Note 3 below.

### *Foreign Currency*

Certain of Ciena's foreign branch offices and subsidiaries use the U.S. Dollar as their functional currency because Ciena Corporation, as the U.S. parent entity, exclusively funds the operations of these branch offices and subsidiaries. For those subsidiaries using the local currency as their functional currency, assets and liabilities are translated at exchange rates in effect at the balance sheet date, and the statement of operations is translated at a monthly average rate. Resulting translation adjustments are recorded directly to a separate component of stockholders' equity. Where the monetary assets and liabilities are transacted in a currency other than the entity's functional currency, re-measurement adjustments are recorded in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. See Note 4 below.

### *Derivatives*

From time to time, Ciena uses foreign currency forward contracts to reduce variability in certain forecasted non-U.S. Dollar denominated cash flows. Generally, these derivatives have maturities of 12 months or less. Ciena also has interest rate hedge arrangements to reduce variability in certain forecasted interest expense associated with its term loans. All of these derivatives are designated as cash flow hedges. At the inception of the cash flow hedge, and on an ongoing basis, Ciena assesses whether the derivative has been effective in offsetting changes in cash flows attributable to the hedged risk during the hedging period. The effective portion of the derivative's net gain or loss is initially reported as a component of accumulated other comprehensive income (loss), and, upon occurrence of the forecasted transaction, is subsequently reclassified to the line item in the Condensed Consolidated Statement of Operations to which the hedged transaction relates. Any net gain or loss associated with the ineffectiveness of the hedging instrument is reported in interest and other income (loss), net. To date, no ineffectiveness has occurred.

From time to time, Ciena uses foreign currency forward contracts to hedge certain balance sheet exposures. These forward contracts are not designated as hedges for accounting purposes, and any net gain or loss associated with these derivatives is reported in interest and other income (loss), net on the Condensed Consolidated Statement of Operations.

Ciena records derivative instruments in the Condensed Consolidated Statements of Cash Flows within operating, investing, or financing activities consistent with the cash flows of the hedged items.

See Notes 6 and 14 below.

#### *Computation of Net Income (Loss) per Share*

Ciena calculates basic earnings per share ("EPS") by dividing earnings attributable to common stock by the weighted average number of common shares outstanding for the period. Diluted EPS includes other potential dilutive shares that would be outstanding if securities or other contracts to issue common stock were exercised or converted into common stock. Ciena uses a dual presentation of basic and diluted EPS on the face of its income statement. A reconciliation of the numerator and denominator used for the basic and diluted EPS computations is set forth in Note 18 below.

#### *Software Development Costs*

Ciena develops software for sale to its customers. GAAP requires the capitalization of certain software development costs that are incurred subsequent to the date technological feasibility is established and prior to the date the product is generally available for sale. The capitalized cost is then amortized straight-line over the estimated life of the product. Ciena defines technological feasibility as being attained at the time a working model is completed. To date, the period between Ciena achieving technological feasibility and the general availability of such software has been short, and software development cost qualifying for capitalization has been insignificant. Accordingly, Ciena has not capitalized any software development costs.

#### *Newly Issued Accounting Standards - Effective*

In April 2015, Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs ("ASU 2015-03")*. ASU 2015-03 requires debt issuance costs related to a recognized debt liability to be presented in the balance sheet as a direct deduction from the carrying value of that debt liability, consistent with debt discounts. ASU 2015-03 is to be applied on a retrospective basis and represents a change in accounting principle. In August 2015, the FASB issued Accounting Standards Update No. 2015-15, *Interest — Imputation of Interest (Subtopic 835-30): Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements — Amendments to SEC Paragraphs Pursuant to Staff Announcement at June 18, 2015 EITF Meeting* ("ASU 2015-15"), which clarifies the treatment of debt issuance costs from line-of-credit arrangements after the adoption of ASU 2015-03. In particular, ASU 2015-15 clarifies that the SEC staff would not object to an entity deferring and presenting debt issuance costs related to a line-of-credit arrangement as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of such arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. Ciena adopted these ASU's during the first quarter of fiscal 2017. The adoption of ASU 2015-03 resulted in the reclassification of unamortized debt issuance costs related to Ciena's convertible notes and term loans from other long-term assets to current portion of long-term debt and long-term debt, net in Ciena's Consolidated Balance sheets in the amount of \$7.9 million at January 31, 2017 and \$8.9 million at October 31, 2016. As permitted by ASU 2015-15, Ciena elected not to reclassify unamortized debt issuance costs associated with its ABL Credit Facility (described in Note 17 below) and continue to present such capitalized costs in other assets.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment ("ASU 2017-04")*, which simplifies the accounting for goodwill impairments by eliminating step two from the goodwill impairment test. ASU 2017-04 requires goodwill impairments to be measured on the basis of the fair value of the reporting unit relative to the reporting unit's carrying amount rather than on the basis of the implied amount of goodwill relative to the goodwill balance of the reporting unit. ASU 2017-04 is effective for annual and interim impairment tests for periods beginning after December 15, 2021. Early adoption is allowed for annual and interim impairment tests occurring after January 1, 2017. Ciena has elected to adopt ASU 2017-04 during the first quarter of fiscal 2017.

#### *Newly Issued Accounting Standards - Not Yet Effective*

In May 2014, FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which provides guidance for revenue recognition. This ASU affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of non-financial assets. This ASU will supersede the revenue recognition

requirements in Topic 605, Revenue Recognition, and most industry-specific guidance. This ASU also supersedes some cost guidance included in Subtopic 605-35, *Revenue Recognition-Construction-Type and Production-Type Contracts*. The standard will be effective for Ciena beginning in the first quarter of fiscal 2019. For multiple element software arrangements where VSOE of undelivered maintenance does not exist, Ciena currently recognizes revenue for the entire arrangement over the maintenance term. Ciena expects that the adoption of this ASU will require Ciena to determine the stand alone selling price for each of the elements at the contract inception and consequently Ciena expects certain software deliverables will be recognized at a point in time rather than over a period of time. Ciena is continuing to evaluate other possible impacts of the adoption of this ASU on its Consolidated Financial Statements and disclosures, as well as the transition method.

In February 2016, FASB issued ASU No. 2016-02, *Leases*, which requires an entity to recognize assets and liabilities on the balance sheet for the rights and obligations created by leased assets and to provide additional disclosures. ASU 2016-02 is effective for Ciena beginning in the first quarter of fiscal 2020. Under current GAAP, the majority of Ciena's leases for its properties are considered operating leases and Ciena expects that the adoption of this ASU will require these leases to be classified as financing leases and to be recognized as assets and liabilities on Ciena's balance sheet. Ciena is continuing to evaluate other possible impacts of the adoption of this ASU on its Consolidated Financial Statements and disclosures.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which provides guidance on several aspects of accounting for share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification on the statement of cash flows. ASU 2016-09 is effective for Ciena beginning in the first quarter of fiscal 2018. Under the new guidance, Ciena would recognize all excess tax benefits previously unrecognized, along with any valuation allowance, on a modified retrospective basis as a cumulative-effect adjustment to retained earnings as of the date of adoption of this updated standard.

### (3) RESTRUCTURING COSTS

Ciena has undertaken a number of restructuring activities intended to reduce expense and better align its workforce and costs with market opportunities, product development and business strategies. The following table sets forth the restructuring activity and balance of the restructuring liability accounts for the three months ended January 31, 2017 (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2016	\$ 868	\$ 1,970	\$ 2,838
Additional liability recorded	2,008	387	2,395
Cash payments	(2,512)	(652)	(3,164)
Balance at January 31, 2017	\$ 364	\$ 1,705	\$ 2,069
Current restructuring liabilities	\$ 364	\$ 1,269	\$ 1,633
Non-current restructuring liabilities	\$ —	\$ 436	\$ 436

The following table sets forth the restructuring activity and balance of the restructuring liability accounts for the three months ended January 31, 2016 (in thousands):

	Workforce reduction	Consolidation of excess facilities	Total
Balance at October 31, 2015	\$ 591	\$ 688	\$ 1,279
Additional liability recorded	393	—	393
Adjustment to previous estimates	—	(9)	(9)
Cash payments	(613)	(148)	(761)
Balance at January 31, 2016	\$ 371	\$ 531	\$ 902
Current restructuring liabilities	\$ 371	\$ 336	\$ 707
Non-current restructuring liabilities	\$ —	\$ 195	\$ 195

### (4) INTEREST AND OTHER INCOME (LOSS), NET

The components of interest and other income (loss), net, are as follows (in thousands):

	Quarter Ended January 31,	
	2017	2016
Interest income	\$ 1,282	\$ 686
Gains (losses) on non-hedge designated foreign currency forward contracts	1,024	(4,614)
Foreign currency exchange losses	(2,417)	(4,377)
Other	481	(471)
Interest and other income (loss), net	\$ 370	\$ (8,776)

Ciena Corporation, as the U.S. parent entity, uses the U.S. Dollar as its functional currency; however, some of its foreign branch offices and subsidiaries use the local currency as their functional currency. During the first three months of fiscal 2017 and the first three months of fiscal 2016, Ciena recorded \$2.4 million and \$4.4 million in foreign currency exchange rate losses, respectively, as a result of monetary assets and liabilities that were transacted in a currency other than the entity's functional currency, and the re-measurement adjustments were recorded in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. From time to time, Ciena uses foreign currency forwards to hedge these balance sheet exposures. These forwards are not designated as hedges for accounting purposes and any net gain or loss associated with these derivatives is reported in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. During the first three months of fiscal 2017 and fiscal 2016, Ciena recorded gains of \$1.0 million and losses of \$4.6 million, respectively, from non-hedge designated foreign currency forward contracts.

**(5) SHORT-TERM AND LONG-TERM INVESTMENTS**

As of the dates indicated, investments are comprised of the following (in thousands):

	January 31, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>U.S. government obligations:</b>				
Included in short-term investments	\$ 230,090	\$ 60	(46)	\$ 230,104
Included in long-term investments	110,035	5	(106)	109,934
	<u>\$ 340,125</u>	<u>\$ 65</u>	<u>\$ (152)</u>	<u>\$ 340,038</u>
<b>Commercial paper:</b>				
Included in short-term investments	\$ 19,952	—	—	\$ 19,952
	<u>\$ 19,952</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 19,952</u>
	October 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>U.S. government obligations:</b>				
Included in short-term investments	\$ 260,125	\$ 140	\$ (6)	\$ 260,259
Included in long-term investments	90,145	57	(30)	90,172
	<u>\$ 350,270</u>	<u>\$ 197</u>	<u>\$ (36)</u>	<u>\$ 350,431</u>
<b>Commercial paper:</b>				
Included in short-term investments	\$ 14,989	—	—	\$ 14,989
	<u>\$ 14,989</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 14,989</u>

The following table summarizes the final legal maturities of debt investments at January 31, 2017 (in thousands):

	Amortized Cost	Estimated Fair Value
Less than one year	\$ 250,042	\$ 250,056
Due in 1-2 years	110,035	109,934
	<u>\$ 360,077</u>	<u>\$ 359,990</u>

**(6) FAIR VALUE MEASUREMENTS**

As of the date indicated, the following table summarizes the assets and liabilities that are recorded at fair value on a recurring basis (in thousands):



	January 31, 2017			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Money market funds	\$ 529,967	\$ —	\$ —	\$ 529,967
U.S. government obligations	—	340,038	—	340,038
Commercial paper	—	39,925	—	39,925
Foreign currency forward contracts	—	361	—	361
<b>Total assets measured at fair value</b>	<b>\$ 529,967</b>	<b>\$ 380,324</b>	<b>\$ —</b>	<b>\$ 910,291</b>
<b>Liabilities:</b>				
Foreign currency forward contracts	\$ —	\$ 496	\$ —	\$ 496
Forward starting interest rate swap	—	1,475	—	1,475
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 1,971</b>	<b>\$ —</b>	<b>\$ 1,971</b>

	October 31, 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Money market funds	\$ 625,277	\$ —	\$ —	\$ 625,277
U.S. government obligations	—	350,431	—	350,431
Commercial paper	—	69,959	—	69,959
Foreign currency forward contracts	—	175	—	175
<b>Total assets measured at fair value</b>	<b>\$ 625,277</b>	<b>\$ 420,565</b>	<b>\$ —</b>	<b>\$ 1,045,842</b>
<b>Liabilities:</b>				
Foreign currency forward contracts	\$ —	\$ 1,396	\$ —	\$ 1,396
Forward starting interest rate swap	—	5,967	—	5,967
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 7,363</b>	<b>\$ —</b>	<b>\$ 7,363</b>

As of the date indicated, the assets and liabilities above are presented on Ciena's Condensed Consolidated Balance Sheet as follows (in thousands):

	January 31, 2017			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Cash equivalents	\$ 529,967	\$ 19,973	\$ —	\$ 549,940
Short-term investments	—	250,056	—	250,056
Prepaid expenses and other	—	361	—	361
Long-term investments	—	109,934	—	109,934
<b>Total assets measured at fair value</b>	<b>\$ 529,967</b>	<b>\$ 380,324</b>	<b>\$ —</b>	<b>\$ 910,291</b>
<b>Liabilities:</b>				
Accrued liabilities	\$ —	\$ 496	\$ —	\$ 496
Other long-term obligations	—	1,475	—	1,475
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 1,971</b>	<b>\$ —</b>	<b>\$ 1,971</b>

	October 31, 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Cash equivalents	\$ 625,277	\$ 54,970	\$ —	\$ 680,247
Short-term investments	—	275,248	—	275,248
Prepaid expenses and other	—	175	—	175
Long-term investments	—	90,172	—	90,172
<b>Total assets measured at fair value</b>	<b>\$ 625,277</b>	<b>\$ 420,565</b>	<b>\$ —</b>	<b>\$ 1,045,842</b>
<b>Liabilities:</b>				
Accrued liabilities	\$ —	\$ 1,396	\$ —	\$ 1,396
Other long-term obligations	—	5,967	—	5,967
<b>Total liabilities measured at fair value</b>	<b>\$ —</b>	<b>\$ 7,363</b>	<b>\$ —</b>	<b>\$ 7,363</b>

Ciena did not have any transfers between Level 1 and Level 2 fair value measurements during the periods presented.

## (7) ACCOUNTS RECEIVABLE

As of January 31, 2017, one customer accounted for 10.5% of Ciena's net accounts receivable and as of October 31, 2016, a different customer accounted for 10.4% of Ciena's net accounts receivable. Ciena has not historically experienced a significant amount of bad debt expense. The allowance for doubtful accounts was \$4.0 million as of January 31, 2017 and October 31, 2016.

## (8) INVENTORIES

As of the dates indicated, inventories are comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Raw materials	\$ 43,503	\$ 44,644
Work-in-process	13,959	12,852
Finished goods	197,651	156,402
Deferred cost of goods sold	83,853	59,856
	338,966	273,754
Provision for excess and obsolescence	(54,371)	(62,503)
	\$ 284,595	\$ 211,251

Ciena writes down its inventory for estimated obsolescence or unmarketable inventory by an amount equal to the difference between the cost of inventory and the estimated net realizable value based on assumptions about future demand and market conditions. During the first three months of fiscal 2017, Ciena recorded a provision for excess and obsolescence of \$5.4 million, primarily related to a decrease in the forecasted demand for certain Networking Platform products. Deductions from the provision for excess and obsolete inventory relate primarily to disposal activities.

## (9) PREPAID EXPENSES AND OTHER

As of the dates indicated, prepaid expenses and other are comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Prepaid VAT and other taxes	\$ 74,598	\$ 77,474
Product demonstration equipment, net	38,766	42,259
Deferred deployment expense	18,607	19,138
Prepaid expenses	24,343	25,659
Other non-trade receivables	9,388	4,398
Financing receivable	7,779	3,740
Derivative assets	361	175
	<u>\$ 173,842</u>	<u>\$ 172,843</u>

Depreciation of product demonstration equipment was \$2.4 million and \$2.5 million for the first three months of fiscal 2017 and 2016, respectively.

#### (10) EQUIPMENT, BUILDING, FURNITURE AND FIXTURES

As of the dates indicated, equipment, building, furniture and fixtures are comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Equipment, furniture and fixtures	\$ 461,146	\$ 451,029
Building subject to capital lease	22,947	22,529
Construction in progress subject to build-to-suit lease	58,671	57,602
Leasehold improvements	62,349	60,011
	<u>605,113</u>	<u>591,171</u>
Accumulated depreciation and amortization	(311,963)	(302,765)
	<u>\$ 293,150</u>	<u>\$ 288,406</u>

Ciena capitalizes construction in progress and records a corresponding long-term liability for build-to-suit lease agreements where Ciena is considered the owner, for accounting purposes, during the construction period. On April 15, 2015, Ciena entered into a build-to-suit lease arrangement pursuant to which the landlord will construct, and Ciena will subsequently lease, two new office buildings at its new Ottawa, Canada campus. The landlord will construct the buildings and contribute up to a maximum of CAD\$290.00 per rentable square foot in total construction costs plus certain allowances for tenant improvements, and Ciena will be responsible for any additional construction costs. As of January 31, 2017, total costs incurred under this build-to-suit arrangement were \$58.7 million. Upon occupancy of the facilities, Ciena expects this arrangement to qualify as a capital lease. As a result, the facilities will be depreciated over the shorter of their useful lives or the lease term.

The total depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements, was \$14.3 million and \$11.9 million for the first three months of fiscal 2017 and 2016, respectively.

#### (11) OTHER INTANGIBLE ASSETS

As of the dates indicated, other intangible assets are comprised of the following (in thousands):

	January 31, 2017			October 31, 2016		
	Gross Intangible	Accumulated Amortization	Net Intangible	Gross Intangible	Accumulated Amortization	Net Intangible
Developed technology	\$ 347,727	\$ (258,955)	\$ 88,772	\$ 347,727	\$ (248,128)	\$ 99,599
In-process research and development	4,200	—	4,200	4,200	—	4,200
Patents and licenses	7,165	(6,348)	817	7,165	(6,285)	880
Customer relationships, covenants not to compete, outstanding purchase orders and contracts	358,647	(324,589)	34,058	358,647	(316,615)	42,032
Total other intangible assets	<u>\$ 717,739</u>	<u>\$ (589,892)</u>	<u>\$ 127,847</u>	<u>\$ 717,739</u>	<u>\$ (571,028)</u>	<u>\$ 146,711</u>

The aggregate amortization expense of intangible assets was \$18.9 million and \$20.5 million for the first three months of fiscal 2017 and 2016, respectively. Expected future amortization of intangible assets for the fiscal years indicated is as follows (in thousands):

Period ended October 31,	
2017 (remaining nine months)	\$ 26,497
2018	22,680
2019	22,133
2020	21,106
2021	18,172
Thereafter	13,059
	<u>\$ 123,647</u> <sup>(1)</sup>

(1) Does not include amortization of in-process research and development, as estimation of the timing of future amortization expense would be impractical.

## (12) GOODWILL

The following table presents the goodwill allocated to Ciena's applicable reportable segments as of the dates indicated (in thousands):

	Balance at October 31, 2016	Acquisitions	Impairments	Translation	Balance at January 31, 2017
Software and Software-Related Services	\$ 201,428	\$ —	\$ —	\$ —	\$ 201,428
Networking Platforms	65,546	—	—	195	65,741
Total	<u>\$ 266,974</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 195</u>	<u>\$ 267,169</u>

## (13) OTHER BALANCE SHEET DETAILS

As of the dates indicated, other long-term assets are comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Maintenance spares, net	\$ 45,529	\$ 49,535
Deferred debt issuance costs, net <sup>(1)</sup>	1,283	1,363
Financing receivable	2,018	1,870
Other	15,112	15,352
	<u>\$ 63,942</u>	<u>\$ 68,120</u>

(1) As described in Note 2 above, in connection with Ciena's adoption of ASU 2015-03 effective January 31, 2017, deferred debt issuance costs associated with its convertible notes and term loans were retrospectively reclassified from other long-term assets to current portion of long-term debt and long-term debt, net on the Condensed Consolidated Balance Sheets. The deferred debt issuance costs reflected relate to Ciena's ABL Credit Facility (described in Note 17 below). The amortization of deferred debt issuance costs for Ciena's ABL Credit Facility is included in interest expense, and was \$0.1 million and \$0.2 million during the first three months of fiscal 2017 and 2016, respectively.

As of the dates indicated, accrued liabilities and other short-term obligations are comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Compensation, payroll related tax and benefits	\$ 63,251	\$ 106,687
Warranty	48,652	52,324
Vacation	36,187	36,112
Capital lease obligations	2,233	2,321
Interest payable	5,486	4,649
Other	108,746	108,260
	<u>\$ 264,555</u>	<u>\$ 310,353</u>

The following table summarizes the activity in Ciena's accrued warranty for the fiscal periods indicated (in thousands):

	Three months ended January 31,	Beginning Balance	Provisions	Settlements	Ending Balance
2016	\$	56,654	4,971	(4,989)	\$ 56,636
2017	\$	52,324	553	(4,225)	\$ 48,652

The decrease in warranty provisions during fiscal 2017 were primarily due to lower failure rates and reduced costs due to efficiencies.

As of the dates indicated, deferred revenue is comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Products	\$ 48,766	\$ 45,216
Services	143,170	137,647
	191,936	182,863
Less current portion	(113,371)	(109,009)
Long-term deferred revenue	<u>\$ 78,565</u>	<u>\$ 73,854</u>

As of the dates indicated, other long-term obligations are comprised of the following (in thousands):

	January 31, 2017	October 31, 2016
Construction liability	\$ 58,671	\$ 57,602
Capital lease obligations	24,186	24,298
Income tax liability	13,765	14,122
Deferred tenant allowance	8,913	9,164
Straight-line rent	7,342	6,406
Forward starting interest rate swap	1,475	5,967
Other	6,968	6,835
	<u>\$ 121,320</u>	<u>\$ 124,394</u>

Ciena capitalizes construction in progress and records a corresponding long-term liability for build-to-suit lease agreements where Ciena is considered the owner during the construction period for accounting purposes.

The following is a schedule by fiscal year of future minimum lease payments under capital leases and the present value of minimum lease payments as of January 31, 2017 (in thousands):

Period ended October 31,

2017 (remaining nine months)	\$	3,084
2018		3,842
2019		3,420
2020		2,440
2021		2,335
Thereafter		28,210
Net minimum capital lease payments		43,331
Less: Amount representing interest		(16,912)
Present value of minimum lease payments		26,419
Less: Current portion of present value of minimum lease payments		(2,233)
Long-term portion of present value of minimum lease payments	\$	24,186

## (14) DERIVATIVE INSTRUMENTS

### *Foreign Currency Derivatives*

As of January 31, 2017 and October 31, 2016, Ciena had forward contracts in place to reduce the variability in its Canadian Dollar and Indian Rupee denominated expense, which principally related to its research and development activities. The notional amount of these contracts was approximately \$83.1 million and \$107.6 million as of January 31, 2017 and October 31, 2016, respectively. These foreign exchange contracts have maturities of 12 months or less and have been designated as cash flow hedges.

During the first three months of fiscal 2017 and fiscal 2016, in order to hedge certain balance sheet exposures, Ciena entered into forward contracts to mitigate risk due to volatility in the Brazilian Real, Canadian Dollar and Mexican Peso. The notional amount of these contracts was approximately \$57.8 million and \$59.6 million as of January 31, 2017 and October 31, 2016, respectively. These foreign exchange contracts have maturities of 12 months or less and have not been designated as hedges for accounting purposes.

### *Interest Rate Derivatives*

During fiscal 2014, Ciena entered into floating interest rate to fixed interest rate swap arrangements ("interest rate swaps") that fixed the interest rate under the 2019 Term Loan (as defined in Note 16) at 5.004% for the period commencing on July 20, 2015 through July 19, 2018. The total notional amount of these derivatives as of January 31, 2017 and October 31, 2016 was \$243.8 million and \$244.4 million, respectively.

In May 2016, Ciena entered into interest rate swaps that fixed the total interest rate under the 2021 Term Loan (as defined in Note 16) at 4.62% to 4.87%, depending on the applicable margin, for the period commencing on June 20, 2016 through June 22, 2020. The total notional amount of these derivatives as of January 31, 2017 and October 31, 2016 was \$148.9 million and \$248.8 million, respectively.

Ciena expects the variable rate payments to be received under the terms of the interest rate swaps to exactly offset the forecasted variable rate payments on the equivalent notional amounts of the term loans. These derivative contracts have been designated as cash flow hedges.

Other information regarding Ciena's derivatives is immaterial for separate financial statement presentation. See Note 4 and Note 6 above.

## (15) ACCUMULATED OTHER COMPREHENSIVE INCOME

The following table summarizes the changes in accumulated balances of other comprehensive income ("AOCI") for the three months ending January 31, 2017:

	Unrealized Gain/(Loss) on Marketable Securities	Unrealized Gain/(Loss) on Foreign Currency Contracts	Unrealized Gain/(Loss) on Forward Starting Interest Rate Swap	Cumulative Foreign Currency Translation Adjustment	Total
Balance at October 31, 2016	\$ 139	\$ (1,091)	\$ (5,967)	\$ (17,410)	\$ (24,329)
Other comprehensive income (loss) before reclassifications	(249)	1,031	4,044	490	5,316
Amounts reclassified from AOCI	—	394	448	—	842
Balance at January 31, 2017	\$ (110)	\$ 334	\$ (1,475)	\$ (16,920)	\$ (18,171)

The following table summarizes the changes in AOCI for the three months ending January 31, 2016:

	Unrealized Gain/(Loss) on Marketable Securities	Unrealized Gain/(Loss) on Foreign Currency Contracts	Unrealized Gain/(Loss) on Forward Starting Interest Rate Swap	Cumulative Foreign Currency Translation Adjustment	Total
Balance at October 31, 2015	\$ (78)	\$ (268)	(5,522)	\$ (16,258)	\$ (22,126)
Other comprehensive income (loss) before reclassifications	22	(3,191)	(1,120)	(2,823)	(7,112)
Amounts reclassified from AOCI	—	671	791	—	1,462
Balance at January 31, 2016	\$ (56)	\$ (2,788)	\$ (5,851)	\$ (19,081)	\$ (27,776)

All amounts reclassified from AOCI related to settlement (gains) losses on foreign currency forward contracts designated as cash flow hedges impacted research and development expense on the Condensed Consolidated Statements of Operations. All amounts reclassified from AOCI related to settlement (gains) losses on forward starting interest rate swaps designated as cash flow hedges impacted interest and other income (loss), net on the Condensed Consolidated Statements of Operations.

## (16) SHORT-TERM AND LONG-TERM DEBT

### Term Loans

On July 15, 2014, Ciena entered into a Term Loan Credit Agreement (the "Term Loan Credit Agreement") providing for senior secured term loans in an aggregate principal amount of \$250 million (the "2019 Term Loan") with a maturity date of July 15, 2019. The 2019 Term Loan required Ciena to make installment payments of approximately \$0.6 million on a quarterly basis.

On April 25, 2016, Ciena entered into an Incremental Joinder and Amendment Agreement (the "Incremental Term Loan Credit Agreement") that amended the Term Loan Credit Agreement. The Incremental Term Loan Credit Agreement provided for a new tranche of senior secured term loans under the Term Loan Credit Agreement in an aggregate principal amount of \$250 million (the "2021 Term Loan"). The 2021 Term Loan required Ciena to make installment payments of approximately \$0.6 million on a quarterly basis. At the beginning of the second quarter of fiscal 2017, Ciena refinanced the 2019 Term Loan and the 2021 Term Loan. See Note 22 below.

The net carrying amount of Ciena's term loans were comprised of the following for the fiscal periods indicated (in thousands):

	January 31, 2017	October 31, 2016
Term Loan Payable due July 15, 2019	\$ 241,635	\$ 241,359
Term Loan Payable due April 25, 2021	245,158	244,944
	\$ 486,793	\$ 486,303

The term loan balances in the table above reflect Ciena's adoption of ASU 2015-03, as described in Note 2 above. Deferred debt issuance costs that were deducted from the carrying amounts of the term loans totaled \$4.6 million at January 31, 2017 and \$4.9 million at October 31, 2016. Deferred debt issuance costs are amortized using the straight-line method, which approximates the effect of the effective interest rate method, through the maturity of the term loans. The amortization of deferred debt issuance costs for these term loans are included in interest expense, and was \$0.3 million and \$0.2 million during the first three months of fiscal 2017 and 2016, respectively. The carrying amounts of the term loans listed above are also net of any unamortized discounts.

The following table sets forth the carrying value and the estimated fair values of Ciena's term loans (in thousands):

	January 31, 2017	
	Carrying Value	Fair Value <sup>(2)</sup>
Term Loan Payable due July 15, 2019 <sup>(1)</sup>	\$ 241,635	\$ 244,375
Term Loan Payable due April 25, 2021 <sup>(1)</sup>	245,158	248,750
	<u>\$ 486,793</u>	<u>\$ 493,125</u>

(1) Includes unamortized bond discount and debt issuance costs.

(2) Ciena's term loans are categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its term loans using a market approach based upon observable inputs, such as current market transactions involving comparable securities.

#### Outstanding Convertible Notes Payable

During the first three months of fiscal 2017, Ciena entered into a private transaction to repurchase \$46.3 million of the outstanding principal amount of its 0.875% Convertible Senior Notes due June 15, 2017, for an aggregate purchase price of \$46.3 million.

The net carrying amount of Ciena's outstanding convertible notes payable was comprised of the following for the fiscal periods indicated (in thousands):

	January 31, 2017	October 31, 2016
0.875% Convertible Senior Notes due June 15, 2017	\$ 185,122	\$ 231,240
3.75% Convertible Senior Notes due October 15, 2018	347,939	347,630
4.0% Convertible Senior Notes due December 15, 2020	190,023	188,509
	<u>\$ 723,084</u>	<u>\$ 767,379</u>

The convertible notes payable balances in the table above reflects Ciena's adoption of ASU 2015-03, as described in Note 2 above. Deferred debt issuance costs that were deducted from the carrying amounts of the convertible notes payable totaled \$3.4 million at January 31, 2017 and \$3.9 million at October 31, 2016. Deferred debt issuance costs are amortized using the straight-line method, which approximates the effect of the effective interest rate method, through the maturity of the convertible notes payable. The amortization of deferred debt issuance costs is included in interest expense, and was \$0.5 million and \$0.7 million during the first three months of fiscal 2017 and 2016, respectively. The carrying amounts of the convertible notes payable listed above are also net of any unamortized discounts.

The principal balance, unamortized discount, deferred debt issuance costs and net carrying value of the liability and equity components of our 2020 notes were as follows as of January 31, 2017 (in thousands):

	Liability Component			Equity Component
	Principal Balance	Unamortized Discount	Deferred Debt Issuance Costs	Net Carrying Amount
4.0% Convertible Senior Notes due December 15, 2020	<u>\$ 202,160</u>	<u>\$ (10,954)</u>	<u>\$ (1,183)</u>	<u>\$ 190,023</u>
				<u>\$ 43,131</u>



The following table sets forth, in thousands, the carrying value and the estimated fair value of Ciena's outstanding issues of convertible notes as of January 31, 2017:

	January 31, 2017	
	Carrying Value <sup>(1)</sup>	Fair Value <sup>(2)</sup>
0.875% Convertible Senior Notes due June 15, 2017	\$ 185,122	\$ 184,563
3.75% Convertible Senior Notes due October 15, 2018	347,939	471,188
4.0% Convertible Senior Notes due December 15, 2020	190,023	264,759
	<u>\$ 723,084</u>	<u>\$ 920,510</u>

(1) Includes unamortized discount, accretion of principal and debt issuance costs.

(2) The convertible notes are categorized as Level 2 in the fair value hierarchy. Ciena estimated the fair value of its outstanding convertible notes using a market approach based upon observable inputs, such as current market transactions involving comparable securities.

#### (17) ABL CREDIT FACILITY

Ciena Corporation and certain of its subsidiaries are parties to a senior secured asset-based revolving credit facility (the "ABL Credit Facility"). Ciena principally uses the ABL Credit Facility to support the issuance of letters of credit that arise in the ordinary course of its business and thereby to reduce its use of cash required to collateralize these instruments.

As of January 31, 2017, letters of credit totaling \$71.3 million were collateralized by the ABL Credit Facility. There were no borrowings outstanding under the ABL Credit Facility as of January 31, 2017.

#### (18) EARNINGS (LOSS) PER SHARE CALCULATION

The following table (in thousands except per share amounts) is a reconciliation of the numerator and denominator of the basic net income per common share ("Basic EPS") and the diluted net income per potential common share ("Diluted EPS"). Basic EPS is computed using the weighted average number of common shares outstanding. Diluted EPS is computed using the weighted average number of the following, in each case, to the extent the effect is not anti-dilutive: (i) common shares outstanding; (ii) shares issuable upon vesting of restricted stock units; (iii) shares issuable under Ciena's employee stock purchase plan and upon exercise of outstanding stock options, using the treasury stock method; and (iv) shares underlying Ciena's outstanding convertible notes.

	Quarter Ended January 31,	
	2017	2016
<b>Numerator</b>		
Net income (loss)	\$ 3,861	\$ (11,546)
Net income (loss) used to calculate Diluted EPS	<u>\$ 3,861</u>	<u>\$ (11,546)</u>
<b>Denominator</b>		
Basic weighted average shares outstanding	140,682	136,675
Add: Shares underlying outstanding stock options and restricted stock units and issuable under employee stock purchase plan	1,502	—
Dilutive weighted average shares outstanding	<u>142,184</u>	<u>136,675</u>
<b>EPS</b>		
Basic EPS	\$ 0.03	\$ (0.08)
Diluted EPS	<u>\$ 0.03</u>	<u>\$ (0.08)</u>

The following table summarizes the weighted average shares excluded from the calculation of the denominator for Diluted EPS due to their anti-dilutive effect for the periods indicated (in thousands):

	Quarter Ended January 31,	
	2017	2016
Shares underlying stock options and restricted stock units	1,556	3,565
0.875% Convertible Senior Notes due June 15, 2017	5,564	12,912
3.75% Convertible Senior Notes due October 15, 2018	17,355	17,355
4.0% Convertible Senior Notes due December 15, 2020	9,198	9,198
Total shares excluded due to anti-dilutive effect	33,673	43,030

## (19) SHARE-BASED COMPENSATION EXPENSE

Ciena has outstanding equity awards issued under its 2008 Omnibus Incentive Plan, as well as certain legacy equity plans and equity plans assumed as a result of previous acquisitions. Ciena grants equity awards under its 2008 Omnibus Incentive Plan (the "2008 Plan") and makes shares of its common stock available for purchase under its Amended and Restated Employee Stock Purchase Plan (the "ESPP"). These plans were approved by stockholders and are described below.

### 2008 Plan

The 2008 Plan authorizes the issuance of awards including stock options, restricted stock units (RSUs), restricted stock, unrestricted stock, stock appreciation rights (SARs) and other equity and/or cash performance incentive awards to employees, directors and consultants of Ciena. Subject to certain restrictions, the Compensation Committee of the Board of Directors has broad discretion to establish the terms and conditions for awards under the 2008 Plan, including the number of shares, vesting conditions, and the required service or performance criteria. Options and SARs have a maximum term of ten years, and their exercise price may not be less than 100% of fair market value on the date of grant. Repricing of stock options and SARs is prohibited without stockholder approval. Certain change in control transactions may cause awards granted under the 2008 Plan to vest, unless the awards are continued or substituted for in connection with the transaction. The total number of shares authorized for issuance under the 2008 Plan is 25.1 million shares. As of January 31, 2017, approximately 1.4 million shares remained available for issuance under the 2008 Plan.

### Stock Options

Outstanding stock option awards to employees are generally subject to service-based vesting conditions and vest incrementally over a four-year period. The following table is a summary of Ciena's stock option activity for the period indicated (shares in thousands):

	Shares Underlying Options Outstanding	Weighted Average Exercise Price
Balance at October 31, 2016	1,387	\$ 26.90
Exercised	(102)	9.58
Canceled	(187)	27.52
Balance at January 31, 2017	1,098	\$ 28.41

The total intrinsic value of options exercised during the first three months of fiscal 2017 and fiscal 2016 was \$1.5 million and \$1.7 million, respectively. Ciena did not grant any stock options during the first three months of fiscal 2017 or fiscal 2016.

The following table summarizes information with respect to stock options outstanding at January 31, 2017, based on Ciena's closing stock price on the last trading day of Ciena's first fiscal quarter of 2017 (shares and intrinsic value in thousands):

Range of Exercise Price	Options Outstanding at January 31, 2017					Vested Options at January 31, 2017			
	Number of Underlying Shares	Weighted Average Remaining	Weighted	Aggregate Intrinsic Value	Number of Underlying Shares	Weighted Average Remaining	Weighted	Aggregate Intrinsic Value	
		Contractual	Average			Contractual	Average		
		Life (Years)	Exercise Price			Life (Years)	Exercise Price		
\$ 0.45 — \$ 11.16	112	2.73	\$ 7.48	\$ 1,913	110	2.68	\$ 7.45	\$ 1,896	
\$ 11.34 — \$ 17.24	242	5.35	13.31	2,736	231	5.24	13.23	2,631	
\$ 17.50 — \$ 30.46	178	1.93	26.02	257	165	1.48	26.61	179	
\$ 31.93 — \$ 37.10	323	2.10	35.19	—	322	2.09	35.18	—	
\$ 37.82 — \$ 55.63	243	4.48	45.84	—	227	4.34	45.87	—	
\$ 0.45 — \$ 55.63	<u>1,098</u>	3.38	\$ 28.41	<u>\$ 4,906</u>	<u>1,055</u>	3.23	\$ 28.42	<u>\$ 4,706</u>	

#### Assumptions for Option-Based Awards

Ciena recognizes the fair value of service-based options as share-based compensation expense on a straight-line basis over the requisite service period.

#### Restricted Stock Units

A restricted stock unit is a stock award that entitles the holder to receive shares of Ciena common stock as the unit vests. Ciena's outstanding restricted stock unit awards are subject to service-based vesting conditions and/or performance-based vesting conditions. Awards subject to service-based conditions typically vest in increments over a three or four-year period. However, the 2008 Plan permits the Company to grant service-based stock awards with shorter vesting periods to certain recipients, including non-employee directors and Ciena's Executive Chairman. Awards with performance-based vesting conditions require the achievement of certain operational, financial or other performance criteria or targets as a condition of vesting, or the acceleration of vesting, of such awards. Ciena recognizes the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based compensation expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets.

The following table is a summary of Ciena's restricted stock unit activity for the period indicated, with the aggregate fair value of the balance outstanding at the end of each period, based on Ciena's closing stock price on the last trading day of the relevant period (shares and aggregate fair value in thousands):

	Restricted Stock Units Outstanding	Weighted Average Grant Date Fair Value Per Share	Aggregate Fair Value
Balance at October 31, 2016	4,280	\$ 19.96	\$ 83,511
Granted	1,849		
Vested	(865)		
Canceled or forfeited	(111)		
Balance at January 31, 2017	<u>5,153</u>	\$ 21.10	\$ 126,808

The total fair value of restricted stock units that vested and were converted into common stock during the first three months of fiscal 2017 and fiscal 2016 was \$21.4 million and \$23.9 million, respectively. The weighted average fair value of each restricted stock unit granted by Ciena during the first three months of fiscal 2017 and fiscal 2016 was \$23.08 and \$19.84 respectively.

#### Assumptions for Restricted Stock Unit Awards

The fair value of each restricted stock unit award is based on the closing price on the date of grant. Share-based expense for service-based restricted stock unit awards is recognized, net of estimated forfeitures, ratably over the vesting period on a straight-line basis.

Share-based expense for performance-based restricted stock unit awards, net of estimated forfeitures, is recognized ratably over the performance period based upon Ciena's determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets. The estimation of whether the performance targets will be achieved involves judgment, and the estimate of expense is revised periodically based on the probability of achieving the performance targets. Revisions are reflected in the period in which the estimate is changed. If any performance goals are not met, no compensation cost is ultimately recognized against that goal and, to the extent previously recognized, compensation expense is reversed.

Because share-based compensation expense is recognized only for those awards that are ultimately expected to vest, the amount of share-based compensation expense recognized reflects a reduction for estimated forfeitures. Ciena estimates forfeitures at the time of grant and revises those estimates in subsequent periods based upon new or changed information.

#### *Amended and Restated Employee Stock Purchase Plan (ESPP)*

Under the ESPP, eligible employees may enroll in a 12-month offer period that begins in December and June of each year. Each offer period includes two six-month purchase periods. Employees may purchase a limited number of shares of Ciena common stock at 85% of the fair market value on either the day immediately preceding the offer date or the purchase date, whichever is lower. The ESPP is considered compensatory for purposes of share-based compensation expense. Pursuant to the ESPP's "evergreen" provision, on December 31 of each year, the number of shares available under the ESPP increases by up to approximately 0.6 million shares, provided that the total number of shares available at that time shall not exceed 8.2 million shares. Unless earlier terminated, the ESPP will terminate on January 24, 2023.

During the first three months of fiscal 2017, Ciena issued 0.5 million shares under the ESPP. At January 31, 2017, 5.4 million shares remained available for issuance under the ESPP.

#### *Share-Based Compensation Expense for Periods Reported*

The following table summarizes share-based compensation expense for the periods indicated (in thousands):

	Quarter Ended January 31,	
	2017	2016
Product costs	\$ 561	\$ 571
Service costs	628	592
Share-based compensation expense included in cost of sales	1,189	1,163
Research and development	3,209	3,428
Sales and marketing	2,873	4,735
General and administrative	5,453	5,129
Acquisition and integration costs	—	17
Share-based compensation expense included in operating expense	11,535	13,309
Share-based compensation expense capitalized in inventory, net	101	5
Total share-based compensation	\$ 12,825	\$ 14,477

As of January 31, 2017, total unrecognized share-based compensation expense was approximately \$95.9 million: (i) \$0.4 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 1.3 years; and (ii) \$95.5 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.6 years.

## (20) SEGMENTS AND ENTITY WIDE DISCLOSURES

### *Segment Reporting*

Ciena's internal organizational structure and the management of its business are grouped into the following operating segments:

- *Networking Platforms* reflects sales of Ciena's Converged Packet Optical, Packet Networking and Optical Transport product lines.
  - Converged Packet Optical — includes the 6500 Packet-Optical Platform and the 5430 Reconfigurable Switching System, which feature Ciena's WaveLogic coherent optical processors. Products also include the Waveserver stackable interconnect system, the family of CoreDirector® Multiservice Optical Switches and the OTN configuration for the 5410 Reconfigurable Switching System. This product line also includes sales of the Z-Series Packet-Optical Platform acquired from Cyan.
  - Packet Networking — includes the 3000 family of service delivery switches and service aggregation switches and the 5000 family of service aggregation switches. This product line also includes the 8700 Packetwave Platform and the Ethernet packet configuration for the 5410 Service Aggregation Switch.
  - Optical Transport — includes the 4200 Advanced Services Platform, 5100/5200 Advanced Services Platform, Common Photonic Layer (CPL) and 6100 Multiservice Optical Platform. Ciena's Optical Transport products have either been previously discontinued, or are expected to be discontinued during fiscal 2017, reflecting network operators' transition toward next-generation converged network architectures.

The Networking Platforms segment also includes sales of operating system software and enhanced software features embedded in each of the product lines above. Revenue from this segment is included in product revenue on the Condensed Consolidated Statement of Operations.

- *Software and Software-Related Services* reflects sales of Ciena's network virtualization, management, control and orchestration software solutions and software-related services, including subscription, installation, support, and consulting services.
  - This segment includes Ciena's element and network management solutions and planning tools, including the OneControl Unified Management System, ON-Center® Network & Service Management Suite, Ethernet Services Manager, Optical Suite Release and Planet Operate. As Ciena seeks adoption of its Blue Planet software platform and transitions features, functionality and customers to this platform, Ciena expects revenue declines for its other element and network management solutions.
  - This segment includes Ciena's Blue Planet network virtualization, service orchestration and network management software platform. Ciena's Blue Planet platform includes multi-domain service orchestration (MDSO), network function virtualization (NFV) management and orchestration (NFV MANO), and Ciena's manage, control and plan (MCP) solution, SDN Multilayer Controller and V-WAN application.

Revenue from the software platforms portion of this segment is included in product revenue on the Condensed Consolidated Statement of Operations. Revenue from software-related services is included in services revenue on the Condensed Consolidated Statement of Operations.

- *Global Services* reflects sales of a broad range of Ciena's services for consulting and network design, installation and deployment, maintenance support and training activities. Revenue from this segment is included in services revenue on the Condensed Consolidated Statement of Operations.

Ciena's long-lived assets, including equipment, building, furniture and fixtures, finite-lived intangible assets and maintenance spares, are not reviewed by the chief operating decision maker for purposes of evaluating performance and allocating resources. As of January 31, 2017, equipment, building, furniture and fixtures, net totaling \$293.2 million primarily supported asset groups within Ciena's Networking Platforms and Software and Software-Related Services segments and supported Ciena's unallocated selling and general and administrative activities. As of January 31, 2017, \$54.2 million of Ciena's intangible assets, net were assigned to asset groups within Ciena's Networking Platforms segment and \$73.6 million of Ciena's intangible assets, net were assigned to asset groups within Ciena's Software and Software-Related Services segment. As of January 31, 2017, all of the maintenance spares, net, totaling \$45.5 million, were assigned to asset groups within Ciena's Global Services segment.

### *Segment Revenue*

The table below (in thousands) sets forth Ciena's segment revenue for the respective periods:

	Quarter Ended January 31,	
	2017	2016
<b>Revenue:</b>		
Networking Platforms		
Converged Packet Optical	\$ 412,652	\$ 389,168
Packet Networking	72,194	48,197
Optical Transport	5,098	12,145
Total Networking Platforms	489,944	449,510
Software and Software-Related Services		
Software Platforms	17,049	8,079
Software-Related Services	22,331	17,347
Total Software and Software-Related Services	39,380	25,426
Global Services		
Maintenance Support and Training	54,990	56,058
Installation and Deployment	27,919	30,840
Consulting and Network Design	9,264	11,281
Total Global Services	92,173	98,179
Consolidated revenue	\$ 621,497	\$ 573,115

#### *Segment Profit (Loss)*

Segment profit (loss) is determined based on internal performance measures used by the chief executive officer to assess the performance of each operating segment in a given period. In connection with that assessment, the chief executive officer excludes the following items: selling and marketing costs; general and administrative costs; acquisition and integration costs; amortization of intangible assets; restructuring costs; interest and other income (loss), net; interest expense; and provisions for income taxes.

The table below (in thousands) sets forth Ciena's segment profit (loss) and the reconciliation to consolidated net income (loss) during the respective periods indicated:

	Quarter Ended January 31,	
	2017	2016
<b>Segment profit (loss):</b>		
Networking Platforms	\$ 113,747	\$ 106,982
Software and Software-Related Services	7,700	(3,574)
Global Services	35,469	39,996
Total segment profit	156,916	143,404
Less: Non-performance operating expenses		
Selling and marketing	85,002	82,478
General and administrative	35,864	31,142
Acquisition and integration costs	—	1,299
Amortization of intangible assets	14,551	16,862
Restructuring costs	2,395	384
Add: Other non-performance financial items		
Interest expense and other income (loss), net	(14,833)	(21,486)
Less: Provision for income taxes	410	1,299
Consolidated net income (loss)	\$ 3,861	\$ (11,546)

## Entity Wide Reporting

Ciena's operating segments each engage in business across four geographic regions: North America; Europe, Middle East and Africa ("EMEA"); Asia Pacific ("APAC"); and Caribbean and Latin America ("CALA"). North America includes only activities in the United States and Canada. The following table reflects Ciena's geographic distribution of revenue principally based on the relevant location for Ciena's delivery of products and performance of services. For the periods below, Ciena's geographic distribution of revenue was as follows (in thousands):

	Quarter Ended January 31,	
	2017	2016
North America	\$ 405,928	\$ 392,704
EMEA	91,543	80,722
CALA	35,146	43,810
APAC	88,880	55,879
Total	\$ 621,497	\$ 573,115

North America includes \$379.7 million and \$365.2 million of United States revenue for fiscal quarters ended January 31, 2017 and 2016, respectively.

The following table reflects Ciena's geographic distribution of equipment, building, furniture and fixtures, net, with any country accounting for at least 10% of total equipment, building, furniture and fixtures, net, specifically identified. Equipment, building, furniture and fixtures, net, attributable to geographic regions outside of the United States and Canada are reflected as "Other International." For the periods below, Ciena's geographic distribution of equipment, building, furniture and fixtures was as follows (in thousands):

	January 31,	October 31,
	2017	2016
United States	\$ 104,187	\$ 103,018
Canada	178,391	173,885
Other International	10,572	11,503
Total	\$ 293,150	\$ 288,406

For the periods below, customers accounting for at least 10% of Ciena's revenue were as follows (in thousands):

	Quarter Ended January 31,	
	2017	2016
AT&T	\$ 96,437	\$ 126,600
Verizon	73,089	n/a
Total	\$ 169,526	\$ 126,600

n/a Denotes revenue representing less than 10% of total revenue for the period

Both customers purchased products and services from each of Ciena's operating segments.

## (21) COMMITMENTS AND CONTINGENCIES

### Foreign Tax Contingencies

Ciena is subject to various tax liabilities arising in the ordinary course of business. Ciena does not expect that the ultimate settlement of these liabilities will have a material effect on its results of operations, financial position or cash flows.

### Litigation

From May 15 through June 3, 2015, five separate putative class action lawsuits in connection with Ciena’s then-pending acquisition of Cyan, Inc. (“Cyan”) were filed in the Court of Chancery of the State of Delaware. On June 23, 2015, each of these lawsuits was consolidated into a single case captioned In Re Cyan, Inc. Shareholder Litigation, Consol. C.A. No. 11027-CB. On July 9, 2015, the plaintiffs filed a verified amended class action complaint, which named as defendants Ciena, a Ciena subsidiary created solely for the purpose of effecting the acquisition (“Merger Sub”), and the members of Cyan’s board of directors. On August 5, 2015, the defendants filed motions to dismiss the amended complaint. On October 1, 2015, the plaintiffs filed a second amended complaint which named as defendants the members of Cyan’s board of directors. Cyan, Ciena, and Merger Sub were not named as defendants. On July 15, 2016, the plaintiffs filed a third amended complaint, which generally alleges that the Cyan board members breached their fiduciary duties by engaging in a conflicted and unfair sales process, failing to maximize stockholder value in the acquisition, taking steps to preclude competitive bidding, and failing to disclose material information necessary for stockholders to make an informed decision regarding the acquisition. The third amended complaint seeks (i) a declaration that the plaintiffs are entitled to a quasi-appraisal remedy, (ii) rescissory damages, (iii) recovery through an accounting of all damages caused as a result of the alleged breaches of fiduciary duties, (iv) compensatory damages, and (v) costs including attorneys’ fees and experts’ fees. On August 5, 2016, the defendants filed a motion to dismiss the third amended complaint. Ciena believes that the consolidated lawsuit is without merit and intends to defend it vigorously.

As a result of the acquisition of Cyan in August 2015, Ciena became a defendant in a securities class action lawsuit. On April 1, 2014, a purported stockholder class action lawsuit was filed in the Superior Court of California, County of San Francisco, against Cyan, the members of Cyan’s board of directors, Cyan’s former Chief Financial Officer, and the underwriters of Cyan’s initial public offering. On April 30, 2014, a substantially similar lawsuit was filed in the same court against the same defendants. The two cases have been consolidated as Beaver County Employees Retirement Fund, et al. v. Cyan, Inc. et al., Case No. CGC-14-538355. The consolidated complaint alleges violations of federal securities laws on behalf of a purported class consisting of purchasers of Cyan’s common stock pursuant or traceable to the registration statement and prospectus for Cyan’s initial public offering in April 2013, and seeks unspecified compensatory damages and other relief. On May 19, 2015, the proposed class was certified. On August 25, 2015, the defendants filed a motion for judgment on the pleadings based on an alleged lack of subject matter jurisdiction over the case, which motion was denied on October 23, 2015. On May 24, 2016, the defendants filed a petition for a writ of certiorari on the jurisdiction issue with the United States Supreme Court, to which the plaintiffs filed a brief in opposition. On November 18, 2016, the parties each filed motions for summary judgment. Ciena believes that the consolidated lawsuit is without merit and intends to defend it vigorously.

On May 29, 2008, Graywire, LLC filed a complaint in the United States District Court for the Northern District of Georgia against Ciena and four other defendants, alleging, among other things, that certain of the parties’ products infringe U.S. Patent 6,542,673 (the “’673 Patent”), relating to an identifier system and components for optical assemblies. The complaint seeks injunctive relief and damages. In July 2009, upon request of Ciena and certain other defendants, the U.S. Patent and Trademark Office (“PTO”) granted the defendants’ *inter partes* application for reexamination with respect to certain claims of the ‘673 Patent, and the district court granted the defendants’ motion to stay the case pending reexamination of all of the patents-in-suit. In December 2010, the PTO confirmed the validity of some claims and rejected the validity of other claims of the ‘673 Patent, to which Ciena and other defendants filed an appeal. On March 16, 2012, the PTO on appeal rejected multiple claims of the ‘673 Patent, including the two claims on which Ciena is alleged to infringe. Subsequently, the plaintiff requested a reopening of the prosecution of the ‘673 Patent, which request was denied by the PTO on April 29, 2013. Thereafter, on May 28, 2013, the plaintiff filed an amendment with the PTO in which it canceled the claims of the ‘673 Patent on which Ciena is alleged to infringe. The case currently remains stayed, and there can be no assurance as to whether or when the stay will be lifted.

In addition to the matters described above, Ciena is subject to various legal proceedings and claims arising in the ordinary course of business, including claims against third parties that may involve contractual indemnification obligations on the part of Ciena. Ciena does not expect that the ultimate costs to resolve these matters will have a material effect on its results of operations, financial position or cash flows.



## (22) SUBSEQUENT EVENT

Under the Term Loan Credit Agreement, Ciena had two existing term loan tranches, the 2019 Term Loan, with an outstanding aggregate principal amount of \$244.4 million, and the 2021 Term Loan, with an outstanding aggregate principal amount of \$248.8 million (together, the “Existing Term Loans”).

Following the end of our first quarter of fiscal 2017, on January 30, 2017, Ciena, as borrower, and Ciena Communications, Inc. and Ciena Government Solutions, Inc., as guarantors, entered into an Omnibus Refinancing Amendment to the Credit Agreement, Security Agreement and Pledge Agreement with the lenders party thereto and the administrative agent (the “Refinancing Agreement”), pursuant to which Ciena refinanced the Existing Term Loans into a single term loan with an aggregate principal amount of \$400 million maturing on January 30, 2022 (the “2022 Term Loan”). In connection with the transaction, Ciena repaid \$93.1 million of outstanding principal under the Existing Term Loans, and the remaining balances under the Existing Term Loans were refinanced and replaced by the 2022 Term Loan. The Refinancing Agreement amends the Term Loan Credit Agreement and provides that the 2022 Term Loan will, among other things:

- mature on January 30, 2022;
- amortize in equal quarterly installments in aggregate amounts equal to 0.25% of the principal amount of the 2022 Term Loan as of January 30, 2017, with the balance payable at maturity;
- be subject to mandatory prepayment on the same basis as the Existing Term Loans under the Term Loan Credit Agreement;
- bear interest, at Ciena’s election, at a per annum rate equal to (a) LIBOR (subject to a floor of 0.75%) plus an applicable margin of 2.50%, or (b) a base rate (subject to a floor of 1.75%) plus an applicable margin of 1.50%; and
- be repayable at any time at Ciena's election, provided that repayment of the 2022 Term Loan with proceeds of certain indebtedness prior to July 30, 2017 will require a prepayment premium of 1% of the aggregate principal amount of such prepayment.

Except as amended by the Refinancing Agreement, the remaining terms of the Term Loan Credit Agreement remain in full force and effect.

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

*This quarterly report contains statements that discuss future events or expectations, projections of results of operations or financial condition, changes in the markets for our products and services, trends in our business, business prospects and strategies and other “forward-looking” information. In some cases, you can identify “forward-looking statements” by words like “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “intends,” “potential,” “projects,” “targets,” or “continue” or the negative of those words and other comparable words. These statements may relate to, among other things, adoption of next-generation network technology and software programmability and control of networks; our competitive landscape; market conditions and growth opportunities; factors impacting our industry; factors impacting the businesses of network operators and their network architectures; our corporate strategy, including our research and development, supply chain and go-to-market initiatives; efforts to increase application of our solutions in customer networks and to increase the reach of our business into new or growing customer and geographic markets; our backlog and seasonality in our business; our acquisition of Cyan, Inc. and its impact on our business and results of operations; expectations for our financial results, revenue, gross margin, operating expense and key operating measures in future periods; the adequacy of our sources of liquidity to satisfy our working capital needs, capital expenditures, and other liquidity requirements; business initiatives including real estate and IT transitions or initiatives; and market risks associated with financial instruments and foreign currency exchange rates. These statements are subject to known and unknown risks, uncertainties and other factors, and actual events or results may differ materially due to factors such as:*

- *our ability to execute our business and growth strategies;*
- *fluctuations in our revenue and operating results and our financial results generally;*
- *the loss of any of our large customers, a significant reduction in their spending, or a material change in their networking or procurement strategies;*
- *the competitive environment in which we operate;*

- market acceptance of products and services currently under development and delays in product or software development;
- lengthy sales cycles and onerous contract terms with communications service providers, Web-scale providers and other large customers;
- product performance problems and undetected errors;
- our ability to diversify our customer base beyond our traditional customers and broaden the application for our solutions in communications networks;
- the level of growth in network traffic and bandwidth consumption and corresponding level of investment in network infrastructures by network operators;
- the international scale of our operations and fluctuations in currency exchange rates;
- our ability to forecast accurately demand for our products for purposes of inventory purchase practices;
- the impact of pricing pressure and price erosion that we regularly encounter in our markets;
- our ability to enforce our intellectual property rights, and costs we may incur in response to intellectual property right infringement claims made against us;
- the continued availability on commercially reasonable terms of software and other technology under third party licenses;
- failure to maintain the security of confidential, proprietary or otherwise sensitive business information or systems or to protect against cyber security attacks;
- the performance of our third party contract manufacturers;
- changes or disruption in components or supplies provided by third parties, including sole and limited source suppliers;
- our ability to manage effectively our relationships with third party service partners and distributors;
- unanticipated risks and additional obligations in connection with our resale of complementary products or technology of other companies;
- our exposure to the credit risks of our customers and our ability to collect receivables;
- modification or disruption of our internal business processes and information systems;
- the effect of our outstanding indebtedness on our liquidity and business;
- fluctuations in our stock price and our ability to access the capital markets to raise capital;
- unanticipated expenses or disruptions to our operations caused by facilities transitions or restructuring activities;
- inability to attract and retain experienced and qualified personnel;
- disruptions to our operations caused by strategic acquisitions and investments or the inability to achieve the expected benefits and synergies of newly-acquired businesses;
- our ability to grow our software business and address networking strategies including software-defined networking and network function virtualization;
- changes in, and the impact of, government regulations, including with respect to: the communications industry generally; the business of our customers; the use, import or export of products; and the environment, potential climate change and other social initiatives;
- future legislation or executive action in the U.S. relating to tax policy or trade regulation;
- impairment charges caused by the write-down of goodwill or long-lived assets;
- our ability to maintain effective internal controls over financial reporting and liabilities that result from the inability to comply with corporate governance requirements; and
- adverse results in litigation matters.

*These are only some of the factors that may affect the forward-looking statements contained in this quarterly report. For a discussion identifying additional important factors that could cause actual results to vary materially from those anticipated in the forward-looking statements, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” in this quarterly report. You should review these risk factors for a more complete understanding of the risks associated with an investment in our securities. For a more complete understanding of the risks associated with an investment in Ciena’s securities, you should review these risk factors and the rest of this quarterly report in combination with the more detailed description of our business and management’s discussion and analysis of financial condition and risk factors described in our annual report on Form 10-K, which we filed with the Securities and Exchange Commission (“SEC”) on December 21, 2016. However, we operate in a very competitive and rapidly changing environment and new risks and uncertainties emerge, are identified or become apparent from time to time. It is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this quarterly report. You should be aware that the forward-looking statements contained in this quarterly report are based on our current views and assumptions. We undertake no obligation to revise or update any forward-looking statements made in this quarterly report to reflect events or circumstances after the date hereof or to reflect new information or the occurrence of unanticipated events, except as required by law. The forward-looking statements in this quarterly report are intended to be subject to protection afforded by the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.*

## Overview

We are a network strategy and technology company, providing solutions that enable a wide range of network operators to adopt next-generation communication architectures and to deliver a broad array of services relied upon by enterprise and consumer end users. We provide equipment, software and services that support the transport, switching, aggregation, service delivery and management of voice, video and data traffic on communications networks. Our high-capacity hardware and network management and control software solutions enable open, multi-vendor, programmable networks that improve automation, reduce network complexity and flexibly support changing service requirements. Our solutions yield business and operational value for our customers by enabling them to support new applications, introduce new revenue-generating services and reduce network complexity and expense.

Our Converged Packet Optical, Packet Networking and Optical Transport products are used by a diverse set of customers and market segments, including communications service providers, cable and multiservice operators, Web-scale providers, submarine network operators, governments, enterprises, research and education (R&E) institutions, and other emerging network operators. These products, which provide functionality from the network core to network access points, allow network operators to scale capacity, increase transmission speeds, allocate traffic and adapt dynamically to changing end-user service demands. In addition to our portfolio of high-capacity hardware platforms, we offer network management and control software platforms designed to simplify the creation, automation and delivery of services across multi-vendor and multi-domain network environments. Our software solutions are oriented around our modular Blue Planet software platform for multi-domain service orchestration, network function virtualization, and network management and control. To complement our hardware and software solutions, we offer a broad range of transformation and automation services that help our customers design, optimize, integrate, deploy, manage and maintain their networks.

Our quarterly reports on Form 10-Q, annual reports on Form 10-K, and current reports on Form 8-K filed with the SEC are available through the SEC's website at [www.sec.gov](http://www.sec.gov) or free of charge on our website as soon as reasonably practicable after we file these documents. We routinely post the reports above, recent news and announcements, financial results and other information about Ciena that is important to investors in the "Investors" section of our website at [www.ciena.com](http://www.ciena.com). Investors are encouraged to review the "Investors" section of our website because, as with the other disclosure channels that we use, from time to time we may post material information on that site that is not otherwise disseminated by us.

### *Market Opportunity*

The markets in which we sell our communications networking solutions have been subject to significant changes in recent years, including rapid growth in network traffic, evolving cloud-based service offerings, changes in the type of customers building communications networks, and heightened end-user service demands. These conditions have placed significant demands on networks, challenged the business models of network operators, and altered the overall competitive landscape of network operators. Existing and emerging network operators are competing to distinguish their service offerings and rapidly introduce differentiated, revenue-generating services, while managing the costs of their networks and seeking to ensure a profitable business model. These dynamics are driving convergence of network features, functions and layers, virtualization of certain network functions, and solutions that leverage increased software-based network control and programmability. We believe that these dynamics, and the need to adapt to rapidly changing business and network demands, will cause network operators to adopt or evolve their networks to be more open, programmable and automated.

### *Competitive Landscape*

The markets in which we compete are characterized by rapidly advancing technologies, frequent introduction of new networking solutions and aggressive selling and pricing efforts to displace incumbent vendors and to capture market share. The markets for our solutions are both highly competitive and fragmented. Our sales of Converged Packet Optical solutions face an intense competitive environment as we and our competitors introduce new, higher-capacity, higher-speed network solutions with improved reach, spectral efficiency, automation, power consumption and cost per bit. We expect the competitive landscape in which we operate to continue to broaden and to remain challenging and dynamic. As we have expanded our solutions offerings to include our 8700 Packetwave Platform and Waveserver DCI platform, our solutions have become increasingly competitive with IP router vendors, data center switch providers, and other IT suppliers or integrators. Separately, as we seek increased customer adoption of our Blue Planet software platform, we expect to compete more directly with additional software vendors and information technology vendors or integrators of these solutions.

In addition to the above dynamics, many network operators are continuing to consider a variety of "consumption models," or approaches to the design and procurement of their network infrastructure. While broader adoption of the consumption

models involving disaggregation in the procurement of hardware and software remains uncertain, we expect that the potential for different models will require us and other system vendors to assess and possibly broaden their existing commercial models over time. We may also face competition from component vendors, including those in our supply chain, who develop networking products based on off-the-shelf or commoditized hardware technology, referred to as “white box” hardware. Further, some of our competitors are not vertically integrated in their packet optical supply chain and therefore sell a set of networking solutions that rely upon coherent modem technology developed by and procured from third party “merchant” providers. In connection with consumption models involving greater disaggregation, the continued use of such third party modem technology by these competitors and/or the availability of such technology in the market may increase overall pricing pressure in this space and may negatively impact our ability to derive higher gross margins for Converged Packet Optical solutions.

Given this dynamic competitive landscape and the market-based price erosion for our products that we regularly encounter, we expect that, in order to achieve sustained revenue growth, we will be required to continue to increase our volume of product shipments, continue to diversify our business and customer base, introduce new solutions that address evolving service and network demands, and accommodate multiple consumption models. In addition, in order to maintain incumbency with key customers and to secure new opportunities, we are often required to agree to aggressive pricing, incur significant costs early in network deployment, or make significant commercial concessions. These terms have previously, and may in the future, adversely affect our results of operations and contribute to fluctuations in our financial results.

## Strategy

Our corporate strategy to capitalize on the evolving market dynamics described above to drive the profitable growth of our business includes the following initiatives:

*Promote Choice and Openness through our OP<sup>n</sup> Philosophy.* We previously introduced our OP<sup>n</sup> Architecture as a focused approach to next-generation networks through scalability, programmability and network level applications. Today, OP<sup>n</sup> has evolved and expanded from an architecture into our governing philosophy and broader belief system, which is rooted in enabling choice in the market through openness. Choice is an increasingly important element of our customers’ efforts to keep pace with bandwidth demands and emerging service offerings, the shift to more automated and programmable networks, and the need to manage network costs. We believe that the best way to enable choice for our customers is by developing and providing network technologies and strategies that facilitate openness through innovation, virtualization, automation and collaboration. We also believe that we are well-positioned in this regard to offer an expansive range of choice to the market. Our OP<sup>n</sup> belief system shapes the operation of our business in a number of ways. It guides our research and development strategy and solutions offerings, including our focus on coherent modem leadership, packet-optical convergence, and on multi-vendor network orchestration, management and control through our Blue Planet software platform. By embracing design principles that leverage open application programming interfaces (APIs), including those found in our Waveserver platform, we believe we facilitate openness and choice. By offering collaborative tools and environments, including our Emulation Cloud and DevOps Toolkit, we enable the development, testing and customization of services and applications. Our OP<sup>n</sup> belief system also influences our go-to-market approach, as we expect to partner increasingly with an ecosystem of solutions vendors and virtual network function providers, and to integrate services and applications across multi-vendor and multi-domain networks. We intend to offer solutions and pursue opportunities across a range of customer consumption models in order to drive the evolution of next-generation network infrastructures and accelerate the realization of our OP<sup>n</sup> philosophy.

*Extend Technology Leadership and Expand Application of our Solutions.* Our product development strategy is focused on maintaining our leading technology offerings and expanding our role and the application of our solutions in customer networks. Our research and development efforts seek to advance and extend our coherent modem technology leadership, including our WaveLogic coherent optical processor and high-speed indium phosphide and silicon photonics technologies (HSPC) acquired from TeraXion during fiscal 2016, to address network operator requirements for performance, power and cost. We are also focused on introducing terabit per second and greater transmission speeds, and expanding the high-capacity and operationally-efficient service delivery capabilities in our Packet Networking and Converged Packet Optical products for access and metro networks, data center interconnect, submarine networks, and other WAN applications. In addition, we are seeking to increase software programmability of networks and to enable network operators to automate and accelerate the creation and delivery of new, cloud-based services. These efforts include investments in our Blue Planet software platform — which is designed to automate, orchestrate, and manage physical network resources and virtualized services across data centers and the WAN — and its integration across our portfolio and with additional third party network resources.

*Increase Diversification of our Business.* The continued diversification of our business is a key element of our strategy to address the dynamic environment of our industry. We believe this diversification positions us to continue to grow our business and to better withstand potential slowdowns adversely affecting particular geographies, markets, customer segments and

applications. We intend to pursue initiatives that broaden sales to existing customers across our solutions portfolio and also to secure additional relationships with a diverse set of network operators in high-growth customer segments and geographies.

Our sales and marketing efforts seek to promote increased sales to existing customers, particularly through opportunities that expand our role or the application of our solutions within their network and business. We are pursuing opportunities to increase adoption of our packet access and aggregation solutions, and to secure market share of our Blue Planet software platform, including within our existing customer base. We are also focused on opportunities to support metro aggregation, data center interconnect, managed services offerings, cloud-based services, submarine networks, business Ethernet services and mobile backhaul. We intend to leverage our existing customer relationships to increase sales and promote the adoption of our solutions as our customers scale and evolve their networks.

We also intend to target important growth markets, including key customer market segments and geographies. Our go-to-market strategy is focused on further diversifying our customer base by penetrating additional internet content providers, data center operators and other emerging network operators that form the “Web-scale” marketplace. We are also focused on securing additional customers within our traditional base of communications service providers, particularly in higher growth markets, in the Asia-Pacific region, including India. We intend to use our direct and indirect sales channels to target, and to expand our sales with, several other market verticals, including cable and multiservice operators, submarine network operators, enterprise customers and in the government and R&E markets. For example, we intend to gain greater reach providing network solutions to submarine network operators, particularly in the new cable build market, in part through our recently announced supply partnership with TE SubCom. To leverage the geographic reach of our direct sales resources and expand sales into key geographies, we have pursued channel and distribution opportunities, including our strategic relationship with Ericsson, that enable sales through third parties, including service providers, systems integrators and value-added resellers.

*Optimize Business to Yield Operating Leverage.* We regularly pursue initiatives to improve our operating margin, constrain operating expense and promote efficiency of our business processes and systems. These initiatives include portfolio optimization and engineering efforts to drive improved efficiencies in the design and development of our solutions and supply chain initiatives to ensure that our product cost model remains ahead of the price erosion that we regularly encounter in our markets. We are also focused on ensuring an efficient supply chain, including efforts to vertically integrate where prudent, reduce our material and overhead costs and improve inventory management and logistics. Our initiatives also include the recent upgrade of our company-wide enterprise resource planning platform, as well as contemporaneous efforts to improve automation of key business processes and systems. We seek to leverage these initiatives to promote the profitable growth of our business and to drive additional operating leverage.

#### *Repurchase of Convertible Notes*

During the first quarter of 2017, we repurchased \$46.3 million of the outstanding aggregate principal amount of our 0.875% Convertible Senior Notes due June 15, 2017 (the “2017 Notes”) in a private transaction, for an aggregate purchase price of \$46.3 million. As of January 31, 2017, \$185.3 million in aggregate principal amount of our 2017 Notes remained outstanding. We regularly evaluate alternatives to manage our capital structure and reduce our debt and may continue to opportunistically repurchase our outstanding convertible notes. See Note 16 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this quarterly report for more information relating to our outstanding convertible notes.

#### *Term Loan Refinancing*

Following the end of our first quarter of fiscal 2017, on January 30, 2017, we entered into an Omnibus Refinancing Amendment to the Credit Agreement, Security Agreement, and Pledge Agreement (the “Refinancing Agreement”) that amends our existing Term Loan Credit Agreement, dated July 15, 2014, as amended (the “Term Loan Credit Agreement”) and provides for the refinancing of the two existing tranches of term loans under the Term Loan Credit Agreement. Under the Refinancing Agreement the two existing tranches of term loans — the first with an aggregate principal amount of \$244.4 million maturing on July 15, 2019, and the second with an aggregate principal amount of \$248.8 million maturing on April 25, 2021 (together, the “Existing Term Loans”) — were combined into a single term loan with a reduced aggregate principal amount of \$400 million maturing on January 30, 2022 (the “2022 Term Loan”). As a result, we repaid \$93.1 million of outstanding principal under the Existing Term Loans, and the remaining balances under the Existing Term Loans were refinanced and replaced by the 2022 Term Loan. See Note 22 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this quarterly report for more information relating to our term loan refinancing.

#### *Company-Wide Enterprise Resource Planning Platform Upgrade*

During the first quarter of fiscal 2017, we upgraded our company-wide enterprise resource planning ("ERP") platform to support our finance, supply chain, services, tax, and information technology processes. The system changes were undertaken due to changes in support and software life-cycle decisions by the ERP platform vendor, not in response to any actual or perceived deficiencies in our internal control over financial reporting, and did not materially change our existing internal controls in design or operation. The ERP platform upgrade resulted in an intentional and temporary shut down of certain systems during the beginning of the first quarter of fiscal 2017.

#### *Financial Results for First Quarter of Fiscal 2017 and Sequential Comparison*

Revenue for the first quarter of fiscal 2017 was \$621.5 million, representing a sequential decrease of 13.2% from \$716.2 million in the fourth quarter of fiscal 2016. We typically experience reductions in order volume toward the end of the calendar year, as the procurement cycles of some of our customers slow and network deployment activity at service providers is curtailed. This seasonality in our order flows across our operating segments and geographic regions can result in weaker, seasonally affected revenue results in the first quarter of our fiscal year. Revenue-related details reflecting sequential changes from the fourth quarter of fiscal 2016 include:

- Product revenue for the first quarter of fiscal 2017 decreased by \$75.5 million, primarily reflecting revenue decreases in Converged Packet Optical within our Networking Platforms segment.
- Service revenue for the first quarter of fiscal 2017 decreased by \$19.2 million.
- North America revenue for the first quarter of fiscal 2017 was \$405.9 million, a decrease from \$463.1 million in the fourth quarter of fiscal 2016. This primarily reflects revenue decreases of \$50.3 million within our Networking Platforms segment and \$8.7 million within our Global Services segment. These decreases were partially offset by an increase of \$1.8 million within our Software and Software-Related Services segment.
- Europe, Middle East and Africa ("EMEA") revenue for the first quarter of fiscal 2017 was \$91.5 million, a decrease from \$112.5 million in the fourth quarter of fiscal 2016. This primarily reflects revenue decreases of \$12.1 million within our Networking Platforms segment and \$10.0 million within our Global Services segment. These decreases were partially offset by an increase of \$1.1 million within our Software and Software-Related Services segment.
- Caribbean and Latin America ("CALA") revenue for the first quarter of fiscal 2017 was \$35.2 million, a decrease from \$46.8 million in the fourth quarter of fiscal 2016. This primarily reflects revenue decreases of \$9.3 million within our Networking Platforms segment and \$1.7 million within our Global Services segment.
- Asia Pacific ("APAC") revenue for the first quarter of fiscal 2017 was \$88.9 million, a decrease from \$93.8 million in the fourth quarter of fiscal 2016. This primarily reflects a decrease of \$4.5 million within our Networking Platforms segment.
- For the first quarter of fiscal 2017, two customers accounted for greater than 10% of total revenue. AT&T accounted for 15.5% of total revenue and Verizon accounted for 11.8%. AT&T accounted for 18.3% of total revenue in the fourth quarter of fiscal 2016.

Gross margin for the first quarter of fiscal 2017 was 44.1%, a decrease from 44.5% in the fourth quarter of fiscal 2016. Reduced gross margin for the first quarter of fiscal 2017 primarily reflects market-based price erosion partially offset by increased software revenue, product cost reductions and lower warranty expense.

Operating expense was \$254.7 million for the first quarter of fiscal 2017, a decrease from \$258.9 million in the fourth quarter of fiscal 2016. First quarter fiscal 2017 operating expense primarily reflects a decrease of \$11.9 million in selling and marketing expense, partially offset by increases of \$4.4 million in research and development expense and \$3.7 in general and administrative expense.

Income from operations for the first quarter of fiscal 2017 was \$19.1 million, compared to income from operations of \$59.7 million during the fourth quarter of fiscal 2016. Our net income for the first quarter of fiscal 2017 was \$3.9 million, or \$0.03 per diluted common share, compared to a net income of \$36.6 million or \$0.25 per diluted common share, for the fourth quarter of fiscal 2016.

We used cash in operations of \$26.3 million during the first quarter of fiscal 2017, compared to \$136.7 million of cash generated from operations during the fourth quarter of fiscal 2016. As of January 31, 2017, we had \$693.9 million in cash and cash equivalents, \$250.1 million of short-term investments in U.S. treasury securities and commercial paper and \$109.9 million of long-term investments in U.S. treasury securities. This compares to \$777.6 million in cash and cash equivalents, \$275.2 million of short-term investments in U.S. treasury securities and commercial paper and \$90.2 million of long-term investments in U.S. treasury securities, at October 31, 2016.

As of January 31, 2017, we had 5,613 employees, which reflects an increase from 5,555 at October 31, 2016 and an increase from 5,363 at January 31, 2016.

## Consolidated Results of Operations

### Operating Segments

Ciena has the following operating segments for reporting purposes: (i) Networking Platforms, (ii) Software and Software-Related Services, and (iii) Global Services. See Note 20 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

### Quarter ended January 31, 2017 compared to the quarter ended January 31, 2016

#### Revenue

During the first three months of fiscal 2017, approximately 18.5% of our revenue was non-U.S. Dollar denominated, including sales in Canadian Dollar, Euro, British Pound, Brazilian Real and Japanese Yen. During the first three months of fiscal 2017 as compared to the first three months of fiscal 2016, the U.S. Dollar fluctuated against these currencies. Consequently, our revenue reported in U.S. Dollars on a constant currency basis was slightly reduced by approximately \$1.1 million or 0.2%. The table below (in thousands, except percentage data) sets forth the changes in our operating segment revenue for the periods indicated:

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
<b>Revenue:</b>						
<b>Networking Platforms</b>						
Converged Packet Optical	\$ 412,652	66.4	\$ 389,168	67.9	\$ 23,484	6.0
Packet Networking	72,194	11.6	48,197	8.4	23,997	49.8
Optical Transport	5,098	0.8	12,145	2.1	(7,047)	(58.0)
Total Networking Platforms	489,944	78.8	449,510	78.4	40,434	9.0
<b>Software and Software-Related Services</b>						
Software Platforms	17,049	2.7	8,079	1.4	8,970	111.0
Software-Related Services	22,331	3.6	17,347	3.0	4,984	28.7
Total Software and Software-Related Services	39,380	6.3	25,426	4.4	13,954	54.9
<b>Global Services</b>						
Maintenance Support and Training	54,990	8.9	56,058	9.8	(1,068)	(1.9)
Installation and Deployment	27,919	4.5	30,840	5.4	(2,921)	(9.5)
Consulting and Network Design	9,264	1.5	11,281	2.0	(2,017)	(17.9)
Total Global Services	92,173	14.9	98,179	17.2	(6,006)	(6.1)
<b>Consolidated revenue</b>	<b>\$ 621,497</b>	<b>100.0</b>	<b>\$ 573,115</b>	<b>100.0</b>	<b>\$ 48,382</b>	<b>8.4</b>

\* Denotes % of total revenue

\*\* Denotes % change from 2016 to 2017

- **Networking Platforms segment revenue** increased, primarily reflecting product line sales increases of \$24.0 million of our Packet Networking products and \$23.5 million of our Converged Packet Optical products, partially offset by a decrease of \$7.0 million in sales of our Optical Transport products.
  - Converged Packet Optical sales reflect increases of \$32.4 million of our 6500 Packet-Optical Platform and \$12.4 million of our Waveserver stackable interconnect system. These increases were partially offset by sales decreases of \$12.1 million of our Z-Series Packet-Optical Platform, \$4.9 million of our 5430 Reconfigurable Switching System and \$4.3 million of our CoreDirector® Multiservice Optical Switches.



- Packet Networking sales primarily reflect increases of \$18.7 million of our 3000 and 5000 family of service delivery and aggregation switches and \$4.9 million of our 8700 Packetwave Platform.
- Optical Transport sales have continued to experience significant declines, as expected. Our Optical Transport products have either been previously discontinued, or are expected to be discontinued, reflecting network operators' transition toward next-generation converged network architectures addressed by solutions within our Converged Packet Optical product line.
- **Software and Software-Related Services segment revenue** increased, primarily reflecting sales increases of \$9.0 million of our software platforms and \$5.0 million in software-related services. The increase in software platform sales reflects increases of \$7.0 million in sales of our Blue Planet software platform and advanced software applications and \$1.0 million in sales of our OneControl Unified Management System. The increase in software-related services is primarily due to sales increases of \$3.1 million of software subscription services, \$1.0 million of services supporting our Blue Planet software platform and advanced software applications, and \$1.0 million of software-enabled services.
- **Global Services segment revenue** decreased, primarily reflecting sales decreases of \$2.9 million of our installation and deployment services, \$2.0 million of our consulting and network design services, and \$1.1 million of our maintenance support and training.

Our operating segments each engage in business and operations across four geographic regions: North America; EMEA; CALA; and APAC. Results for North America include only activities in the United States and Canada. Part of our business and growth strategy is to continue to diversify our customer base and secure additional communications service provider customers outside of North America, including in high-growth geographies such as India. We believe that this is an important part of our strategy and required for continued revenue growth. The following table reflects our geographic distribution of revenue principally based on the relevant location for our delivery of products and performance of services. Our revenue, particularly when considered by geographic distribution, can fluctuate significantly and the timing of revenue recognition for large network projects, particularly outside of North America, can result in large variations in geographic revenue results in any particular quarter. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
North America	\$ 405,928	65.3	\$ 392,704	68.5	\$ 13,224	3.4
EMEA	91,543	14.7	80,722	14.1	10,821	13.4
CALA	35,146	5.7	43,810	7.6	(8,664)	(19.8)
APAC	88,880	14.3	55,879	9.8	33,001	59.1
Total	\$ 621,497	100.0	\$ 573,115	100.0	\$ 48,382	8.4

\* Denotes % of total revenue

\*\* Denotes % change from 2016 to 2017

- **North America revenue** primarily reflects increases of \$12.6 million within our Software and Software-Related Services segment and \$6.1 million within our Networking Platforms segment, partially offset by a revenue decrease of \$5.5 million within our Global Services segment. The increase within our Software and Software-Related Services segment primarily reflects sales increases of \$5.9 million of our Blue Planet software platform and advanced software applications, \$3.2 million of our software subscription services, \$1.0 million of our OneControl Unified Management System and \$1.0 million in services supporting our Blue Planet software platform and advanced software applications. The revenue increase within our Networking Platforms segment primarily reflects a product line increase of \$13.3 million of Packet Networking sales, partially offset by product line decreases of \$5.4 million of Converged Packet Optical sales and \$1.8 million in Optical Transport sales. The revenue increase within Packet Networking primarily reflects an increase of \$10.5 million in sales of our 3000 and 5000 family of service delivery and aggregation switches to AT&T.
- **EMEA revenue** primarily reflects increases of \$12.0 million within our Networking Platform segment and \$1.0 million within our Software and Software-Related Services segment, partially offset by a revenue decrease of \$2.0 million within our Global Services segment. Networking Platform segment revenue reflects a product line increase of \$13.2 million in Converged Packet Optical sales, primarily due to increased sales of the 6500 Packet-Optical Platform to certain communication service providers.

- **CALA revenue** primarily reflects a decrease of \$10.8 million within our Networking Platform segment, partially offset by a revenue increase of \$2.0 million within our Global Services segment. CALA revenue primarily reflects decreased sales in Mexico.
- **APAC revenue** primarily reflects an increase of \$33.1 million within our Networking Platform segment. The revenue increase within our Networking Platforms segment primarily reflects an increase of our 6500 Packet-Optical Platform sales to communication service providers, particularly in India, submarine network operators, enterprise customers and sales through our strategic relationship with Ericsson. The timing of revenue recognition for large network projects in this region can result in significant variations in revenue results in any particular quarter.

#### Cost of Goods Sold and Gross Profit

Product cost of goods sold consists primarily of amounts paid to third party contract manufacturers, component costs, employee-related costs and overhead, shipping and logistics costs associated with manufacturing-related operations, warranty and other contractual obligations, royalties, license fees, amortization of intangible assets, cost of excess and obsolete inventory and, when applicable, estimated losses on committed customer contracts.

Services cost of goods sold consists primarily of direct and third party costs associated with our provision of services including installation, deployment, maintenance support, consulting and training activities and, when applicable, estimated losses on committed customer contracts. The majority of these costs relate to personnel, including employee and third party contractor-related costs.

Our gross profit as a percentage of revenue, or “gross margin,” has improved in recent fiscal years, from 41.4% in fiscal 2014 to 44.7% in fiscal 2016. However, gross margin, particularly when viewed on a quarterly basis, can fluctuate due to a number of factors. Our gross margin remains highly dependent upon on our continued ability to drive product cost reductions relative to the price erosion that we regularly encounter in our markets. Moreover, to retain or secure key customers, we may agree to pricing or other unfavorable commercial terms that adversely affect our gross margin. Our success in taking share and winning new business can result in additional costs associated with the early stages of network deployments, including an increased concentration of lower margin “common” equipment sales and installation services, as compared to higher margin products including channel cards, software services and maintenance services. Gross margin can also be impacted by changes in expense for excess and obsolete inventory and warranty obligations and our revenue concentration within a particular segment, product line, geography, or customer.

Service gross margin can be affected by the mix of customers and services, particularly the mix between deployment and maintenance services, geographic mix and the timing and extent of any investments in internal resources to support this business.

The tables below (in thousands, except percentage data) set forth the changes in revenue, cost of goods sold and gross profit for the periods indicated:

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
Total revenue	\$ 621,497	100.0	\$ 573,115	100.0	\$ 48,382	8.4
Total cost of goods sold	347,712	55.9	321,665	56.1	26,047	8.1
Gross profit	\$ 273,785	44.1	\$ 251,450	43.9	\$ 22,335	8.9

\* Denotes % of total revenue

\*\* Denotes % change from 2016 to 2017

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
Product revenue	\$ 506,993	100.0	\$ 457,589	100.0	\$ 49,404	10.8
Product cost of goods sold	286,811	56.6	260,482	56.9	26,329	10.1
Product gross profit	\$ 220,182	43.4	\$ 197,107	43.1	\$ 23,075	11.7

\* Denotes % of product revenue

\*\* Denotes % change from 2016 to 2017

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
Service revenue	\$ 114,504	100.0	\$ 115,526	100.0	\$ (1,022)	(0.9)
Service cost of goods sold	60,901	53.2	61,183	53.0	(282)	(0.5)
Service gross profit	\$ 53,603	46.8	\$ 54,343	47.0	\$ (740)	(1.4)

\* Denotes % of services revenue

\*\* Denotes % change from 2016 to 2017

- **Gross profit as a percentage of revenue** reflects improved product gross profit partially offset by reduced services gross profit.
- **Gross profit on products as a percentage of product revenue** benefited from increased software revenue, product cost reductions and lower warranty expense partially offset by market-based price erosion.
- **Gross profit on services as a percentage of services revenue** decreased primarily due to increased installation and deployment costs due to certain early stage deployment activities.

### Operating Expense

We expect operating expense to increase in fiscal 2017 from the level reported for fiscal 2016 in order to fund our research and development initiatives, to provide for investments in the re-engineering of company-wide enterprise resource planning platforms, and to fund the transition of key facilities. In particular, the development of our new facilities and the transition of our operations in Ottawa, Canada and Gurgaon, India will require significant effort, time and cost.

Operating expense consists of the component elements described below.

*Research and development expense* primarily consists of salaries and related employee expense (including share-based compensation expense), prototype costs relating to design, development, testing of our products, depreciation expense and third-party consulting costs.

*Selling and marketing expense* primarily consists of salaries, commissions and related employee expense (including share-based compensation expense), and sales and marketing support expense, including travel, demonstration units, trade show expense and third-party consulting costs.

*General and administrative expense* primarily consists of salaries and related employee expense (including share-based compensation expense), and costs for third-party consulting and other services.

*Acquisition and integration costs* consist of expenses for financial, legal and accounting advisors and severance and other employee-related costs, associated with our acquisition of Cyan on August 3, 2015 and our acquisition of the HSPC assets from TeraXion and its wholly-owned subsidiary on February 1, 2016.

*Amortization of intangible assets* primarily reflects the amortization of purchased technology and customer relationships from our acquisitions.

*Restructuring costs* primarily reflect actions Ciena has taken to better align our workforce, facilities and operating costs with perceived market opportunities, business strategies and changes in market and business conditions.

The table below (in thousands, except percentage data) sets forth the changes in operating expense for the periods indicated:

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
Research and development	\$ 116,869	18.8	\$ 108,046	18.9	\$ 8,823	8.2
Selling and marketing	85,002	13.7	82,478	14.4	2,524	3.1
General and administrative	35,864	5.8	31,142	5.4	4,722	15.2
Acquisition and integration costs	—	—	1,299	0.2	(1,299)	(100.0)
Amortization of intangible assets	14,551	2.3	16,862	2.9	(2,311)	(13.7)
Restructuring costs	2,395	0.4	384	0.1	2,011	523.7
<b>Total operating expenses</b>	<b>\$ 254,681</b>	<b>41.0</b>	<b>\$ 240,211</b>	<b>41.9</b>	<b>\$ 14,470</b>	<b>6.0</b>

\* Denotes % of total revenue

\*\* Denotes % change from 2016 to 2017

- **Research and development expense** was adversely affected by \$1.8 million as a result of foreign exchange rates, net of hedging, primarily due to a weaker U.S. Dollar in relation to the Canadian Dollar. Including the effect of foreign exchange rates, research and development expenses increased by \$8.8 million. This change reflects increases of \$4.4 million in employee and compensation costs and \$5.1 million in facilities and information technology costs. These increases were partially offset by a decrease of \$1.2 million in professional services.
- **Selling and marketing expense** increased by \$2.5 million, primarily reflecting increases of \$1.0 million in employee and compensation costs, \$0.6 million in facilities and information technology costs and \$0.6 million in technology related costs.
- **General and administrative expense** increased by \$4.7 million, primarily reflecting increases of \$1.5 million in employee and compensation costs and \$2.5 million for professional services and legal fees.
- **Acquisition and integration costs** incurred during fiscal 2016 reflects expense for financial, legal and accounting advisors and severance and other employee compensation costs, related to our acquisition of Cyan on August 3, 2015 and our acquisition of certain HSPC assets of TeraXion and its wholly-owned subsidiary on February 1, 2016.
- **Amortization of intangible assets** decreased due to certain intangible assets having reached the end of their economic lives.
- **Restructuring costs** increased reflecting a global workforce reduction of approximately 50 employees in the first quarter of fiscal 2017 as part of our business optimization strategy to improve our gross margin, constrain operating expense and redesign certain business processes, systems, and resources.

#### Other items

The table below (in thousands, except percentage data) sets forth the changes in other items for the periods indicated:

	Quarter Ended January 31,				Increase	
	2017	%*	2016	%*	(decrease)	%**
Interest and other income (loss), net	\$ 370	0.1	\$ (8,776)	(1.5)	\$ 9,146	104.2
Interest expense	\$ 15,203	2.4	\$ 12,710	2.2	\$ 2,493	19.6
Provision for income taxes	\$ 410	0.1	\$ 1,299	0.2	\$ (889)	(68.4)

\* Denotes % of total revenue

\*\* Denotes % change from 2016 to 2017

- **Interest and other income (loss), net** primarily reflects a \$7.6 million gain in foreign exchange rates on assets and liabilities denominated in a currency other than the relevant functional currency, net of hedging activity.
- **Interest expense** increased primarily due to the 2021 Term Loan that was entered into in the second quarter of fiscal 2016. For additional information about our term loans, see Note 16 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.
- **Provision for income taxes** decreased primarily due to lower foreign tax expense.

## Segment Profit (Loss)

The table below (in thousands, except percentage data) sets forth the changes in our segment profit (loss) for the respective periods:

	Quarter Ended January 31,			
	2017	2016	Increase (decrease)	%*
Segment profit (loss):				
Networking Platforms	\$ 113,747	\$ 106,982	\$ 6,765	6.3
Software and Software-Related Services	\$ 7,700	\$ (3,574)	\$ 11,274	315.4
Global Services	\$ 35,469	\$ 39,996	\$ (4,527)	(11.3)

\* Denotes % change from 2016 to 2017

- **Networking Platforms segment profit** increased, primarily due to higher sales volume, as described above, partially offset by reduced gross margin and higher research and development costs. The reduced gross margin primarily reflects market-based price erosion partially offset by product cost reductions and lower warranty expense.
- **Software and Software-Related Services segment profit** reflects higher sales volume, as described above, and improved gross margin, partially offset by increased research and development costs. Research and development costs primarily reflect increased expenses relating to the continued development of our Blue Planet software platform.
- **Global Services segment profit** decreased, primarily due to lower sales volume, as described above, and reduced gross margin. The reduced gross margin is primarily due to increased installation and deployment costs due to certain early stage deployment activities.

## Liquidity and Capital Resources

For the three months ended January 31, 2017, we used in \$26.3 million in cash to fund our operating needs, as our working capital requirements of \$88.9 million exceeded our net income (adjusted for non-cash charges) of \$62.6 million. The increase in working capital was primarily driven by inventory increases of \$78.7 million. We further invested \$25.7 million in capital expenditures for the purchase of equipment, furniture and fixtures. For additional details, see the discussion below entitled, "Cash from Operations."

Our total cash, cash equivalents and investments decreased by \$89.2 million during the first three months of fiscal 2017, as a result of the cash used in to fund operations and capital expenditures described above totaling \$52.0 million, as well as the repurchase of an additional \$46.3 million in outstanding 0.875% Convertible Senior Notes due June 15, 2017. Proceeds from the issuance of equity under our employee stock purchase plans provided approximately \$9.7 million in cash during the period. We expect to repay the balance of the outstanding 2017 Notes with additional cash and investments on hand.

The following table sets forth changes in our cash and cash equivalents and investments in marketable debt securities (in thousands):

	January 31, 2017	October 31, 2016	Increase (decrease)
Cash and cash equivalents	\$ 693,853	\$ 777,615	\$ (83,762)
Short-term investments in marketable debt securities	250,056	275,248	(25,192)
Long-term investments in marketable debt securities	109,934	90,172	19,762
Total cash and cash equivalents and investments in marketable debt securities	\$ 1,053,843	\$ 1,143,035	\$ (89,192)

As more fully described in Note 22, following the end of our first quarter of fiscal 2017, we refinanced our existing Term Loans into a single term loan with an aggregate principal amount of \$400 million, maturing on January 30, 2022 (the "2022 Term Loan"). In connection with the transaction, Ciena repaid \$93.1 million of outstanding principal under the Existing Term Loans utilizing cash, cash equivalents and investments on hand.

Our principal sources of liquidity on hand include our cash and investments, which as of January 31, 2017 totaled \$1.1 billion, as well as our ABL Credit Facility. Ciena and certain of its subsidiaries are parties to a senior secured asset-based revolving credit facility (the “ABL Credit Facility”) providing for a total commitment of \$250 million with a maturity date of December 31, 2020. We principally use the ABL Credit Facility to support the issuance of letters of credit that arise in the ordinary course of our business and thereby to reduce our use of cash required to collateralize these instruments. As of January 31, 2017, letters of credit totaling \$71.3 million were collateralized by our ABL Credit Facility. There were no borrowings outstanding under the ABL Credit Facility as of January 31, 2017. Based on past performance and current expectations, we believe that cash from operations, cash and investments and other sources of liquidity, including our ABL Credit Facility, will satisfy the working capital needs, capital expenditures, the repayment of our outstanding 0.875% convertible senior notes due June 15, 2017 and other liquidity requirements associated with our operations through at least the next 12 months.

The amount of cash, cash equivalents and short-term investments held by our foreign subsidiaries was \$52.4 million as of January 31, 2017. Given this amount, we do not believe that there are significant amounts held by foreign subsidiaries in which we consider earnings to be permanently reinvested, that may not be available for U.S. operations. In the event such funds held by our foreign subsidiaries were repatriated, we believe that any resulting tax implications would not be material.

We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our operating or investment plans and may consider capital raising and other market opportunities that may be available to us. During fiscal 2017, we have repurchased \$46.3 million in aggregate principal amount of our outstanding 2017 Notes. For additional information about our convertible notes, see Note 16 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report. We regularly evaluate alternatives to manage our capital structure and reduce our debt and may continue to opportunistically repurchase our outstanding convertible notes.

#### *Cash from Operations*

The following sections set forth the components of our \$26.3 million of cash used in operating activities during the first three months of fiscal 2017:

##### *Net income (adjusted for non-cash charges)*

The following table sets forth our net income (adjusted for non-cash charges) during the period (in thousands):

	Three months ended January 31, 2017
Net income	\$ 3,861
Adjustments for non-cash charges:	
Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	16,699
Share-based compensation costs	12,825
Amortization of intangible assets	18,864
Provision for inventory excess and obsolescence	5,431
Provision for warranty	553
Other	4,452
Net income (adjusted for non-cash charges)	<u>\$ 62,685</u>

##### *Working Capital*

We used \$88.9 million of cash for working capital during the period. The following tables set forth the major components of the cash used in working capital (in thousands):

	Three months ended	
	January 31, 2017	
Cash used in accounts receivable	\$	(21,956)
Cash used in inventories		(78,749)
Cash used in prepaid expenses and other		(1,004)
Cash provided by accounts payable, accruals and other obligations		4,037
Cash provided by deferred revenue		8,737
Total cash used for working capital	\$	(88,935)

As compared to the end of fiscal 2016:

- The \$22.0 million of cash used by accounts receivable during the first three months of fiscal 2017 reflects increased sales volume at the end of the first quarter of fiscal 2017;
- The \$78.7 million of cash used in inventory during the first three months of fiscal 2017 primarily reflects increases in finished goods to meet customer delivery schedules for the beginning of the second quarter of fiscal 2017;
- Cash used in prepaid expense and other during the first three months of fiscal 2017 was \$1.0 million, primarily reflecting lower product demonstration equipment, partially offset by an increase in a financing receivable;
- The \$4.0 million of cash provided by accounts payable, accruals and other obligations during the first three months of fiscal 2017 reflects increased inventory purchases at the end of the first quarter of fiscal 2017, partially offset by the timing of bonus payments to employees under our annual cash incentive compensation plan; and
- The \$8.7 million of cash provided by deferred revenue during the first three months of fiscal 2017 represents an increase in advanced payments received from customers prior to revenue recognition.

Our days sales outstanding (DSOs) for the first three months of fiscal 2017 were 86 days and our inventory turns for the first three months of fiscal 2017 were 4.0.

#### Cash Paid for Interest

The following tables set forth the cash paid for interest during the period (in thousands):

	Three months ended	
	January 31, 2017	
0.875% Convertible Senior Notes due June 15, 2017 <sup>(1)</sup>	\$	1,013
3.75% Convertible Senior Notes, due October 15, 2018 <sup>(2)</sup>		—
4.0% Convertible Senior Notes, due December 15, 2020 <sup>(3)</sup>		3,750
Term Loan due July 15, 2019 <sup>(4)</sup>		2,342
Term Loan due April 25, 2021 <sup>(5)</sup>		2,702
Interest rate swaps <sup>(6)</sup>		1,174
ABL Credit Facility <sup>(7)</sup>		348
Capital leases		502
Cash paid during period	\$	11,831

(1) Interest on our outstanding 0.875% Convertible Senior Notes, due June 15, 2017, is payable on June 15 and December 15 of each year.

(2) Interest on our outstanding 3.75% Convertible Senior Notes, due October 15, 2018, is payable on April 15 and October 15 of each year.

(3) Interest on our outstanding 4.0% Convertible Senior Notes, due December 15, 2020, is payable on June 15 and December 15 of each year.

(4) Interest on the 2019 Term Loan was payable periodically based on the underlying market index rate selected for borrowing. The 2019 Term Loan bore interest at LIBOR plus a spread of 3.00% subject to a minimum LIBOR rate of

- 0.75%. At the end of the first quarter of fiscal 2017, prior to the term loan refinancing, the interest rate on the 2019 Term Loan was 3.78%.
- (5) Interest on the 2021 Term Loan was payable periodically based on the underlying market index rate selected for borrowing. The 2021 Term Loan bore interest at LIBOR plus a spread of 3.25% to 3.50% subject to a minimum LIBOR rate of 0.75%. At the end of the first quarter of fiscal 2017, prior to the term loan refinancing, the interest rate on the 2021 Term Loan was 4.28%.
- (6) Prior to the term loan refinancing, payments on our interest rate swaps were variable and effectively fixed the total interest rate under the 2019 Term Loan at 5.004% from July 20, 2015 through July 19, 2018 and the 2021 Term Loan at 4.62% to 4.87%, depending on applicable margin, from June 20, 2016 through June 22, 2020.
- (7) During the first three months of fiscal 2017, we utilized the ABL Credit Facility to collateralize certain standby letters of credit and paid \$0.3 million in commitment fees, interest expense and other administrative charges relating to our ABL Credit Facility.

For additional information about our convertible notes and term loans, ABL Credit Facility and interest rate swaps, see Notes 14, 16 and 17 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report. For additional information relating to the refinancing of our 2019 Term Loan and our 2021 Term Loan following the end of the first quarter of fiscal 2017, see Note 22 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

## Contractual Obligations

The following is a summary of our future minimum payments under contractual obligations as of January 31, 2017 (in thousands):

	Total	Less than one year	One to three years	Three to five years	Thereafter
Principal due at maturity on convertible notes <sup>(1)</sup>	\$ 752,385	\$ 185,258	\$ 350,000	\$ 217,127	\$ —
Principal due on term loans <sup>(2)</sup>	493,125	5,000	246,875	241,250	—
Interest due on convertible notes	57,061	21,436	28,125	7,500	—
Interest due on term loans <sup>(2)</sup>	67,910	20,140	34,737	13,033	—
Payments due under interest rate swaps <sup>(2)</sup>	7,290	3,864	3,090	336	—
Operating leases <sup>(3)</sup>	134,010	26,913	41,029	28,263	37,805
Purchase obligations <sup>(4)</sup>	265,097	265,097	—	—	—
Capital leases— equipment	4,598	1,763	2,835	—	—
Capital leases— buildings <sup>(5)</sup>	124,587	4,302	14,672	15,045	90,568
Other obligations	2,628	1,036	1,592	—	—
<b>Total <sup>(6)</sup></b>	<b>\$ 1,908,691</b>	<b>\$ 534,809</b>	<b>\$ 722,955</b>	<b>\$ 522,554</b>	<b>\$ 128,373</b>

- (1) Includes the accretion of the principal amount on our outstanding 4.0% Convertible Senior Notes, due December 15, 2020 payable at maturity at a rate of 1.85% per year compounded semi-annually, commencing December 27, 2012.
- (2) Does not include the effect of our Refinancing Agreement which aggregated our Existing Term Loans into a single with a reduced aggregate principal amount. Interest on the term loans and payments due under the interest rate swaps are variable and were calculated using the rate in effect on the balance sheet date. For additional information about our term loans and the interest rate swaps, see Notes 14, 16 and 22 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.
- (3) Does not include variable insurance, taxes, maintenance and other costs required by the applicable operating lease. These costs are not expected to have a material future impact.
- (4) Purchase obligations relate to purchase order commitments to our contract manufacturers and component suppliers for inventory. In certain instances, we are permitted to cancel, reschedule or adjust these orders. Consequently, only a portion of the amount reported above relates to firm, non-cancelable and unconditional obligations.



- (5) This represents the total minimum lease payments due for all buildings that are subject to capital lease accounting, as well as buildings that are expected to be recorded as capital leases upon the commencement of the lease term. Payment timing is based on the expected commencement of the lease term. Does not include variable insurance, taxes, maintenance and other costs required by the applicable capital lease. These costs are not expected to have a material future impact.
- (6) As of January 31, 2017, we also had approximately \$13.8 million of other long-term obligations in our Condensed Consolidated Balance Sheet for unrecognized tax positions that are not included in this table because the timing of any cash settlement with the respective tax authority, if any, cannot be reasonably estimated.

Some of our commercial commitments, including some of the future minimum payments in operating leases set forth above and certain commitments to customers, are secured by standby letters of credit collateralized under our ABL Credit Facility or restricted cash. Restricted cash balances are included in other current assets or other long-term assets depending upon the duration of the underlying letter of credit obligation. The following is a summary of our commercial commitments secured by standby letters of credit by commitment expiration date as of January 31, 2017 (in thousands):

	Total	Less than one year	One to three years	Three to five years	Thereafter
Standby letters of credit	\$ 76,526	\$ 38,584	\$ 14,748	\$ 10,767	\$ 12,427

### Off-Balance Sheet Arrangements

We do not engage in any off-balance sheet financing arrangements. In particular, we do not have any equity interests in so-called limited purpose entities, which include special purpose entities (SPEs) and structured finance entities.

### Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expense, and related disclosure of contingent assets and liabilities. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. On an ongoing basis, we reevaluate our estimates, including those related to share-based compensation, bad debts, inventories, intangible and other long-lived assets, goodwill, income taxes, warranty obligations, restructuring, derivatives and hedging, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Among other things, these estimates form the basis for judgments 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. To the extent that there are material differences between our estimates and actual results, our consolidated financial statements will be affected.

We believe that the following critical accounting policies reflect those areas where significant judgments and estimates are used in the preparation of our consolidated financial statements.

#### Revenue Recognition

We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the price to the buyer is fixed or determinable; and collectibility is reasonably assured. Customer purchase agreements and customer purchase orders are generally used to determine the existence of an arrangement. Shipping documents and evidence of customer acceptance, when applicable, are used to verify delivery or services rendered. We assess whether the price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. We assess collectibility based primarily on the creditworthiness of the customer as determined by credit checks and analysis, as well as the customer's payment history. Revenue for maintenance services is deferred and recognized ratably over the period during which the services are to be performed. Shipping and handling fees billed to customers are included in revenue, with the associated expenses included in product cost of goods sold.

Software revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is probable. In instances where final acceptance criteria of the software are specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

We limit the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or refund privileges.

Revenue for multiple element arrangements is allocated to each unit of accounting based on the relative selling price of each delivered element, with revenue recognized for each delivered element when the revenue recognition criteria are met. We determine the selling price for each deliverable based upon the selling price hierarchy for multiple-deliverable arrangements. Under this hierarchy, we use vendor-specific objective evidence ("VSOE") of selling price, if it exists, or third party evidence ("TPE") of selling price if VSOE does not exist. If neither VSOE nor TPE of selling price exists for a deliverable, we use our best estimate of selling price ("BESP") for that deliverable. For multiple element software arrangements where VSOE of undelivered maintenance does not exist, revenue for the entire arrangement is recognized over the maintenance term.

VSOE, when determinable, is established based on our pricing and discounting practices for the specific product or service when sold separately. In determining whether VSOE exists, we require that a substantial majority of the selling prices for a product or service fall within a reasonably narrow pricing range. We have generally been unable to establish TPE of selling price because our go-to-market strategy differs from that of others in our markets, and the extent of customization and differentiated features and functions varies among comparable products or services from our peers. We determine BESP based upon management-approved pricing guidelines, which consider multiple factors including the type of product or service, gross margin objectives, competitive and market conditions, and the go-to-market strategy, all of which can affect pricing practices.

Our total deferred revenue for products was \$48.8 million and \$45.2 million as of January 31, 2017 and October 31, 2016, respectively. Our services revenue is deferred and recognized ratably over the period during which the services are to be performed. Our total deferred revenue for services was \$143.2 million and \$137.7 million as of January 31, 2017 and October 31, 2016, respectively.

### ***Share-Based Compensation***

We estimate the fair value of our restricted stock unit awards based on the fair value of our common stock on the date of grant. Our outstanding restricted stock unit awards are subject to service-based vesting conditions and/or performance-based vesting conditions. We recognize the estimated fair value of service-based awards, net of estimated forfeitures, as share-based expense ratably over the vesting period on a straight-line basis. Awards with performance-based vesting conditions require the achievement of certain financial or other performance criteria or targets as a condition to the vesting, or acceleration of vesting. We recognize the estimated fair value of performance-based awards, net of estimated forfeitures, as share-based expense over the performance period, using graded vesting, which considers each performance period or tranche separately, based upon our determination of whether it is probable that the performance targets will be achieved. At the end of each reporting period, we reassess the probability of achieving the performance targets and the performance period required to meet those targets, and the expense is adjusted accordingly. Determining whether the performance targets will be achieved involves judgment, and the estimate of expense may be revised periodically based on changes in the probability of achieving the performance targets. Revisions are reflected in the period in which the estimate is changed. If any performance goals are not met, no compensation cost is ultimately recognized against that goal and, to the extent previously recognized, compensation cost is reversed.

Because share-based compensation expense is based on awards that are ultimately expected to vest, the amount of expense takes into account estimated forfeitures. We estimate forfeitures at the time of grant and revise these estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Changes in these estimates and assumptions can materially affect the measurement of estimated fair value of our share-based compensation. See Note 19 to our Condensed Consolidated Financial Statements in Item 1 of Part I of this report for information regarding our assumptions related to share-based compensation and the amount of share-based compensation expense we incurred for the periods covered in this report. As of January 31, 2017, total unrecognized compensation expense was \$95.9 million: (i) \$0.4 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 1.3 years; and (ii) \$95.5 million which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.6 years.

We recognize windfall tax benefits associated with the exercise of stock options or release of restricted stock units directly to stockholders' equity only when realized. A windfall tax benefit occurs when the actual tax benefit realized by us upon an employee's disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that we had recorded. When assessing whether a tax benefit relating to share-based compensation has been realized, we follow the "with-and-without" method. Under the with-and-without method, the windfall is considered realized and recognized for financial statement purposes only when an incremental benefit is provided after considering all other tax benefits including our net operating losses. The with-and-without method results in the windfall from share-based compensation awards always being effectively the last tax benefit to be considered. Consequently, the windfall attributable to share-based compensation will not be

considered realized in instances where our net operating loss carryover (that is unrelated to windfalls) is sufficient to offset the current year's taxable income before considering the effects of current-year windfalls.

### ***Incentive Compensation Expense***

We provide incentive-based compensation opportunities to employees through cash incentive awards and, as described in "Share-Based Compensation" above, performance-based equity awards. The expense associated with these awards is reflected as a component of employee-related expense within our operating expense and costs of goods sold, as applicable.

For fiscal 2017, the Compensation Committee has approved an annual cash incentive arrangement generally applicable to full-time employees excluding commissioned salespersons, with the aggregate amount of any awards payable dependent upon the achievement of certain financial and operational goals for fiscal 2017. Given that the awards are generally contingent upon achieving annual objectives, the payment of cash incentive awards is not expected to be made until after fiscal year-end results are finalized. As a result, the expense that we accrue for cash incentive compensation in any interim period in fiscal 2017 is based upon estimates of expected financial results for the year and expected performance against relevant operating objectives. Because assessing actual performance against many of these objectives cannot generally occur until at or near fiscal year-end, determining the amount of expense that we incur in our interim financial statements for incentive compensation involves the judgment of management. Amounts accrued are subject to change in future interim periods if actual future financial results or operational performance are better or worse than expected. We incurred an aggregate of \$15.0 million of expense in the first three months of fiscal 2017 associated with our cash incentive bonus plan for fiscal 2017.

### ***Reserve for Inventory Obsolescence***

We make estimates about future customer demand for our products when establishing the appropriate reserve for excess and obsolete inventory. We write down inventory that has become obsolete or unmarketable by an amount equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. Inventory write downs are a component of our product cost of goods sold. Upon recognition of the write down, a new lower cost basis for that inventory is established, and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. In an effort to limit our exposure to delivery delays and to satisfy customer needs we purchase inventory based on forecasted sales across our product lines. In addition, part of our research and development strategy is to promote the convergence of similar features and functionalities across our product lines. Each of these practices exposes us to the risk that our customers will not order products for which we have forecasted sales, or will purchase less than we have forecasted. Historically, we have experienced write downs due to changes in our strategic direction, discontinuance of a product and declines in market conditions. We recorded charges for excess and obsolete inventory of \$5.4 million and \$7.0 million in the first three months of fiscal 2017 and 2016, respectively. The charges in fiscal 2017 primarily were related to a decrease in the forecasted demand for certain Networking Platform products. Our inventory net of allowance for excess and obsolescence was \$284.6 million and \$211.3 million as of January 31, 2017 and October 31, 2016, respectively.

### ***Allowance for Doubtful Accounts Receivable***

Our allowance for doubtful accounts receivable is based on management's assessment, on a specific identification basis, of the collectibility of customer accounts. We perform ongoing credit evaluations of our customers and generally have not required collateral or other forms of security from customers. In determining the appropriate balance for our allowance for doubtful accounts receivable, management considers each individual customer account receivable in order to determine collectibility. In doing so, we consider creditworthiness, payment history, account activity and communication with such customer. If a customer's financial condition changes, or if actual defaults are higher than our historical experience, we may be required to take a charge for an allowance for doubtful accounts receivable which could have an adverse impact on our results of operations. Our accounts receivable, net of allowance for doubtful accounts, was \$595.7 million and \$576.2 million as of January 31, 2017 and October 31, 2016, respectively. Our allowance for doubtful accounts was \$4.0 million as of January 31, 2017 and October 31, 2016, respectively.

### ***Goodwill***

Our goodwill was generated from the acquisition of Cyan during fiscal 2015 and the acquisition of the HSPC assets from TeraXion during fiscal 2016, and is primarily related to expected synergies. Goodwill is the excess of the purchase price over the fair values assigned to the net assets acquired in a business combination. We test goodwill for impairment on an annual basis, which we have determined to be the last business day of fiscal September each year. We also test goodwill for impairment between annual tests if an event occurs or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value.

The first step in the process of assessing goodwill impairment is to compare the fair value of the reporting unit with the unit's carrying amount, including goodwill. If this test indicates that the fair value is less than the carrying value, then step two as amended by ASU No. 2017-04, which we adopted in the first quarter in fiscal 2017, requires goodwill impairments to be measured on the basis of the fair value of the reporting unit relative to the reporting unit's carrying amount. A non-cash goodwill impairment charge would have the effect of decreasing earnings or increasing losses in such period. If we are required to take a substantial impairment charge, our operating results would be materially adversely affected in such period. As of January 31, 2017 and October 31, 2016, the goodwill balance was \$267.2 million and \$267.0 million, respectively.

### ***Long-lived Assets***

Our long-lived assets include: equipment, building, furniture and fixtures; finite-lived intangible assets; in-process research and development; and maintenance spares. As of January 31, 2017 and October 31, 2016, these assets totaled \$466.5 million and \$484.7 million, net, respectively. We test long-lived assets for impairment whenever events or changes in circumstances indicate that the assets' carrying amount is not recoverable from its undiscounted cash flows. Our long-lived assets are assigned to asset groups which represent the lowest level for which we identify cash flows. We measure impairment loss as the amount by which the carrying amount of the asset or asset group exceeds its fair value.

### ***Deferred Tax Valuation Allowance***

We provide a valuation allowance for our deferred tax assets in excess of deferred tax liabilities because we have concluded that it is more likely than not that such deferred tax assets will ultimately not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income (including the reversals of deferred tax liabilities) during the periods in which those deferred tax assets will become deductible. We assess available positive and negative evidence regarding our ability to realize our deferred tax assets and record a valuation allowance when it is more likely than not that deferred tax assets will not be realized. To form a conclusion, management considers our recent financial results and trends and makes judgments and estimates related to projections of profitability, the timing and extent of the use of net operating loss carryforwards, and tax planning strategies. At January 31, 2017, we were not in a three-year cumulative loss position. However, management determined that a valuation allowance is still necessary, due to, among other things, the relatively low level of cumulative pre-tax income during this period — cumulative 12-quarter profit was only recently achieved in the second half of fiscal 2016 — and our lengthy history of operating losses. We will continue to evaluate future financial performance to determine whether such profitability is both sustainable and significant enough to provide sufficient evidence to support reversal of all or a portion of the valuation allowance. Any future release of valuation allowance may be recorded as a tax benefit increasing net income or as an adjustment to paid-in capital, based on tax ordering requirements. The valuation allowance balance at January 31, 2017 was \$1.5 billion.

### ***Warranty***

Our liability for product warranties, included in other accrued liabilities, was \$48.7 million and \$52.3 million as of January 31, 2017 and October 31, 2016, respectively. Our products are generally covered by a warranty for periods ranging from one to five years. We accrue for warranty costs as part of our cost of goods sold based on associated material costs, technical support labor costs and associated overhead. Material cost is estimated based primarily upon historical trends in the volume of product returns within the warranty period and the cost to repair or replace the equipment. Technical support labor cost is estimated based primarily upon historical trends and the cost to support the customer cases within the warranty period. The provision for product warranties was \$0.6 million and \$5.0 million for the first three months of fiscal 2017 and 2016, respectively. See Note 13 to the Condensed Consolidated Financial Statements included in Item 1 of Part I of this report. The provision for warranty claims may fluctuate on a quarterly basis depending upon the mix of products and customers in that period. If actual product failure rates, material replacement costs, service or labor costs differ from our estimates, revisions to the estimated warranty provision would be required. An increase in warranty claims or the related costs associated with satisfying our warranty obligations could increase our cost of sales and negatively affect our gross margin.

### ***Item 3. Quantitative and Qualitative Disclosures About Market Risk***

The following discussion about our market risk disclosures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates.

***Interest Rate Sensitivity.*** We currently hold investments in U.S. government obligations and commercial paper with varying maturities. See Notes 5 and 6 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report for information relating to investments and fair value. These investments are sensitive to interest rate movements, and

their fair value will decline as interest rates rise and increase as interest rates decline. The estimated impact on these investments of a 100 basis point (1.0%) increase in interest rates across the yield curve from rates in effect as of the balance sheet date would be a \$2.8 million decline in value.

Our earnings and cash flows from operations may be exposed to changes in interest rates because of the floating rate of interest in our term loans.

Following the end of our first quarter of fiscal 2017, on January 30, 2017, we entered into a Refinancing Agreement which aggregated our 2019 Term Loan and 2021 Term Loan into our 2022 Term Loan, a single term loan with a reduced aggregate principal amount. See Note 22 to our Condensed Consolidated Financial Statements for information relating to this transaction. The 2022 Term Loan bears interest at LIBOR plus a spread of 2.5%, subject to a minimum LIBOR rate of 0.75%. During February 2017, we entered into interest rate swap arrangements ("interest rate swaps") that combined with remaining interest rates swaps mentioned below, fix the total interest rate under the 2022 Term Loan at 4.5% from February 2017 through July 2018. Additionally, these swaps fix the interest rate for the majority of the principal under the 2022 Term Loan from July 2018 through January 2021.

Prior to the Refinancing Agreement transaction above, the 2019 Term Loan bore interest at LIBOR plus a spread of 3.00% subject to a minimum LIBOR rate of 0.75% and the 2021 Term Loan bore interest at LIBOR plus a spread ranging from 3.25% to 3.50% subject to a minimum LIBOR rate of 0.75%, with the actual spread determined according to our total net leverage ratio. During fiscal 2014, we entered into interest rate swaps that fixed the total interest rate under the 2019 Term Loan at 5.004%, for the period commencing on July 20, 2015 through July 19, 2018. During fiscal 2016, we entered into interest rate swaps that fixed the total interest rate under the 2021 Term Loan at 4.62% to 4.87%, depending on the applicable spread, for the period commencing on June 20, 2016 through June 22, 2020.

As such, a 100 basis point (1.0%) increase in the LIBOR rate as of our most recent LIBOR rate setting would have an immaterial impact in annualized interest expense on our 2022 Term Loan as recognized in our Condensed Consolidated Financial Statements.

*Foreign Currency Exchange Risk.* As a global concern, our business and results of operations are exposed to and can be impacted by movements in foreign currency exchange rates. For example, the announcement of the United Kingdom (UK) referendum in which voters approved an exit from the European Union (EU), commonly referred to as "Brexit," has previously caused, and may continue to cause, significant volatility in currency exchange rate fluctuations. Due to our global sales presence, some of our sales transactions and revenue are non-U.S. Dollar denominated, with the Canadian Dollar, Euro and Brazilian Real being our most significant foreign currency revenue exposures. If the U.S. Dollar strengthens against these currencies, our revenue for these transactions reported in U.S. Dollars would decline. For our U.S. Dollar denominated sales, an increase in the value of the U.S. Dollar would increase the real costs of our products to customers in markets outside the United States, which could impact our competitive position. During the first three months of fiscal 2017, approximately 18.5% of revenue was non-U.S. Dollar denominated. During the first three months of fiscal 2017 as compared to the three months of fiscal 2016, the U.S. Dollar strengthened against the Euro and British Pound, primarily offset by weakening against the Canadian Dollar, Japanese Yen and Brazilian Real, consequently, our revenue reported in U.S. Dollars was slightly reduced by approximately \$1.1 million or 0.2%. As they relate to costs of goods sold, employee-related and facilities costs associated with certain manufacturing-related operations in Canada represent our primary exposure to foreign currency exchange risk.

With regard to operating expense, our primary exposure to foreign currency exchange risk relates to the Canadian Dollar, British Pound, Euro, Indian Rupee and Brazilian Real. During the first three months of fiscal 2017, approximately 51% of our operating expense was non-U.S. Dollar denominated. If these or other currencies strengthen, costs reported in U.S. Dollars will increase. During the first three months of fiscal 2017, research and development expense was adversely affected by approximately \$1.8 million, net of hedging, primarily due to the weakening of the U.S. Dollar in relation to the Canadian Dollar in comparison to the first three months of fiscal 2016.

From time to time, we use foreign currency forward contracts to reduce variability in certain forecasted non-U.S. Dollar denominated cash flows. Generally, these derivatives have maturities of 12 months or less and are designated as cash flow hedges. At the inception of the cash flow hedge, and on an ongoing basis, we assess whether the forward contract has been effective in offsetting changes in cash flows attributable to the hedged risk during the hedging period. The effective portion of the derivative's net gain or loss is initially reported as a component of accumulated other comprehensive income (loss) and, upon the occurrence of the forecasted transaction, is subsequently reclassified to the line item in the Condensed Consolidated Statement of Operations to which the hedged transaction relates. Any net gain or loss associated with the ineffectiveness of the hedging instrument is reported in interest and other income (loss), net.

Ciena Corporation, as the U.S. parent entity, uses the U.S. Dollar as its functional currency; however some of our foreign branch offices and subsidiaries use the local currency as their functional currency. During the first three months of fiscal 2017, we recorded \$2.4 million in foreign currency exchange losses, as a result of monetary assets and liabilities that were transacted in a currency other than the entity's functional currency, and the re-measurement adjustments were recorded in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. From time to time, we use foreign currency forwards to hedge these balance sheet exposures. These forwards are not designated as hedges for accounting purposes and any net gain or loss associated with these derivatives is reported in interest and other income (loss), net on the Condensed Consolidated Statement of Operations. During first three months of fiscal 2017, we recorded gains of \$1.0 million from these derivatives. See Note 2, Note 4 and Note 14 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

*Convertible Notes Outstanding.* The fair market value of each of our outstanding issues of convertible notes is subject to interest rate and market price risk due to the convertible feature of the notes and other factors. Generally the fair market value of fixed interest rate debt will increase as interest rates fall and decrease as interest rates rise. The fair market value of the notes may also increase as the market price of our stock rises or due to increased volatility in our stock price, and decrease as the market price of our stock falls or due to decreased volatility in our stock price. Interest rate and market value changes affect the fair market value of the notes, and may affect the prices at which we would be able to repurchase such notes were we to do so. These changes do not impact our financial position, cash flows or results of operations. For additional information on the fair value of our outstanding notes, see Note 16 to our Condensed Consolidated Financial Statements included in Item 1 of Part I of this report.

#### **Item 4. Controls and Procedures**

##### **Disclosure Controls and Procedures**

As of the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, 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). Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

##### **Changes in Internal Control over Financial Reporting**

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **PART II — OTHER INFORMATION**

#### **Item 1. Legal Proceedings**

From May 15 through June 3, 2015, five separate putative class action lawsuits in connection with Ciena's then-pending acquisition of Cyan, Inc. ("Cyan") were filed in the Court of Chancery of the State of Delaware. On June 23, 2015, each of these lawsuits was consolidated into a single case captioned In Re Cyan, Inc. Shareholder Litigation, Consol. C.A. No. 11027-CB. On July 9, 2015, the plaintiffs filed a verified amended class action complaint, which named as defendants Ciena, a Ciena subsidiary created solely for the purpose of effecting the acquisition ("Merger Sub"), and the members of Cyan's board of directors. On August 5, 2015, the defendants filed motions to dismiss the amended complaint. On October 1, 2015, the plaintiffs filed a second amended complaint which named as defendants the members of Cyan's board of directors. Cyan, Ciena, and Merger Sub were not named as defendants. On July 15, 2016, the plaintiffs filed a third amended complaint, which generally alleges that the Cyan board members breached their fiduciary duties by engaging in a conflicted and unfair sales process, failing to maximize stockholder value in the acquisition, taking steps to preclude competitive bidding, and failing to disclose material information necessary for stockholders to make an informed decision regarding the acquisition. The third amended complaint seeks (i) a declaration that the plaintiffs are entitled to a quasi-appraisal remedy, (ii) rescissory damages, (iii) recovery through an accounting of all damages caused as a result of the alleged breaches of fiduciary duties, (iv) compensatory damages, and (v) costs including attorneys' fees and experts' fees. On August 5, 2016, the defendants filed a motion to dismiss the third amended complaint. We believe that the consolidated lawsuit is without merit and intend to defend it vigorously.

As a result of our acquisition of Cyan in August 2015, we became a defendant in a securities class action lawsuit. On April 1, 2014, a purported stockholder class action lawsuit was filed in the Superior Court of California, County of San Francisco,

against Cyan, the members of Cyan's board of directors, Cyan's former Chief Financial Officer, and the underwriters of Cyan's initial public offering. On April 30, 2014, a substantially similar lawsuit was filed in the same court against the same defendants. The two cases have been consolidated as Beaver County Employees Retirement Fund, et al. v. Cyan, Inc. et al., Case No. CGC-14-538355. The consolidated complaint alleges violations of federal securities laws on behalf of a purported class consisting of purchasers of Cyan's common stock pursuant or traceable to the registration statement and prospectus for Cyan's initial public offering in April 2013, and seeks unspecified compensatory damages and other relief. On May 19, 2015, the proposed class was certified. On August 25, 2015, the defendants filed a motion for judgment on the pleadings based on an alleged lack of subject matter jurisdiction over the case, which motion was denied on October 23, 2015. On May 24, 2016, the defendants filed a petition for a writ of certiorari on the jurisdiction issue with the United States Supreme Court, to which the plaintiffs filed a brief in opposition. On November 18, 2016, the parties each filed motions for summary judgment. We believe that the consolidated lawsuit is without merit and intend to defend it vigorously.

On May 29, 2008, Graywire, LLC filed a complaint in the United States District Court for the Northern District of Georgia against Ciena and four other defendants, alleging, among other things, that certain of the parties' products infringe U.S. Patent 6,542,673 (the "'673 Patent'"), relating to an identifier system and components for optical assemblies. The complaint seeks injunctive relief and damages. In July 2009, upon request of Ciena and certain other defendants, the U.S. Patent and Trademark Office ("PTO") granted the defendants' inter partes application for reexamination with respect to certain claims of the '673 Patent, and the district court granted the defendants' motion to stay the case pending reexamination of all of the patents-in-suit. In December 2010, the PTO confirmed the validity of some claims and rejected the validity of other claims of the '673 Patent, to which Ciena and other defendants filed an appeal. On March 16, 2012, the PTO on appeal rejected multiple claims of the '673 Patent, including the two claims on which Ciena is alleged to infringe. Subsequently, the plaintiff requested a reopening of the prosecution of the '673 Patent, which request was denied by the PTO on April 29, 2013. Thereafter, on May 28, 2013, the plaintiff filed an amendment with the PTO in which it canceled the claims of the '673 Patent on which Ciena is alleged to infringe. The case currently remains stayed, and there can be no assurance as to whether or when the stay will be lifted.

In addition to the matters described above, we are subject to various legal proceedings and claims arising in the ordinary course of business, including claims against third parties that may involve contractual indemnification obligations on the part of Ciena. We do not expect that the ultimate costs to resolve these matters will have a material effect on our results of operations, financial position or cash flows.

### **Item 1A. Risk Factors**

Investing in our securities involves a high degree of risk. In addition to the other information contained in this report, you should consider the following risk factors before investing in our securities.

#### **Our revenue and operating results can fluctuate significantly and unpredictably from quarter to quarter.**

Our revenue and results of operations can fluctuate significantly and unpredictably from quarter to quarter. Our budgeted expense levels are based on our visibility into customer spending plans and our projections of future revenue and gross margin. Customer spending levels are uncertain and subject to change, and reductions in our expense levels can take significant time to implement. A significant portion of our quarterly revenue is generated from customer orders received in that same quarter (which we refer to as "book to revenue"). Increased reliance on book to revenue introduces a number of risks, including the inherent difficulty in forecasting the amount and timing of book to revenue in any given quarter, and may increase the likelihood of fluctuations in our results. Accordingly, our revenue for a particular quarter is difficult to predict, and a shortfall in expected orders in a given quarter can materially adversely affect our revenue and results of operations for that quarter or future quarterly periods. Additional factors that contribute to fluctuations in our revenue and operating results include:

- broader macroeconomic conditions, including weakness and volatility in global markets, that affect our customers;
- changes in capital spending by customers, in particular our large communications service provider customers;
- changes in networking strategies;
- order timing, volume and cancellations;
- backlog levels;
- the level of competition and pricing pressure in our industry;
- the impact of commercial concessions or unfavorable commercial terms required to maintain incumbency or secure new opportunities with key customers;
- our level of success in achieving cost reductions and improved efficiencies in our supply chain;
- the pace and impact of price erosion that we regularly encounter in our markets;

- our incurrence of start-up costs, including lower margin phases of projects required to support initial deployments, gain new customers or enter new markets;
- the timing of revenue recognition on sales, particularly relating to large orders;
- the mix of revenue by product segment, geography and customer in any particular quarter;
- installation service availability and readiness of customer sites;
- availability of components and manufacturing capacity;
- adverse impact of foreign exchange; and
- seasonal effects in our business.

Quarterly fluctuations from these and other factors may also cause our results of operations to fall short of or to exceed significantly the expectations of securities analysts or investors, which may cause volatility in our stock price.

**A small number of customers, including large communications service providers, account for a significant portion of our revenue. The loss of any of these customers or a significant reduction in their spending could have a material adverse effect on our business and results of operations.**

While our customer base has diversified in recent years to include network operators in additional customer segments and geographies, a significant portion of our revenue remains concentrated among a small number of customers, including large communications service providers. For example, AT&T accounted for approximately 18.4% of fiscal 2016 revenue, and our ten largest customers contributed 51.1% of fiscal 2016 revenue. Consequently, our financial results are closely correlated with the spending of a relatively small number of customers. Our business and results of operations can be materially adversely impacted by reductions in spending or capital expenditure budgets by our largest customers. A number of our large service provider customers, including AT&T, from which we experienced a decline in annual revenue during fiscal 2016, have announced various procurement initiatives or efforts to reduce capital expenditures on network infrastructure in future periods. Moreover, because we do not have long-term contracts that obligate AT&T or our other customers to purchase any minimum or guaranteed order volumes, and customers often have the right to modify or cancel orders, there can be no assurance as to customer spending levels, which can be unpredictable, and sales to any customer could significantly decrease or cease at any time.

Because a number of our largest customers are communications service providers, our business and results of operations can be significantly affected by market, industry or competitive dynamics adversely affecting this segment. Our communications service provider customers face a rapidly shifting competitive landscape as cloud service operators, "over-the-top" and other content providers challenge their traditional business models and network infrastructures. Moreover, a number of our communications service provider customers, including AT&T, Verizon and Centurylink, have recently announced significant acquisition transactions. Such transactions have in the past, and may in the future, result in spending delays or deferrals, or changes in preferred vendors, as the integration of combined network infrastructures proceed and procurement strategies are determined. There can be no assurance that we will be able to maintain the revenue levels we have previously achieved with customers, including our communications service provider customers. The loss of any of our largest customers, or a significant reduction in their spending, could have a material adverse effect on our business and results of operations.

**We face intense competition that could hurt our sales and results of operations, and we expect the competitive landscape in which we operate to continue to broaden to include additional solutions providers.**

We face an intense competitive market for sales of communications networking equipment, software and services. Competition is intense on a global basis, as we and our competitors aggressively seek to capture market share and displace incumbent equipment vendors. A small number of very large companies have historically dominated our industry, many of which have substantially greater financial and marketing resources, broader product offerings, and more established relationships with service providers and other customer segments than we do. Because of their scale and resources, they may be perceived to be a better fit for the procurement or network operating and management strategies of large service providers. Moreover, there has been a trend toward vendor consolidation by certain customers in our markets, which we believe may bolster the resources and advantages of larger, more diversified competitors. We also compete with a number of smaller companies that provide significant competition for a specific product, application, customer segment or geographic market. Due to the narrower focus of their efforts, these competitors may achieve commercial availability of their products more quickly or may be more attractive to customers in a particular product niche.

Generally, competition in our markets is based on any one or a combination of the following factors:

- product functionality, speed, capacity, scalability and performance;
- price and total cost of ownership of our solutions;



- incumbency and strength of existing business relationships;
- ability to offer comprehensive networking solutions, consisting of equipment, software and network consulting services;
- ability to adapt to customer needs and accommodate different consumption models;
- product development plans and the ability to meet customers' immediate and future network requirements;
- flexibility and openness of platforms, including ease of integration, interoperability and integrated software programmability and management;
- space and power considerations;
- manufacturing and lead-time capability; and
- services and support capabilities.

In an effort to maintain our incumbency or secure new customer opportunities, we have in the past, and may in the future, agree to aggressive pricing, commercial concessions and other unfavorable terms that result in low or negative gross margins on a particular order or group of orders. Competition can also result in commercial and legal terms and conditions that place a disproportionate amount of risk on us.

We expect the competitive landscape in which we operate to continue to broaden and to increase, as network operators pursue a diverse range of consumption models and network strategies. As these changes occur, we expect that our business will compete more directly with additional networking solution suppliers, including IP router vendors, data center switch providers and other suppliers or integrators of networking technology. In addition, as we seek increased customer adoption of our Blue Planet software platform, and network operator demands for software programmability, management and control increase, we expect to compete more directly with software vendors and information technology vendors or integrators of these solutions. We may also face competition from system and component vendors, including those in our supply chain, who develop networking products based on off-the-shelf or commoditized hardware technology, referred to as "white box" hardware; particularly where a customer's network strategy seeks to emphasize deployment of such product offerings or adopt a disaggregated approach to the procurement of hardware and software. The expansion of our competitive landscape, and entry of new competitors into our markets and customers, may adversely impact our business and results of operations. If competitive pressures increase, or if we fail to compete successfully in our markets, our business and results of operations could suffer.

**Our business and operating results could be adversely affected by unfavorable changes in macroeconomic and market conditions and reductions in the level of spending by customers in response to these conditions.**

Our business and operating results, which depend significantly on general economic conditions and demand for our products and services, could be materially adversely affected by unfavorable or uncertain macroeconomic and market conditions, globally or with respect to a particular region or country where we operate. Global financial markets experienced periods of significant volatility and instability during fiscal 2016. Broad macroeconomic weakness and market volatility have previously resulted in sustained periods of decreased demand for our products and services, which has adversely affected our operating results. Macroeconomic and market conditions could be adversely affected by a variety of political, economic or other factors in the United States and international markets, that could in turn adversely affect spending levels of our customers and their end users, and could create volatility or deteriorating conditions in the markets in which we operate. Macroeconomic uncertainty or weakness could result in:

- reductions in customer spending and delay, deferral or cancellation of network infrastructure initiatives;
- increased competition for fewer network projects and sales opportunities;
- increased pricing pressure that may adversely affect revenue, gross margin and profitability;
- difficulty forecasting operating results and making decisions about budgeting, planning and future investments;
- increased overhead and production costs as a percentage of revenue;
- tightening of credit markets needed to fund capital expenditures by us or our customers;
- customer financial difficulty, including longer collection cycles and difficulties collecting accounts receivable or write-offs of receivables; and
- increased risk of charges relating to excess and obsolete inventories and the write-off of other intangible assets.

Reductions in customer spending in response to unfavorable or uncertain macroeconomic and market conditions, globally or with respect to a particular region where we operate, would adversely affect our business, results of operations and financial condition.

**Our reliance upon third party component suppliers, including sole and limited source suppliers, exposes our business to additional risk and could limit our sales, increase our costs and harm our customer relationships.**

We maintain a global sourcing strategy and depend on third party suppliers in international markets for support in our product design and development, and in the sourcing of key product components and subsystems. Our products include optical and electronic components for which reliable, high-volume supply is often available only from sole or limited sources. Increases in market demand or scarcity of resources or manufacturing capability have resulted, and may in the future result, in shortages in availability of important components for our solutions, product allocation challenges, deployment delays and increased lead times. We are exposed to risks relating to unfavorable economic conditions or other similar challenges affecting the businesses and results of operations of our component providers that can affect their liquidity levels, ability to continue investing in their businesses, ability to meet development commitments and manufacturing capability. These and other challenges affecting our suppliers could expose our business to increased costs, loss or lack of supply, or discontinuation of components that can result in lost revenue, additional product costs, increased lead times and deployment delays that could harm our business and customer relationships. We do not have any guarantees of supply from these third parties, and in certain cases are relying upon temporary commercial arrangements or standard purchase orders. As a result, there is no assurance that we will be able to secure the components or subsystems that we require, in sufficient quantity and quality, and on reasonable terms. Moreover, our access to necessary components could be adversely impacted by competition from component vendors, including those in our supply chain, who develop competing networking products based on off-the-shelf or commoditized hardware technology, referred to as “white box” hardware. The loss of a source of supply, or lack of sufficient availability of key components, could require that we locate an alternate source or redesign our products, either of which could result in business interruption, increased costs and negatively affect our product gross margin and results of operations. Our business and results of operations would be negatively affected if we were to experience any significant disruption or difficulties with key suppliers affecting the price, quality, availability or timely delivery of required components.

**Investment of research and development resources in communications networking technologies for which there is not an adequate matching market opportunity, or failure to sufficiently or timely invest in technologies for which there is market demand, would adversely affect our revenue and profitability.**

The market for communications networking hardware and software solutions is characterized by rapidly evolving technologies, changes in market demand and increasing adoption of software-based networking solutions. We continually invest in research and development to sustain or enhance our existing hardware and software solutions and to develop or acquire new technologies including new software platforms. There is often a lengthy period between commencing these development initiatives and bringing new or improved solutions to market. During this time, technology preferences, customer demand and the markets for our solutions, or those introduced by our competitors, may move in directions that we had not anticipated. There is no guarantee that our new products, including our Blue Planet software platform, or enhancements to other solutions will achieve market acceptance or that the timing of market adoption will be as predicted. As a result, there is a significant possibility that some of our development decisions, including significant expenditures on acquisitions, research and development costs, or investments in technologies, will not meet our expectations, and that our investment in some projects will be unprofitable. There is also a possibility that we may miss a market opportunity because we failed to invest, or invested too late, in a technology, product or enhancement sought by our customers. Changes in market demand or investment priorities may also cause us to discontinue existing or planned development for new products or features, which can have a disruptive effect on our relationships with customers. If we fail to make the right investments or fail to make them at the right time, our competitive position may suffer, and our revenue and profitability could be adversely affected.

**Network equipment sales to communications service providers, Web-scale providers and other large customers often involve lengthy sales cycles and protracted contract negotiations that may require us to agree to commercial terms or conditions that negatively affect pricing, risk allocation, payment and the timing of revenue recognition.**

Our sales initiatives, particularly with communications service providers, Web-scale providers and other large customers, often involve lengthy sales cycles. These selling efforts often involve a significant commitment of time and resources by us and our customers that may include extensive product testing, laboratory or network certification, network or region-specific product certification and homologation requirements for deployment in networks. Even after a customer awards its business to us or decides to purchase our solutions, the length of deployment time can vary depending upon the customer’s schedule, site readiness, the size of the network deployment, the degree of custom configuration required and other factors. Additionally, these sales also often involve protracted and sometimes difficult contract negotiations in which we may deem it necessary to agree to unfavorable contractual or commercial terms that adversely affect pricing, expose us to penalties for delays or non-performance, and require us to assume a disproportionate amount of risk. To maintain incumbency with key customers for existing and future business opportunities, we may be required to offer discounted pricing, make commercial concessions or offer less favorable terms as compared to our historical business arrangements with these customers. We may also be requested

to provide deferred payment terms, vendor or third-party financing or other alternative purchase structures that extend the timing of payment and revenue recognition. Alternatively, customers may insist upon terms and conditions that we deem too onerous or not in our best interest, and we may be unable to reach a commercial agreement. As a result, we may incur substantial expense and devote time and resources to potential sales opportunities that never materialize or result in lower than anticipated sales.

**If the market for software solutions does not evolve in the way we anticipate or if customers do not adopt our Blue Planet solutions, we may not be able to realize a key part of our business strategy and the intended benefits of our acquisition of Cyan.**

A key part of our business strategy and ability to derive the anticipated benefits of our acquisition of Cyan will depend on our ability to gain market adoption for our Blue Planet software platform. If the markets relating to software solutions, including SDN, NFV, service orchestration and software management and control, do not develop as we anticipate, or if we are unable to increase market awareness and adoption of our Blue Planet solutions as the preferred solution within those markets, demand for our Blue Planet solutions may not grow. As a result, the success of our Cyan acquisition and our long-term success in the software market will depend to a significant extent on potential customers recognizing the benefits of our next-generation Blue Planet software solutions, and the willingness of service providers and high-performance data center and other network operators to increase their use of SDN and NFV solutions in their networks. The market for these solutions is at an early stage, and it is difficult to predict important trends, including the potential growth, if any, of this market. If the market for these software solutions does not evolve in the way we anticipate or if customers do not adopt our solutions, we may not be able to increase sales of our Blue Planet platform, and our revenue and profitability would be adversely affected. If we are not able to successfully achieve these objectives, certain of the anticipated benefits of the merger may not be realized fully, or may take longer to realize than expected.

**Changes in networking or procurement strategies among our customers could adversely affect our business, competitive position and results of operations.**

Growing bandwidth demands, network operator efforts to reduce costs and requirements for enhanced network programmability and automation are causing network operators to consider a diverse range of approaches to the design and procurement of network infrastructure. We refer to these different approaches as “consumption models.” These consumption models can include: the traditional systems procurement of fully integrated solutions including hardware, software and services from the same vendor; the procurement of a fully integrated hardware solution from one vendor with the separate use of a network operator’s own SDN-based control; the procurement of an integrated photonic line system with open interfaces from one vendor and the separate or “disaggregated” procurement of modem technology from a different vendor; or the use of published reference designs and open source specifications for the procurement of off-the-shelf or commoditized hardware (often referred to as “white box” hardware) to be used with open source software. We believe that network operators will continue to consider a variety of different consumption models. Many of these approaches are in their very early stages of development and evaluation, and the types of models and their levels of adoption will depend in significant part on the nature of the operator and its particular network and network applications. Among our customers, AT&T is pursuing network strategies that emphasize enhanced software programmability, management and control of networks, and deployment of “white box” hardware. Other network operator customers, including Web-scale providers, are playing a leading role in the transition to software-defined networking or the standardization of communications network solutions. The potential for different approaches to the procurement of networking infrastructure will require network operators and vendors to assess and possibly broaden their existing commercial models over time. Adoption of a range of consumption models may alter and broaden our competitive landscape to include other technology vendors, including component vendors and software vendors. If we are unable to offer attractive solutions that accommodate the range of consumption models ultimately adopted by our customers or within our markets, or if we are unable to modify or existing commercial model accordingly, our business, competitive position and results of operations could be adversely affected.

**We may experience delays in the development and production of our products that may negatively affect our competitive position and business.**

Our hardware and software networking solutions, including our Blue Planet software platform, are based on complex technology, and we can experience unanticipated delays in developing, manufacturing and introducing these solutions to market. Delays in product development efforts by us or our supply chain may affect our reputation with customers, affect our ability to seize market opportunities and impact the timing and level of demand for our products. The development of new technologies may increase the complexity of supply chain management or require the acquisition, licensing or interworking with the technology of third parties. As a result, each step in the development cycle of our products presents serious risks of failure, rework or delay, any one of which could adversely affect the cost-effectiveness and timely development of our

products. We may encounter delays relating to engineering development activities and software, design, sourcing and manufacture of critical components, and the development of prototypes. In addition, intellectual property disputes, failure of critical design elements, and other execution risks may delay or even prevent the release of these products. If we do not successfully develop or produce products in a timely manner, our competitive position may suffer, and our business, financial condition and results of operations could be harmed.

**Product performance problems and undetected errors affecting the performance, reliability or security of our products could damage our business reputation and negatively affect our results of operations.**

The development and production of sophisticated hardware and software for communications network equipment is highly complex. Some of our products can be fully tested only when deployed in communications networks or when carrying traffic with other equipment, and software products may contain bugs that can interfere with expected performance. As a result, undetected defects or errors, and product quality, interoperability, reliability and performance problems are often more acute for initial deployments of new products and product enhancements. We have recently launched, and are in the process of launching, a number of new hardware and software platforms, including our Blue Planet software platform, and other solutions targeting metro network applications and data center interconnect. Unanticipated product performance problems can relate to the design, manufacturing, installation, operation and interoperability of our products. Undetected errors can also arise as a result of defects in components, software or manufacturing, installation or maintenance services supplied by third parties, and technology acquired from or licensed by third parties. From time to time we have had to replace certain components, provide software remedies or other remediation in response to defects or bugs, and we may have to do so again in the future. There can be no assurance that such remediation would not have a material impact on our business and results of operations. In addition, unanticipated security vulnerabilities relating to our products or the activities of our supply chain, including any actual or perceived exposure of our solutions to malicious software or cyber-attacks, could adversely affect our business and reputation. Product performance, reliability, security and quality problems can negatively affect our business, and may result in some or all of the following effects:

- damage to our reputation, declining sales and order cancellations;
- increased costs to remediate defects or replace products;
- payment of liquidated damages, contractual or similar penalties, or other claims for performance failures or delays;
- increased warranty expense or estimates resulting from higher failure rates, additional field service obligations or other rework costs related to defects;
- increased inventory obsolescence;
- costs and claims that may not be covered by liability insurance coverage or recoverable from third parties; and
- delays in recognizing revenue or collecting accounts receivable.

These and other consequences relating to undetected errors affecting the quality, reliability and security of our products could negatively affect our business and results of operations.

**Direct or indirect efforts to increase our sales and market share in targeted international markets and customer segments may be unsuccessful.**

Part of our business and growth strategy is to expand our geographic reach and increase market share in international markets. This strategy includes selling to Web-scale network operators with global operations as well as to service provider customers in additional geographies, including Asia-Pacific and India. This diversification of our markets and customer base has been a significant component of the growth of our business. Our efforts to continue to increase our sales and market share in international markets may ultimately be unsuccessful, and failure to do so could limit our growth and could harm our results of operations.

In addition, in order to sell our products into new geographic markets, diversify our customer base and broaden the application for our solutions in communications networks, we continue to promote sales initiatives and foster strategic channel sales relationships. Specifically, we are targeting sales opportunities around the world with Web-scale providers, cloud infrastructure providers, communications service providers, enterprises, wireless operators, cable and multiservice operators, submarine network operators, research and education institutions, and federal, state and local governments. To succeed in some of these geographic markets and customer segments, we often need to leverage strategic sales channels and distribution arrangements, and we expect these relationships to be an important part of our business. There can be no assurance we will realize the expected benefits of these third party sales relationships. We compete in certain business areas with our third party channel partners or may have divergent interests. Our efforts to manage and drive the intended benefits of such sales relationships may ultimately be unsuccessful, and difficulties selling through third party channels could limit our growth and could harm our results of operations.

**The international scale of our sales and operations exposes us to additional risk and expense that could adversely affect our results of operations.**

We market, sell and service our products globally, maintain personnel in numerous countries, and rely upon a global supply chain for sourcing important components and manufacturing our products. Our international sales and operations are subject to inherent risks, including:

- the impact of economic conditions in countries outside the United States;
- effects of adverse changes in currency exchange rates;
- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulty and cost of staffing and managing foreign operations;
- less protection for intellectual property rights in some countries;
- tax and customs changes that adversely impact our global sourcing strategy, manufacturing practices, transfer-pricing, or competitiveness of our products for global sales;
- social, political and economic instability;
- compliance with certain testing, homologation or customization of products to conform to local standards;
- higher incidence of corruption or unethical business practices that could expose us to liability or damage our reputation;
- significant changes to free trade agreements, trade protection measures, tariffs, export compliance, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements; and
- natural disasters, epidemics and acts of war or terrorism.

Our international operations are also subject to complex foreign and U.S. laws and regulations, including anti-corruption laws, antitrust or competition laws, environmental regulations, and data privacy laws, among others. Violations of these laws and regulations could result in fines and penalties, criminal sanctions against us or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in certain geographies, and significant harm to our business reputation. There can be no assurance that any individual employee, contractor, agent or other business partner will not violate these legal requirements or our policies to mitigate these risks. Additionally, the costs of complying with these laws (including the costs of investigations, auditing and monitoring) could also adversely affect our current or future business.

The U.S. government has indicated a willingness to revise, renegotiate, or terminate various, existing multilateral trade agreements and to impose new taxes on certain goods imported into the U.S. Because we rely upon a global sourcing strategy and third party contract manufacturers in markets outside of the U.S. to perform substantially all of the manufacturing of our products, such steps, if adopted, could adversely impact our business and operations, and may make our products less competitive in the U.S. and other markets. At this time, it remains unclear what actions, if any, the U.S. government will take with respect to such trade agreements, tax policy related to international commerce, or imposition of tariffs on goods imported into the U.S. There can be no assurance that any future legislation or executive action in the U.S. relating to tax policy and trade regulation would not adversely affect our business, operations and financial results.

The success of our international sales and operations will depend, in large part, on our ability to anticipate and manage effectively these risks. Our failure to manage any of these risks could harm our international operations, reduce our international sales, and could give rise to liabilities, costs or other business difficulties that could adversely affect our operations and financial results.

**We may be required to write off significant amounts of inventory as a result of our inventory purchase practices, the obsolescence of product lines or unfavorable market or contractual conditions.**

To avoid delays and meet customer demand for shorter delivery terms, we place orders with our contract manufacturers and component suppliers based on forecasts of customer demand. In a number of cases these suppliers may require longer lead times for fulfillment than we have with our customers. Thus, our practice of buying inventory based on forecasted demand exposes us to the risk that our customers ultimately may not order the products we have forecast or will purchase fewer products than forecast. As a result, we may purchase inventory in anticipation of sales that ultimately do not occur. We regularly incur, on a quarterly basis, costs related to our excess or obsolete inventory. Market uncertainty can also limit our visibility into customer spending plans and compound the difficulty of forecasting inventory at appropriate levels. Moreover, our customer purchase agreements generally do not include any minimum purchase commitment. Also, customers often have the right to modify, reduce or cancel purchase quantities, and spending levels can be uncertain and subject to significant fluctuation. Our products are highly configurable, and certain new products have overlapping feature sets or application as existing products. Accordingly, it is increasingly possible that customers may forgo purchases of certain products we have inventoried in favor of a similar, newer product. We may also be exposed to the risk of inventory write-offs as a result of certain supply chain initiatives, including consolidation and transfer of key manufacturing activities. If we are required to write off or

write down a significant amount of inventory, our results of operations for the applicable period would be materially adversely affected.

**Our intellectual property rights may be difficult and costly to enforce.**

We generally rely on a combination of patents, copyrights, trademarks and trade secret laws to establish and maintain proprietary rights in our products and technology. Although we have been issued numerous patents and other patent applications are currently pending, there can be no assurance that any of these patents or other proprietary rights will not be challenged, invalidated or circumvented, or that our rights will provide us with any competitive advantage. In addition, there can be no assurance that patents will be issued from pending applications or that claims allowed on any patents will be sufficiently broad to protect our technology. Further, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States.

We are subject to the risk that third parties may attempt to access, divert or use our intellectual property without authorization. Protecting against the unauthorized use of our products, technology and other proprietary rights is difficult, time-consuming and expensive, and we cannot be certain that the steps that we are taking will prevent or minimize the risks of such unauthorized use. In addition, our intellectual property strategy must continually evolve to protect our proprietary rights in new solutions, including our software solutions. Litigation may be necessary to enforce or defend our intellectual property rights or to determine the validity or scope of the proprietary rights of others. Such litigation could result in substantial cost and diversion of management time and resources, and there can be no assurance that we will obtain a successful result. Any inability to protect and enforce our intellectual property rights could harm our ability to compete effectively.

**We may incur significant costs in response to claims by others that we infringe their intellectual property rights.**

From time to time third parties may assert claims or initiate litigation or other proceedings related to patent, copyright, trademark and other intellectual property rights to technologies and related standards that are relevant to our business. The rate of infringement assertions by patent assertion entities is increasing, particularly in the United States. Generally, these patent owners neither manufacture nor use the patented invention directly, and they seek solely to derive value from their ownership through royalties from patent licensing programs.

We could be adversely affected by litigation, other proceedings or claims against us, as well as claims against our manufacturers, suppliers or customers, alleging infringement of third party proprietary rights by our products and technology, or components thereof. Regardless of the merit of these claims, they can be time-consuming, divert the time and attention of our technical and management personnel, and result in costly litigation. These claims, if successful, could require us to:

- pay substantial damages or royalties;
- comply with an injunction or other court order that could prevent us from offering certain of our products;
- seek a license for the use of certain intellectual property, which may not be available on commercially reasonable terms or at all;
- develop non-infringing technology, which could require significant effort and expense and ultimately may not be successful; and
- indemnify our customers or other third parties pursuant to contractual obligations to hold them harmless or pay expenses or damages on their behalf.

Any of these events could adversely affect our business, results of operations and financial condition. Our exposure to risks associated with the use of intellectual property may increase as a result of acquisitions, as we have a lower level of visibility into the development process with respect to such technology and the steps taken to safeguard against the risks of infringing the rights of third parties.

**Our products incorporate software and other technology under license from third parties, and our business would be adversely affected if this technology were no longer available to us on commercially reasonable terms.**

We integrate third party software and other technology into our operating system, network management and control platforms and other products. As network operators adopt software management and control and virtualized network functions, we believe that we will be increasingly required to work with third party technology providers. As a result, we may be required to license certain software or technology from third parties, including competitors. Licenses for software or other technology may not be available or may not continue to be available to us on commercially reasonable terms. Third party licensors may insist on unreasonable financial or other terms in connection with our use of such technology. Our failure to comply with the terms of any license may result in our inability to continue to use such license, which may result in significant costs, harm our market opportunities and require us to obtain or develop a substitute technology.

Our solutions, including our Blue Planet software platform, utilize elements of open source or publicly available software. As network operators seek to enhance programmability of networks, we expect that we and other communications networking solutions vendors will increasingly contribute to and use technology or open source software developed by standards settings bodies or other industry forums that seek to promote the integration of network layers and functions. The terms of such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. This increases our risks associated with our use of such software and may require us to seek licenses from third parties, to re-engineer our products or to discontinue the sale of such solutions. Difficulty obtaining and maintaining technology licenses with third parties may disrupt development of our products, increase our costs and adversely affect our business.

**We rely upon third party contract manufacturers and our business and results of operations may be adversely affected by risks associated with their businesses, financial condition, and the geographies in which they operate.**

We rely upon third party contract manufacturers with facilities in Canada, Mexico, Thailand and the United States to perform substantially all of the manufacturing of our products. There are a number of risks associated with our dependence on contract manufacturers, including:

- reduced control over delivery schedules and planning;
- reliance on the quality assurance procedures of third parties;
- potential uncertainty regarding manufacturing yields and costs;
- availability of manufacturing capability and capacity, particularly during periods of high demand;
- risks and uncertainties associated with the locations or countries where our products are manufactured, including potential manufacturing disruptions caused by social, geopolitical or environmental factors;
- changes in U.S. law or policy governing foreign trade, manufacturing, development and investment in the countries where we currently manufacture our products, including the World Trade Organization Information Technology Agreement or other free trade agreements;
- limited warranties provided to us; and
- potential misappropriation of our intellectual property.

These and other risks could impair our ability to fulfill orders, harm our sales and impact our reputation with customers. If our contract manufacturers are unable or unwilling to continue manufacturing our products or components of our products, or if our contract manufacturers discontinue operations, we may be required to identify and qualify alternative manufacturers, which could cause us to be unable to meet our supply requirements to our customers and result in the breach of our customer agreements. The process of qualifying a new contract manufacturer and commencing volume production is expensive and time-consuming, and if we are required to change or qualify a new contract manufacturer, we would likely lose sales revenue and damage our existing customer relationships.

A substantial portion of our products are manufactured by third party contract manufacturers in Mexico. The U.S. government has indicated a willingness to revise, renegotiate, or terminate various multilateral trade agreements and to impose new taxes on certain goods imported into the U.S. Such steps, if adopted, could adversely impact our business and operations, and may make our products less competitive in the U.S. and other markets. At this time, it remains unclear what actions, if any, will be taken by the U.S. government with respect to such trade agreements, tax policy related to international commerce, or the imposition of tariffs on goods imported into the U.S. There can be no assurance that any future legislation or executive action in the U.S. relating to tax policy and trade regulation would not adversely affect our business, operations and financial results.

**Data security breaches and cyber-attacks could compromise our intellectual property or other sensitive information and cause significant damage to our business and reputation.**

In the ordinary course of our business, we maintain on our network systems, and the networks of third party providers, certain information that is confidential, proprietary or otherwise sensitive in nature. This information includes intellectual property, financial information and confidential business information relating to us and our customers, suppliers and other business partners. We also produce networking equipment solutions and software used by network operators to ensure security and reliability in their management and transmission of data. Our customers, particularly those in regulated industries, are increasingly focused on the security features of our technology solutions, and maintaining the security of information sensitive to us and our business partners is critical to our business and reputation. Companies in the technology industry have been increasingly subject to a wide variety of security incidents, cyber-attacks and other attempts to gain unauthorized access to networks or sensitive information. Our network systems and storage applications, and those systems and storage applications maintained by our third party providers, may be subject to unauthorized access by hackers or breached due to operator error, malfeasance or other system disruptions. The network solutions we sell to end customers may be exposed to similar risks. In

some cases, it is difficult to anticipate or to detect immediately such incidents and the damage caused thereby. If an actual or perceived breach of network security occurs in our network or in the network of a business partner, the market perception of our products could be harmed. While we continually work to safeguard our products and internal network systems to mitigate these potential risks, there is no assurance that such actions will be sufficient to prevent cyber-attacks or security breaches. Security incidents involving access or improper use of our systems, networks or products could compromise confidential or otherwise protected information, destroy or corrupt data, or otherwise disrupt our operations. These security events could also negatively impact our reputation and our competitive position and could result in litigation with third parties, regulatory action, loss of business, potential liability and increased remediation costs, any of which could have a material adverse effect on our financial condition and results of operations.

**Our failure to manage our relationships with third party service partners effectively could adversely impact our financial results and relationship with customers.**

We rely on a number of third party service partners, both domestic and international, to complement our global service and support resources. We rely upon these partners for certain installation, maintenance and support functions. In addition, as network operators increasingly seek to rely on vendors to perform additional services relating to the design, construction and operation of their networks, the scope of work performed by our support partners is likely to increase and may include areas where we have less experience providing or managing such services. We must successfully identify, assess, train and certify qualified service partners in order to ensure the proper installation, deployment and maintenance of our products, as well as to ensure the skillful performance of other services associated with expanded solutions offerings, including site assessment and construction-related services. Vetting and certification of these partners can be costly and time-consuming, and certain partners may not have the same operational history, financial resources and scale as us. Moreover, certain service partners may provide similar services for other companies, including our competitors. We may not be able to manage our relationships with our service partners effectively, and we cannot be certain that they will be able to deliver services in the manner or time required or that we will be able to maintain the continuity of their services. We may also be exposed to a number of risks or challenges relating to the performance of our service partners, including:

- delays in recognizing revenue;
- liability for injuries to persons, damage to property or other claims relating to the actions or omissions of our service partners;
- our services revenue and gross margin may be adversely affected; and
- our relationships with customers could suffer.

As our service offering expands and customers look to identify vendors capable of managing, integrating and optimizing multi-domain, multi-vendor networks with unified software, our relationships with third party service partners will become increasingly important. If we do not manage effectively our relationships with third party service partners, or if they fail to perform these services in the manner or time required, our financial results and relationships with customers could be adversely affected.

**We may be adversely affected by fluctuations in currency exchange rates.**

As a company with global operations, we face exposure to adverse movements in foreign currency exchange rates. For example, the announcement of Brexit and the outcome of the U.S. presidential election each have caused, and may continue to cause, significant volatility in currency exchange rate fluctuations. Due to our global presence, a significant percentage of our revenue, operating expense and assets and liabilities are non-U.S. Dollar denominated and therefore subject to foreign currency fluctuation. We face exposure to currency exchange rates as a result of the growth in our non-U.S. Dollar denominated operating expense in Canada, Europe, Asia and Latin America. An increase in the value of the U.S. Dollar could increase the real cost to our customers of our products in those markets outside the United States where we sell in Dollars, and a weakened Dollar could increase the cost of local operating expenses and procurement of materials or service that we purchase in foreign currencies. From time to time, we may hedge against currency exposure associated with anticipated foreign currency cash flows or assets and liabilities denominated in foreign currency. Such attempts to offset the impact of currency fluctuations are costly, and no amount of hedging can be effective against all circumstances. Losses associated with these hedging instruments and the adverse effect of foreign currency exchange rate fluctuation may negatively affect our results of operations.

**We may be exposed to unanticipated risks and additional obligations in connection with our resale of complementary products or technology of other companies.**

We have entered into agreements with strategic supply partners that permit us to distribute their products or technology. We may rely upon these relationships to add complementary products or technologies, diversify our product portfolio, or address a



particular customer or geographic market. We may enter into additional original equipment manufacturer (OEM), resale or similar strategic arrangements in the future. We may incur unanticipated costs or difficulties relating to our resale of third party products. Our third party relationships could expose us to risks associated with the business, financial condition, intellectual property rights and supply chain continuity of such partners, as well as delays in their development, manufacturing or delivery of products or technology. We may also be required by customers to assume warranty, indemnity, service and other commercial obligations, including potential liability to customers, greater than the commitments, if any, made to us by our technology partners. Some of our strategic supply partners are relatively small companies with limited financial resources. If they are unable to satisfy their obligations to us or our customers, we may have to expend our own resources to satisfy these obligations. Exposure to these risks could harm our reputation with key customers and could negatively affect our business and our results of operations.

**Our exposure to the credit risks of our customers and resellers may make it difficult to collect receivables and could adversely affect our revenue and operating results.**

In the course of our sales to customers and resale channel partners, we may have difficulty collecting receivables, and our business and results of operations could be exposed to risks associated with uncollectible accounts. Lack of liquidity in the capital markets, macroeconomic weakness and market volatility may increase our exposure to these credit risks. Our attempts to monitor customer payment capability and to take appropriate measures to protect ourselves may not be sufficient, and it is possible that we may have to write down or write off accounts receivable. Such write-downs or write-offs could negatively affect our operating results for the period in which they occur, and, if large, could have a material adverse effect on our revenue and operating results.

**Our business is dependent upon the proper functioning of our internal business processes and information systems, and modification or interruption of such systems or external factors may disrupt our business, processes and internal controls.**

We rely upon a number of internal business processes and information systems to support key business functions, and the efficient operation of these processes and systems is critical to managing our business. Our business processes and information systems must be sufficiently scalable to support the growth of our business and may require modifications or upgrades that expose us to a number of operational risks. During the first quarter of fiscal 2017, we undertook a significant upgrade of our company-wide enterprise resource planning platform that will impact multiple locations, functions and processes. We are also currently pursuing initiatives to transform and optimize our business operations through the reengineering of certain other processes, investment in automation, and engagement of strategic partners or resources to assist with certain business functions. These changes require a significant investment of capital and human resources and may be costly and disruptive to our operations, and they could impose substantial demands on management time. These changes may also require changes in our information systems, modification of internal control procedures and significant training of employees or third party resources. There can be no assurance that our business and operations will not experience disruption in connection with our current system upgrade or other initiatives. Even if we do not encounter these adverse effects or disruption in our business, the design and implementation of these new systems may be more costly than anticipated.

Our information technology systems, and those of third party information technology providers or business partners, may also be vulnerable to damage or disruption caused by circumstances beyond our control, including catastrophic events, power anomalies or outages, natural disasters, viruses or malware, and computer system or network failures. We may also be exposed to cyber-security related incidents, including unauthorized access of information systems and disclosure or diversion of intellectual property or confidential data. There can be no assurance that our business systems or those of our third party business partners would not be subject to similar incidents, exposing us to significant cost, reputational harm and disruption or damage to our business.

**Outstanding indebtedness under our convertible notes and senior secured credit facilities may adversely affect our liquidity and results of operations and could limit our business.**

As of the date of this report, we had approximately \$752.4 million in indebtedness repayable at maturity under our outstanding convertible notes. In the event that some or all of these notes are converted into common stock, the ownership interests of our existing stockholders will be diluted, and any sales of such shares in the public market following conversion may adversely affect the market price for our common stock. We are also a party to credit agreements relating to a \$250 million senior secured asset-based revolving credit facility and an outstanding senior secured term loan with \$400 million repayable at maturity. The agreements governing these credit facilities contain certain covenants that limit our ability, among other things, to incur additional debt, create liens and encumbrances, pay cash dividends, redeem or repurchase stock, enter into certain acquisition transactions or transactions with affiliates, repay certain indebtedness, make investments or dispose of assets. The

agreements also include customary remedies, including the right of the lenders to take action with respect to the collateral securing the loans, that would apply should we default or otherwise be unable to satisfy our debt obligations.

Our indebtedness could have important negative consequences, including:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing, particularly in unfavorable capital and credit market conditions;
- debt service and repayment obligations that may adversely impact our results of operations and reduce the availability of cash resources for other business purposes;
- limiting our flexibility in planning for, or reacting to, changes in our business and the markets; and
- placing us at a possible competitive disadvantage to competitors that have better access to capital resources.

We may also enter into additional transactions or credit facilities, including equipment loans, working capital lines of credit and other long-term debt, which may increase our indebtedness and result in additional restrictions upon our business. In addition, major debt rating agencies regularly evaluate our debt based on a number of factors. There can be no assurance that we will be able to maintain our existing debt ratings, and failure to do so could adversely affect our cost of funds, liquidity and access to capital markets.

**Significant volatility and uncertainty in the capital markets may limit our access to funding on favorable terms or at all.**

The operation of our business requires significant capital. We have accessed the capital markets in the past and have successfully raised funds, including through the issuance of equity, convertible notes and other indebtedness, to increase our cash position, support our operations and undertake strategic growth initiatives. We regularly evaluate our liquidity position, debt obligations, and anticipated cash needs to fund our long-term operating plans, and we may consider it necessary or advisable to raise additional capital or incur additional indebtedness in the future. If we raise additional funds through further issuance of equity or securities convertible into equity, or undertake certain transactions intended to address our existing indebtedness, our existing stockholders could suffer dilution in their percentage ownership of our company or our leverage and outstanding indebtedness could increase. Global capital markets have undergone periods of significant volatility and uncertainty in recent years, and there can be no assurance that such financing alternatives would be available to us on favorable terms or at all, should we determine it necessary or advisable to seek additional cash resources.

**Facilities transitions could be disruptive to our operations and may result in unanticipated expense and adverse effects to our cash position and cash flows.**

We have recently undertaken and expect to undertake in the future the transition of two of our significant research and development facilities, which will affect a large number of our employees. The lease for our Lab 10 building on the Carling Campus in Ottawa, Canada will expire in fiscal 2018, and the leases for our facilities in Gurgaon, India will expire in fiscal 2018 and fiscal 2019. The Ottawa and Gurgaon facilities represent our two largest research and development sites, and they house both significant headcount including key engineering personnel and a large amount of sophisticated lab equipment. In Ottawa, we are in the process of developing a new research and development campus, and we will be transitioning our existing operations and personnel to the new campus during 2017 in anticipation of the expiration of the Lab 10 lease. In Gurgaon, we recently entered into a lease for a new building adjacent to one of our existing facilities, and we will be transitioning certain of our existing operations and personnel to the new building during 2017 and 2018. Relocating our engineering operations may be costly, and there can be no assurance that the transition of key engineering functions to a successor facility will not be disruptive or adversely affect productivity. Significant facilities transitions could be disruptive to our operations and may result in additional or unanticipated expense and adverse effects on our cash position and cash flows.

**The potential effects of the referendum on the UK's membership in the European Union remain uncertain.**

On June 23, 2016, the United Kingdom (UK) held a referendum in which voters approved an exit from the European Union (EU), commonly referred to as "Brexit." The referendum was advisory, and the terms of any withdrawal are subject to a negotiation period that could last at least two years after the government of the UK formally initiates a withdrawal process. This will be either accompanied or followed by additional negotiations between the EU and the UK concerning the future relations between the parties. Nevertheless, the referendum has created significant uncertainty about the future relationship between the UK and the EU. It is possible that the level of economic activity in this region will be adversely impacted and that there will be increased regulatory and legal complexities, including those relating to tax, trade, security, and employees. Such changes could be costly and potentially disruptive to our operations and business relationships in these markets. In addition, Brexit could lead to economic uncertainty, including significant volatility in global stock markets and currency exchange rates, that may adversely impact our business. While we have adopted certain financial measures to reduce the risks of doing business

internationally, we cannot ensure that such measures will be adequate to allow us to operate without disruption or adverse impact to our business and financial results in the affected regions.

**Restructuring activities could disrupt our business and affect our results of operations.**

We have previously taken steps, including reductions in force, office closures, and internal reorganizations to reduce the size and cost of our operations, improve efficiencies, or realign our organization and staffing to better match our market opportunities and our technology development initiatives. We may take similar steps in the future as we seek to realize operating synergies, optimize our operations to achieve our target operating model and profitability objectives, or better reflect changes in the strategic direction of our business. These changes could be disruptive to our business, including our research and development efforts, and could result in significant expense, including accounting charges for inventory and technology-related write-offs, workforce reduction costs and charges relating to consolidation of excess facilities. Substantial expense or charges resulting from restructuring activities could adversely affect our results of operations and use of cash in those periods in which we undertake such actions.

**If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively.**

Competition to attract and retain highly skilled technical, engineering and other personnel with experience in our industry is intense, and our employees have been the subject of targeted hiring by our competitors. Competition is particularly intense in certain jurisdictions where we have research and development centers, including the Silicon Valley area of northern California, and we may experience difficulty retaining and motivating existing employees and attracting qualified personnel to fill key positions. Because we rely upon equity awards as a significant component of compensation, particularly for our executive team, a lack of positive performance in our stock price, reduced grant levels, or changes to our compensation program may adversely affect our ability to attract and retain key employees. In addition, none of our executive officers is bound by an employment agreement for any specific term. The loss of members of our management team or other key personnel could be disruptive to our business, and, were it necessary, it could be difficult to replace members of our management team or other key personnel. If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively, and our operations and financial results could suffer.

**Strategic acquisitions and investments could disrupt our operations and may expose us to increased costs and unexpected liabilities.**

We may acquire or make investments in other technology companies, or enter into other strategic relationships, to expand the markets we address, diversify our customer base or acquire, or accelerate the development of, technology or products. To do so, we may use cash, issue equity that could dilute our current stockholders, or incur debt or assume indebtedness. Strategic transactions, including our acquisition of Cyan in fiscal 2015 and our acquisition of the high-speed photonics components (“HSPC”) assets from TeraXion in fiscal 2016, can involve numerous additional risks, including:

- failure to achieve the anticipated transaction benefits or the projected financial results and operational synergies;
- greater than expected acquisition and integration costs;
- disruption due to the integration and rationalization of operations, products, technologies and personnel;
- diversion of management attention;
- difficulty completing projects of the acquired company and costs related to in-process projects;
- difficulty managing customer transitions or entering into new markets;
- the loss of key employees;
- disruption on termination of business relationships with customers, suppliers, vendors, landlords, licensors and other business partners;
- ineffective internal controls over financial reporting;
- dependence on unfamiliar suppliers or manufacturers;
- assumption of or exposure to unanticipated liabilities, including intellectual property infringement or other legal claims; and
- adverse tax or accounting impact.

As a result of these and other risks, our acquisitions, investments or strategic transactions may not realize the intended benefits and may ultimately have a negative impact on our business, results of operation and financial condition.

**Adverse resolution of litigation may harm our operating results or financial condition.**

We are a party to claims and litigation in the normal course of our business. Such litigation can be expensive, lengthy, and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict and may harm our operating results or financial condition. For additional information regarding certain of the legal proceedings in which we are involved, see Item 1, “Legal Proceedings,” contained in Part II of this report.

**Changes in government regulation affecting the communications industry and the businesses of our customers could harm our prospects and operating results.**

The Federal Communications Commission, or FCC, has jurisdiction over the U.S. communications industry, and similar agencies have jurisdiction over the communication industries in other countries. Many of our largest customers, including service providers and multiservice network operators, are subject to the rules and regulations of these agencies. During 2015, the FCC approved rules that would regulate broadband internet service providers as telecommunications service carriers under Title II of the Telecommunications Act and adopted net neutrality regulations that prohibit blocking, degrading or prioritizing certain types of internet traffic. The future impact of these rules is uncertain in light of the recent change in FCC leadership. In addition to the net neutrality rules, similar changes in regulatory requirements covering access to, management of, or carriage of traffic on the internet in the United States and internationally could serve as a disincentive to certain wireline or wireless network operators, including certain of our customers, to invest in their network infrastructures or introduce new services. Such changes could adversely affect the sale of our products and services. Similarly, changes in regulatory tariff requirements or other regulations relating to pricing or terms of carriage on communications networks could slow the development or expansion of network infrastructures and adversely affect our business, operating results, and financial condition.

**Government regulations affecting the use, import or export of products could adversely affect our operations, negatively affect our revenue and increase our costs.**

The United States and various foreign governments have established certain trade and tariff requirements under which we have implemented a global approach to the sourcing and manufacture of our products, as well as the distribution and fulfillment to customers around the world. Changes or restrictions impacting the import of our components to manufacturing facilities outside of the U.S., the importation of finished goods to the U.S., or the export of products globally, would adversely affect our operations, increase our costs and adversely impact our revenue. Government regulation of usage, import or export of our products, or our technology within our products, or our failure to obtain required approvals for our products, could harm our international and domestic sales and adversely affect our revenue and costs of sales. Failure to comply with such regulations could result in enforcement actions, fines, penalties or restrictions on export privileges. In addition, costly tariffs on our equipment, restrictions on importation, trade protection measures and domestic preference requirements of certain countries could limit our access to these markets and harm our sales. These regulations could adversely affect the sale or use of our products, substantially increase our cost of sales and adversely affect our business and revenue.

**Government regulations related to the environment, potential climate change and other social initiatives could adversely affect our business and operating results.**

Our operations are regulated under various federal, state, local and international laws relating to the environment and potential climate change. If we were to violate or become liable under these laws or regulations, we could incur fines, costs related to damage to property or personal injury, and costs related to investigation or remediation activities. Our product design efforts and the manufacturing of our products are also subject to evolving requirements relating to the presence of certain materials or substances in our equipment, including regulations that make producers for such products financially responsible for the collection, treatment and recycling of certain products. For example, our operations and financial results may be negatively affected by environmental regulations, such as the Waste Electrical and Electronic Equipment (WEEE) and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) that have been adopted by the European Union. Compliance with these and similar environmental regulations may increase our cost of designing, manufacturing, selling and removing our products. The SEC has adopted disclosure requirements regarding the use of “conflict minerals” mined from the Democratic Republic of Congo and adjoining countries (“DRC”) and procedures regarding a manufacturer’s efforts to prevent the sourcing of such minerals from the DRC. Certain of these minerals are present in our products. SEC rules implementing these requirements may have the effect of reducing the pool of suppliers who can supply DRC “conflict free” components and parts, and we may not be able to obtain conflict free products or supplies in sufficient quantities for our operations. Because our supply chain is complex, we may face reputational challenges with our customers, stockholders and other stakeholders if we are unable to verify sufficiently the origins for the “conflict minerals” used in our products and cannot assert that our products are “conflict free.” Environmental or similar social initiatives may also make it difficult to obtain supply of compliant components or may require us to write off non-compliant inventory, which could have an adverse effect on our business and operating results.

**We may be required to write down goodwill or long-lived assets, and these impairment charges would adversely affect our operating results.**

As of January 31, 2017 our balance sheet includes \$267.2 million of goodwill. This amount represents the remaining excess of the total purchase price of our acquisitions of Cyan and the HSPC assets from TeraXion over the fair value of the net assets acquired. We test each reporting unit for impairment of goodwill on an annual basis, and between annual tests if an event occurs or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value. As of January 31, 2017, our balance sheet also includes \$466.5 million in long-lived assets, which includes \$127.8 million of intangible assets. Valuation of our long-lived assets requires us to make assumptions about future sales prices and sales volumes for our products. These assumptions are used to forecast future, undiscounted cash flows upon which our estimates are based. Periods of significant uncertainty or instability of macroeconomic conditions can make forecasting future business difficult. If actual market conditions differ or our forecasts change for our business or any particular operating segment, we may be required to reassess goodwill or long-lived assets and we could record an impairment charge. Any impairment charge relating to goodwill or long-lived assets would have the effect of decreasing our earnings or increasing our losses in such period. If we are required to take a substantial impairment charge, our operating results would be materially adversely affected in such period.

**Failure to maintain effective internal controls over financial reporting could have a material adverse effect on our business, operating results and stock price.**

Section 404 of the Sarbanes-Oxley Act of 2002 requires that we include in our annual report a report containing management's assessment of the effectiveness of our internal controls over financial reporting as of the end of our fiscal year and a statement as to whether or not such internal controls are effective. Compliance with these requirements has resulted in, and is likely to continue to result in, significant costs and the commitment of time and operational resources. Certain ongoing initiatives, including the upgrade of our company-wide enterprise resource planning platform during the first quarter of 2017, will necessitate modifications to our internal control systems, processes and related information systems. Similarly, other efforts to transform business processes, including our supply chain operations, or to transition certain functions to third party resources or providers, will require further changes to our control environment as we optimize our business and operations. Our expansion into new regions could pose further challenges to our internal control systems. We cannot be certain that our current design for internal control over financial reporting, or any additional changes to be made, will be sufficient to enable management to determine that our internal controls are effective for any period, or on an ongoing basis. If we are unable to assert that our internal controls over financial reporting are effective, market perception of our financial condition and the trading price of our stock may be adversely affected, and customer perception of our business may suffer.

**Our stock price is volatile.**

Our common stock price has experienced substantial volatility in the past and may remain volatile in the future. Volatility in our stock price can arise as a result of a number of the factors discussed in this "Risk Factors" section. During fiscal 2016, our closing stock price ranged from a high of \$25.30 per share to a low of \$15.73 per share. The stock market has experienced significant price and volume fluctuation that has affected the market price of many technology companies, with such volatility often unrelated to the operating performance of these companies. Divergence between our actual or anticipated financial results and published expectations of analysts, or the expectations of the market generally, can cause significant swings in our stock price. Our stock price can also be affected by market conditions in our industry as well as announcements that we, our competitors, vendors or our customers may make. These may include announcements of financial results or changes in estimated financial results, technological innovations, the gain or loss of customers or key opportunities. Our common stock is also included in certain market indices, and any change in the composition of these indices to exclude our company would adversely affect our stock price. These and other factors affecting macroeconomic conditions or financial markets may materially adversely affect the market price of our common stock in the future.

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

Not applicable.

***Item 3. Defaults Upon Senior Securities***

Not applicable.

***Item 4. Mine Safety Disclosures***

Not applicable.

**Item 5. Other Information**

Not applicable.

**Item 6. Exhibits**

3.1	Second Amended and Restated Bylaws of Ciena Corporation *
10.1	Omnibus Refinancing Amendment to Credit Agreement (dated as of July 15, 2014, as amended), Security Agreement, and Pledge Agreement, dated as of January 30, 2017, by and among Ciena Corporation, as borrower, Ciena Communications, Inc. and Ciena Government Solutions, Inc., as guarantors, Bank of America, N.A. as administrative agent, and the lenders party thereto
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
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
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

\* Incorporated by reference from Ciena's Current Report on Form 8-K filed January 27, 2017

**SIGNATURES**

Pursuant to the requirements 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.

Ciena Corporation

Date: March 8, 2017

By: /s/ Gary B. Smith

Gary B. Smith  
President, Chief Executive Officer  
and Director  
(Duly Authorized Officer)

Date: March 8, 2017

By: /s/ James E. Moylan, Jr.

James E. Moylan, Jr.  
Senior Vice President, Finance and  
Chief Financial Officer  
(Principal Financial Officer)



**OMNIBUS REFINANCING AMENDMENT  
TO CREDIT AGREEMENT, SECURITY AGREEMENT AND PLEDGE AGREEMENT**

OMNIBUS REFINANCING AMENDMENT TO CREDIT AGREEMENT, SECURITY AGREEMENT AND PLEDGE AGREEMENT, dated as of January 30, 2017 (this "Amendment"), by and among Ciena Corporation, a Delaware corporation (the "Borrower"), the other Loan Parties party hereto, the Additional Term Lenders (as defined below, which together with the Continuing Term Lenders (as defined below) constitute the Required Lenders) and Bank of America, N.A., as administrative agent (in such capacity, the "Administrative Agent").

**RECITALS:**

WHEREAS, reference is hereby made to the Credit Agreement, dated as of July 15, 2014 (as amended by the First Amendment, dated as of April 15, 2015, the Second Amendment, dated as of July 2, 2015, the Incremental Joinder and Amendment Agreement, dated as of April 25, 2016, and as further amended, restated, amended and restated, supplemented or otherwise modified from time to time prior to the date hereof, the "Existing Credit Agreement" and, as amended by this Amendment, the "Credit Agreement"), by and among the Borrower, the lenders from time to time party thereto and the Administrative Agent (capitalized terms used but not otherwise defined herein having the meanings provided in the Credit Agreement);

WHEREAS, the Borrower, by this Amendment, hereby notifies the Administrative Agent pursuant to Section 2.12 of the Credit Agreement, the receipt of which is hereby acknowledged, of its request for Credit Agreement Refinancing Indebtedness in the form of Refinancing Term Loans (as defined below) in an aggregate principal amount of \$400,000,000 to refinance the 2014 Term Loans and the 2016 Term Loans, in each case outstanding immediately prior to the Refinancing Amendment Effective Date (as defined below) (the "Existing Term Loans"; the Term Lenders with respect thereto, the "Existing Term Lenders").

WHEREAS, each Existing Term Lender that executes and delivers a signature page to this Amendment in the form of Annex I hereto (a "Lender Addendum") will thereby agree to the terms of this Amendment and agree to continue all of its Existing Term Loans as Refinancing Term Loans (such continued Existing Term Loans, the "Continued Term Loans"; all such Lenders, collectively, the "Continuing Term Lenders") in a principal amount up to the aggregate principal amount of its Existing Term Loans;

WHEREAS, each Person (other than a Continuing Term Lender in its capacity as such) that agrees to make Refinancing Term Loans (collectively, the "Additional Term Lenders" and, together with the Continuing Term Lenders, the "Refinancing Lenders") will make Refinancing Term Loans to the Borrower on the Refinancing Amendment Effective Date (the "Additional Term Loans" and, together with the Continued Term Loans, the "Refinancing Term Loans") in the amount of its Additional Term Commitment (as defined below);

WHEREAS, the Refinancing Term Lenders, the Borrower and the Administrative Agent, as applicable, have agreed (i) to make modifications to the Existing Credit Agreement to effect the terms of the Refinancing Term Loans as set forth below and (ii) to make certain other modifications to the Existing Credit Agreement, the Security Agreement as amended prior to, and otherwise in effect on, the date hereof (the "Existing Security Agreement"), and the Term Loan Pledge Agreement dated as of July 15, 2014, by and among the Loan Parties, as pledgors, and the Bank of America, N.A., as collateral agent and pledgee, as amended prior to, and otherwise in effect on, the date hereof (the "Existing Pledge Agreement"), in each case as set forth below;

WHEREAS, (i) Bank of America, N.A. and Deutsche Bank Securities, Inc. are acting as the joint arrangers and joint bookrunners (the “Refinancing Facility Lead Arrangers”) for the Refinancing Term Loans established hereunder and (ii) those entities designated as Syndication Agent and Documentation Agents, as applicable, under the Existing Credit Agreement, are acting in such capacity for the Refinancing Term Loans established hereunder; and

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. Amendments to Credit Agreement. Each of the parties hereto agrees that, effective on the Refinancing Amendment Effective Date, (a) the Existing Credit Agreement shall be amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken-text~~) and to add the double-underlined text (indicated textually in the same manner as the following example: double-underlined text) as set forth in the pages of the Credit Agreement attached as Annex II-A hereto and (b) Schedule 7.03 to the Credit Agreement shall be amended and restated in its entirety in the form attached as Annex II-B.

SECTION 2. Amendments to the Security Agreement. Each of the parties hereto agrees that, effective on the Refinancing Amendment Effective Date, the Existing Security Agreement as in effect on the date hereof shall be amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken-text~~) and to add the double-underlined text (indicated textually in the same manner as the following example: double-underlined text) as set forth in the pages of the Security Agreement attached as Annex III hereto.

SECTION 3. Amendments to the Pledge Agreements.

(a) Each of the parties hereto agrees that, effective on the Refinancing Amendment Effective Date, the Existing Pledge Agreement as in effect on the date hereof shall be amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken-text~~) and to add the double-underlined text (indicated textually in the same manner as the following example: double-underlined text) as set forth in the pages of the Security Agreement attached as Annex IV hereto.

(b) The parties hereto hereby agree that the Canadian Term Loan Pledge Agreement, dated as of December 12, 2014, between the Borrower and Bank of America, N.A., as collateral agent (as amended prior to, and otherwise in effect on, the date hereof the “Existing Canadian Pledge Agreement” and as amended pursuant to the terms hereof, the “Canadian Pledge Agreement”), may be amended to reflect, *mutatis mutandis*, the amendments made to the Pledge Agreement pursuant to the terms hereof, and the Lenders hereby authorize the Administrative Agent to approve such amendments to the Existing Canadian Pledge Agreement.

SECTION 4. Refinancing Term Loans. Subject to the satisfaction of the conditions set forth in Section 5 hereof:

(a) Subject to the terms and conditions set forth herein, each Continuing Term Lender agrees to continue its Existing Term Loans as Refinancing Term Loans in an aggregate principal amount equal to its Continuing Term Commitment (as defined below). The “Continuing Term Commitment” of any Continuing Term Lender will be the amount set forth opposite such Continuing Term Lender’s name on Schedule 2 hereto.

(b) Subject to the terms and conditions set forth herein, each Additional Term Lender severally agrees to make a Refinancing Term Loan to the Borrower on the Refinancing Amendment Effective Date in a principal amount equal to its Additional Term Commitment (as defined below). The “Additional Term Commitment” of any Additional Term Lender will be the amount set forth opposite such Additional Term Lender’s name on Schedule 1 hereto.

(c) The Refinancing Term Loans shall have the terms set forth in the Credit Agreement, including, without limitations, the following:

(i) The Applicable Rate with respect to the Refinancing Term Loans shall mean, a percentage per annum equal to (i) with respect to the Refinancing Term Loans that are Eurodollar Rate Loans, 2.50% and (ii) with respect to Refinancing Term Loans that are Base Rate Loans, 1.50%.

(ii) LIBOR shall not be less than 0.75%.

(iii) The Maturity Date with respect to the Refinancing Term Loans shall mean January 30, 2022; provided, however, that, if such date is not a Business Day, the Maturity Date shall be the next preceding Business Day.

(iv) The optional prepayment premium of 1% provided for in Section 2.03(a)(i) of the Credit Agreement shall apply to the Refinancing Term Loans for the period from the Refinancing Amendment Effective Date to the six-month anniversary of such date.

(v) The initial Interest Period in respect of the Refinancing Term Loans shall commence on the Refinancing Amendment Effective Date and shall end on February 20, 2017.

(d) The continuation of Continued Term Loans may be implemented pursuant to procedures specified by the Administrative Agent (in consultation with the Borrower), including by repayment of Continued Term Loans of a Continuing Term Lender followed by a subsequent assignment to it of Refinancing Term Loans in the same amount.

(e) On the Refinancing Amendment Effective Date, any Term Lender with Existing Term Loans that are not continued as Continued Term Loans (the “Non-Continuing Term Lenders”) shall have its Existing Term Loans prepaid in full, and the Borrower shall pay to each Non-Continuing Term Lender all accrued and unpaid interest on, such Non-Continuing Term Lender’s Existing Term Loans to, but not including, the Refinancing Amendment Effective Date.

(f) Upon the Refinancing Amendment Effective Date, the Administrative Agent and each Lender is deemed to have waived any notice requirement set forth in Section 2.03(a) with respect to any prepayment of Existing Term Loans in connection with the refinancing.

SECTION 5. Refinancing Amendment Effective Date Conditions. This Amendment will become effective on the date (the “Refinancing Amendment Effective Date”) on which each of the following conditions have been satisfied (or waived) in accordance with the terms therein:

(a) the Administrative Agent shall have received (x) a counterpart of this Amendment signed on behalf of (i) the Borrower and each other Loan Party, (ii) the Administrative Agent, (iii)

the Additional Term Lenders (if any) and (y) Lender Addenda executed and delivered by the Continuing Term Lenders with respect to the Continued Term Loans.

(b) the Administrative Agent shall have received a certificate of a Responsible Officer of each Loan Party dated the date hereof certifying (w) that attached thereto is a true and complete copy of the certificate or articles of incorporation, including all amendments thereto of such Loan Party certified as of a recent date by the Secretary of State of the state of organization of such Loan Party and a certificate as to the good standing of such Loan Party as of a recent date, (x) that attached thereto is a true and complete copy of the by-laws (or equivalent organizational document) of such Loan Party as in effect on such date, (y) that attached is a true and complete copy of the resolutions duly adopted by the board of directors (or equivalent governing body) of such Loan Party authorizing the execution, delivery and performance of this Amendment and all other documents executed in connection herewith, the borrowings thereunder, and that such resolutions have not been modified, rescinded or amended and are in full force and effect on such date and (z) as to the incumbency and specimen signature of each officer executing the Amendment and any document executed in connection therewith and countersigned by another officer as to the incumbency and specimen signature of the Secretary or Assistant Secretary executing such certificate;

(c) the Administrative Agent shall have received a certificate signed by a Responsible Officer of the Borrower certifying (A) that the conditions specified in Sections 4.02(a) and (b) of the Credit Agreement have been satisfied, (B) that there has been no event or circumstance since the date of the most recent annual audited financial statements furnished pursuant to Sections 6.01(a) of the Credit Agreement that has had or could be reasonably expected to have, either individually or in the aggregate, a Material Adverse Effect and (C) as of the Refinancing Amendment Effective Date, there are no actions, suits, claims, demands, investigations, inspections, audits, charges or proceedings pending or to the knowledge of any Responsible Officer of a Loan Party, threatened in writing (i) with respect to this Amendment, the Credit Agreement or any other Loan Document, or (ii) which has had, or could reasonably be expected to have, a Material Adverse Effect;

(d) all fees and out-of-pocket expenses required to be paid or reimbursed by Borrower as separately agreed by Borrower and Merrill Lynch, Pierce, Fenner & Smith Incorporated (or one of its affiliates) as lead arranger, including reasonable and documented fees and out-of-pocket expenses of the Refinancing Facility Lead Arrangers and all reasonable and documented fees and out-of-pocket expenses of counsel to the Administrative Agent and the Refinancing Facility Lead Arrangers shall have been paid or reimbursed, on or prior to the date hereof;

(e) the Borrower shall have paid to the Administrative Agent for the account of (i) each Continuing Lender that has executed and delivered to the Administrative Agent an executed Lender Addendum by no later than 11:59 a.m. New York City time on January 25, 2017, a fee in an amount equal to 0.125% of the aggregate principal amount of such Continuing Term Lender's Existing Tem Loans held immediately prior to the Refinancing Amendment Effective Date and continued as Refinancing Term Loans on such date and (ii) each Additional Term Lender, a fee in an amount equal to 0.125% of the amount of such Additional Term Lender's Additional Term Commitment; provided that such fee in the case of clauses (i) and (ii) may be in the form of an original issue discount.

(f) The Borrower shall have prepaid in part the Existing Term Loans such that, immediately after giving effect to such prepayment, the aggregate principal amount of the Existing Term Loans does not exceed \$400,000,000.

(g) the Refinancing Facility Lead Arrangers, the Refinancing Term Lenders and the Administrative Agent shall have received (a) an opinion of Hogan Lovells US LLP, counsel to the Loan Parties, in form and substance reasonably satisfactory to the Refinancing Facility Lead Arrangers and the Administrative Agent and (b) a solvency certificate from the chief financial officer of the Borrower certifying that the Loan Parties (on a consolidated basis) are Solvent as of the date hereof and after giving effect to the Refinancing Term Loans and the use of proceeds therefrom in form and substance reasonably satisfactory to the Refinancing Facility Lead Arrangers and the Administrative Agent;

(h) the Administrative Agent shall have received a Note in substantially the form attached as Exhibit C to the Credit Agreement executed by the Borrower in favor of each Additional Term Lender requesting a Note;

(i) the representations and warranties of the Borrower contained in Article V of the Credit Agreement or in any other Loan Document, or which are contained in any document furnished at any time under or in connection herewith or therewith, shall be true and correct in all material respects (or, with respect to any such representation or warranty that is qualified by materiality or Material Adverse Effect, in all respects as drafted) on and as of the Refinancing Amendment Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects (or, with respect to any such representation or warranty that is qualified by materiality or Material Adverse Effect, in all respects as drafted) as of such earlier date, and except that for purposes of this clause (h), the representations and warranties contained in Sections 5.05(a) and (b) of the Credit Agreement shall be deemed to refer to the most recent statements furnished pursuant to Sections 6.01(a) and (b) of the Credit Agreement, respectively;

(j) the representations and warranties in Section 6 of this Amendment shall be true and correct in all material respects as of the date hereof;

(k) the Additional Term Lenders party hereto and the Administrative Agent shall have received at least 5 Business Days prior to the date hereof all documentation and other information about the Borrower and the Guarantors required under applicable “know your customer” and anti-money laundering rules and regulations, including the PATRIOT Act;

(l) the Administrative Agent shall have received (or waived the receipt of) a Request for Credit Extension in accordance with the requirements of the Credit Agreement; and

(m) no Default shall exist on the date hereof before or after giving effect to the Refinancing Term Loans.

SECTION 6. Representations and Warranties. By its execution of this Amendment, each Loan Party hereby represents and warrants that:

(a) This Amendment and the other documents executed in connection herewith have been duly executed and delivered by each Loan Party party hereto and constitute a legal, valid and binding obligation of such Loan Party enforceable against such Loan Party in accordance with their terms, except as such enforceability may be limited by bankruptcy, insolvency, fraudulent transfer, reorganization, receivership, moratorium or similar laws of general applicability relating to or limiting creditors’ rights generally or by general equity principles;

(b) On the date hereof and after giving effect to the Refinancing Term Loans and the use of proceeds therefrom, the Loan Parties (on a consolidated basis) are Solvent; and

(c) The execution, delivery and performance by a Loan Party of this Amendment and the other documents executed in connection herewith to which such Person is a party (a) have been duly authorized by all requisite corporate or other organizational of such Loan Party, (b) do not (i) violate (A) any provision of (x) any applicable law, statute, rule or regulation, or (y) of the certificate or articles of incorporation, bylaws or other constitutive documents of such Loan Party, (B) any applicable order of any Governmental Authority or (C) any provision of any indenture, agreement or other instrument to which such Person is a party or by which any of them or any of their property is bound (including the Loan Documents, the ABL Credit Agreement and the Permitted Convertible Notes Indentures), (ii) be in conflict with, result in a breach of or constitute (alone or with notice or lapse of time or both) a default under or give rise to any right to require the prepayment, repurchase or redemption of any obligation under any such indenture, agreement or other instrument or (iii) result in the creation or imposition of any Lien upon or with respect to any property or assets now owned or hereafter acquired by the Borrower or any Subsidiary (other than Liens created or permitted under the Credit Agreement or under the Collateral Documents), in case under this clause (b), to the extent that such violation, conflict, breach, default, or creation or imposition of Lien could not reasonably be expected to result in a Material Adverse Effect.

**SECTION 7. Covenant and Acknowledgment.**

(a) By its execution of this Amendment, the Borrower hereby covenants and agrees that the proceeds of the Refinancing Term Loans shall be used by Borrower in accordance with Section 6.11 of the Credit Agreement.

(b) Each Loan Party hereby expressly acknowledges the terms of this Amendment and reaffirms, as of the date hereof, (i) the covenants and agreements contained in each Loan Document to which it is a party, including, in each case, such covenants and agreements as in effect immediately after giving effect to this Amendment and the transactions contemplated hereby and (ii) its guarantee of the Obligations (including, without limitation, the Refinancing Loans) under the Guaranty and its grant of Liens on the Collateral to secure the Obligations (including, without limitation, the Obligations with respect to the Refinancing Term Loans) pursuant to the Collateral Documents.

**SECTION 8. Certain Post-Closing Obligations.** Reasonably promptly following request by the Administrative Agent, the Borrower shall take all action reasonably determined by local counsel to the Administrative Agent to be necessary to maintain the perfection and priority of the security interest of the Administrative Agent for the benefit of the Secured Parties in the Collateral granted under the Foreign Pledge Agreements, in the same manner as contemplated by the Foreign Pledge Agreements prior to the incurrence of the Refinancing Term Loans.

**SECTION 9. Reference to and Effect on Loan Documents; Reaffirmation of the Loan Parties.**

(a) On and after the effectiveness of this Amendment, (i) each reference in the Credit Agreement and the other Loan Documents to “this Agreement”, “hereunder”, “hereof” or words of like import referring to the Credit Agreement, the Security Agreement or the Existing Pledge Agreement shall mean and be a reference to the Credit Agreement, the Security Agreement or the Existing Pledge Agreement, in each case as applicable, as specifically amended by this Amendment, (ii) each reference to “2017 Term Loan”, “2017 Term Loans”, “Term Loan”, “Term Loans”, “Term Commitment”, or “Term Commitments” shall be deemed to include the Refinancing Term Loans,

the Additional Term Loans and the Additional Term Commitments, as applicable, and all other related terms will have correlative meanings *mutatis mutandis*.

(b) Each Loan Party hereby consents to the amendment of the Credit Agreement, the Security Agreement and the Existing Pledge Agreement effected hereby and confirms and agrees that, notwithstanding the effectiveness of this Amendment, each Loan Document to which such Loan Party is a party is, and the obligations of such Loan Party contained in the Credit Agreement, this Amendment or in any other Loan Document to which it is a party are, and shall continue to be, in full force and effect and are hereby ratified and confirmed in all respects, in each case as amended by this Amendment. For greater certainty and without limiting the foregoing, each Loan Party hereby confirms that (i) the existing security interests granted by such Loan Party in favor of the Administrative Agent for the benefit of the Secured Parties pursuant to the Loan Documents in the Collateral described therein shall continue to secure the obligations of the Loan Parties under the Credit Agreement and the other Loan Documents as and to the extent provided in the Loan Documents and (ii) neither the modification of the Credit Agreement effected pursuant to this Amendment nor the execution, delivery, performance or effectiveness of this Amendment (A) impairs the validity, effectiveness or priority of the Liens granted pursuant to any Loan Document, and such Liens continue unimpaired with the same priority to secure repayment of all Obligations, whether heretofore or hereafter incurred or (B) requires that any new filings be made or other action taken to perfect or to maintain the perfection of such Liens.

SECTION 10. Amendment, Modification and Waiver. This Amendment may not be amended, modified or waived except as permitted by Section 10.01 of the Credit Agreement. The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of any Lender or the Administrative Agent under any of the Loan Documents, nor, except as expressly provided herein, constitute a waiver or amendment of any provision of any of the Loan Documents

SECTION 11. Entire Agreement. This Amendment, the Credit Agreement and the other Loan Documents constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof and supersede all other prior agreements and understandings, both written and verbal, among the parties hereto with respect to the subject matter hereof. Except as expressly set forth herein, this Amendment shall not by implication or otherwise limit, impair, constitute a waiver of, or otherwise affect the rights and remedies of any party under, the Credit Agreement, nor alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement, all of which are ratified and affirmed in all respects and shall continue in full force and effect. It is understood and agreed that each reference in each Loan Document to the Credit Agreement, the Security Agreement or the Existing Pledge Agreement, whether direct or indirect, shall hereafter be deemed to be a reference to the Credit Agreement, the Security Agreement or the Existing Pledge Agreement, in each case as applicable, as amended hereby and that this Amendment is a Loan Document.

SECTION 12. **GOVERNING LAW. GOVERNING LAW. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK. SECTIONS 10.14 AND 10.15 OF THE CREDIT AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE INTO THIS AMENDMENT AND SHALL APPLY HERETO.**

SECTION 13. Severability. If any provision of this Amendment is held to be illegal, invalid or unenforceable, the legality, validity and enforceability of the remaining provisions of this Amendment shall

not be affected or impaired thereby. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

SECTION 14. Counterparts; Effectiveness. This Amendment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery by telecopier or other electronic means of an executed counterpart of a signature page to this Amendment shall be effective as delivery of an original executed counterpart of this Amendment.

SECTION 15. **WAIVER OF JURY TRIAL.** EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AMENDMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AMENDMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

[SIGNATURE PAGES FOLLOW]



**IN WITNESS WHEREOF**, each of the undersigned has caused its duly authorized officer to execute and deliver this Amendment as of the date first written above.

**BANK OF AMERICA, N.A.**, as Administrative Agent

By: /s/ Priscilla Baker  
Name: Priscilla Baker  
Title: AVP

**BANK OF AMERICA, N.A.**, as and Additional Term Lender

By: /s/ Gregory Roetting  
Name: Gregory Roetting  
Title: Vice President

**LOAN PARTIES:**

**CIENA CORPORATION**

By: /s/ Elizabeth A. Dolce  
Name: Elizabeth A. Dolce  
Title: Vice President and Treasurer

**CIENA COMMUNICATIONS, INC.**

By: /s/ Elizabeth A. Dolce  
Name: Elizabeth A. Dolce  
Title: Vice President and Treasurer

**CIENA GOVERNMENT SOLUTIONS, INC.**

By: /s/ Elizabeth A. Dolce

Name: Elizabeth A. Dolce

Title: Vice President and Treasurer

**ANNEX II-A**

**AMENDMENTS TO CREDIT AGREEMENT**

[Changed pages to Credit Agreement follow]

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CREDIT AGREEMENT

Dated as of July 15, 2014

among

CIENA CORPORATION,

as the Borrower,

BANK OF AMERICA, N.A.,

as Administrative Agent,

and

The Other Lenders Party Hereto

BANK OF AMERICA, N.A.

and

DEUTSCHE BANK SECURITIES INC.,

as Joint Lead Arrangers and Joint Bookrunners

DEUTSCHE BANK SECURITIES INC.,

as Syndication Agent

JPMORGAN CHASE BANK, N.A.

MORGAN STANLEY SENIOR FUNDING, INC.,

as Co-Documentation Agents

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## CREDIT AGREEMENT

This CREDIT AGREEMENT (“Agreement”) is entered into as of July 15, 2014, among CIENA CORPORATION, a Delaware corporation (the “Borrower”), each lender from time to time party hereto (collectively, the “Lenders” and individually, a “Lender”), and BANK OF AMERICA, N.A., as Administrative Agent.

### PRELIMINARY STATEMENTS:

The Borrower has requested that the Lenders provide a term loan facility, the proceeds of which shall be used to fund cash to the Borrower’s balance sheet and general corporate purposes, which may include the repayment of certain indebtedness, and the Lenders have indicated their willingness to lend on the terms and subject to the conditions set forth herein.

In consideration of the mutual covenants and agreements herein contained, the parties hereto covenant and agree as follows:

### ARTICLE I

#### DEFINITIONS AND ACCOUNTING TERMS

1.01. Defined Terms. Unless otherwise defined in Annex I, as used in this Agreement, the following terms shall have the meanings set forth below:

~~“2014 Outstandings” means the aggregate Outstanding Amount of all 2014 Term Loans.~~

~~“2014 Term Facility” means the aggregate principal amount of the 2014 Term Loans of all Term Lenders at such time.~~

~~“2014 Term Loan Lender” means each Lender holding a 2014 Term Loan and any permitted assignees thereof in accordance with the Credit Agreement.~~

“2014 Term Loans” means the Term Loans made by the Lenders to the Borrower pursuant to Section 2.01 on July 15, 2014 and repaid or refinanced on the 2017 Refinancing Amendment Effective Date.

“2015 Convertible Notes” shall mean the Borrower’s 4.00% senior convertible notes due March 15, 2015, issued pursuant to the 2015 Convertible Notes Indenture.

“2015 Convertible Notes Documents” shall mean the 2015 Convertible Notes and the 2015 Convertible Notes Indenture.

“2015 Convertible Notes Indenture” shall mean the Indenture, dated as of March 15, 2010, between the Borrower, as issuer, and The Bank of New York Mellon, as trustee, as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.

“2016 Audited Financial Statements” means the audited consolidated balance sheet of the Borrower and its Subsidiaries for the fiscal year ended October 31, 2016, and the related consolidated statements of income or operations, shareholders’ equity and cash flows for such fiscal year of the Borrower and its Subsidiaries, including the notes thereto.

~~“2016 Outstandings” means the aggregate Outstanding Amount of all 2016 Term Loans.~~

~~“2016 Term Facility” means the aggregate principal amount of the 2016 Term Loans of all Term Lenders at such time.~~

~~“2016 Term Loan Lender” has the meaning ascribed to such term in the 2016 Incremental Joinder.~~

“2016 Term Loans” means the Term Loans made by the Lenders to the Borrower pursuant to the 2016 Incremental Joinder [and repaid or refinanced on the 2017 Refinancing Amendment Effective Date](#).

~~“2016 Incremental Effective Date” means April 25, 2016.~~

“2016 Incremental Joinder” means that certain Incremental Joinder and Amendment Agreement dated as of April 25, 2016.

“2017 Convertible Notes” shall mean the Borrower’s 0.875% senior convertible notes due June 15, 2017, issued pursuant to the 2017 Convertible Notes Indenture.

“2017 Convertible Notes Documents” shall mean the 2017 Convertible Notes and the 2017 Convertible Notes Indenture.

“2017 Convertible Notes Indenture” shall mean the Indenture, dated as of June 11, 2007, between the Borrower, as issuer, and The Bank of New York, as trustee, as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.

“2017 Refinancing Amendment Effective Date” means [January 30, 2017](#).

“2017 Term Loan Lender” means [each Lender holding a 2017 Term Loan and any permitted assignees thereof in accordance with the Credit Agreement](#).

“2017 Term Loans” means the Term Loans made by the Lenders to the Borrower pursuant to that certain [Omnibus Refinancing Amendment to Credit Agreement, Security Agreement and Pledge Agreement, to refinance in full the 2014 Term Loans and the 2016 Term Loans outstanding as of the 2017 Refinancing Amendment Effective Date](#).

“2018 Convertible Notes” shall mean the Borrower’s 3.75% senior convertible notes due October 15, 2018, issued pursuant to the 2018 Convertible Notes Indenture.

“2018 Convertible Notes Documents” shall mean the 2018 Convertible Notes and the 2018 Convertible Notes Indenture.

“2018 Convertible Notes Indenture” shall mean the Indenture, dated as of October 18, 2010, between the Borrower, as issuer, and The Bank of New York Mellon Trust Company, N.A., as trustee, as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.

“2020 Convertible Notes” shall mean the Borrower’s 4.00% senior convertible notes due December 15, 2020, issued pursuant to the 2020 Convertible Notes Indenture.

“2020 Convertible Notes Documents” shall mean the 2020 Convertible Notes and the 2020 Convertible Notes Indenture.

“2020 Convertible Notes Indenture” shall mean the Indenture, dated as of December 27, 2012, between the Borrower, as issuer, and The Bank of New York Mellon Trust Company, N.A., as trustee, as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.

“ABL Credit Agreement” means that certain ABL Credit Agreement dated as of August 13, 2012 among the Borrower, Ciena Communications, Inc., Ciena Government Solutions, Inc., Ciena Canada, Inc., Deutsche Bank AG New York Branch, as administrative agent and collateral agent and a syndicate of lenders, as amended by that certain Amendment to Credit Agreement, dated as of August 24, 2012, as further amended by that certain Omnibus Second Amendment to Credit Agreement and First Amendment to U.S. Security Agreement, Canadian Security Agreement, U.S. Pledge Agreement, U.S. Guaranty and Canadian Guaranty, dated as of March 5, 2013, as [further amended by that certain Omnibus Fourth Amendment to Credit Agreement and First Amendment to U.S. Pledge Agreement and Canadian Pledge Agreement](#),

[dated as of April 15, 2015, as further amended by that certain Fifth Amendment to Credit Agreement, dated as of July 2, 2015, as further amended by that certain Sixth Amendment to Credit Agreement, dated as of January 8, 2016](#), and as such credit agreement may be further amended, amended and restated, modified, waived, extended, renewed, replaced or refinanced from time to time in accordance with the terms of the Intercreditor Agreement and this Agreement.

“ABL Formula” means an amount equal to the sum of 85% of the book value of all inventory and 85% of the book value of all accounts receivable, in each case, owned by the Borrower and its Subsidiaries as of the end of the most recent fiscal quarter for which financial statements have been delivered to the Administrative Agent in accordance with [Section 6.01\(a\)](#) or [\(b\)](#) and calculated in accordance with GAAP.

“ABL Credit Documents” shall have the meaning provided in the Intercreditor Agreement.

“ABL Obligations” shall have the meaning provided in the Intercreditor Agreement.

“ABL Priority Collateral” shall have the meaning provided in the Intercreditor Agreement.

“Acquired Entity or Business” shall mean either (x) all or substantially all of the assets of, or the assets constituting a business, division or product line of, any Person not already a Subsidiary of the Borrower or (y) 100% of the Equity Interests of any such Person, which Person shall, as a result of the acquisition of such Equity Interests, become a Wholly-Owned Subsidiary of the Borrower (or shall be merged with and into the Borrower or a Wholly-Owned Subsidiary of the Borrower; provided that, in the case of any merger involving (x) the Borrower, the Borrower shall be the surviving or continuing Person, and (y) a Guarantor, a Guarantor shall be the surviving or continuing Person (or if such surviving or continuing Person is not a Guarantor, it shall become a Guarantor contemporaneously with the consummation of such merger)).

“Additional ABL Capacity” shall have the meaning specified in [Section 7.02\(c\)](#).

“Additional Convertible Notes” shall mean unsecured senior convertible notes of the Borrower issued pursuant to, and containing the requirements of, clause (y) of [Section 7.02\(l\)](#) or [Section 7.02\(n\)](#), which unsecured senior convertible notes are convertible into shares of Company Common Stock.

“Additional Convertible Notes Documents” shall mean any Additional Convertible Notes and any Additional Convertible Notes Indenture.

“Additional Convertible Notes Indenture” shall mean each indenture (or similar document) pursuant to which any Additional Convertible Notes are issued.

“Administrative Agent” means Bank of America in its capacity as administrative agent under any of the Loan Documents, or any successor administrative agent.

“Administrative Agent’s Office” means the Administrative Agent’s address and, as appropriate, account as set forth on [Schedule 10.02](#), or such other address or account as the Administrative Agent may from time to time notify to the Borrower and the Lenders.

“Administrative Questionnaire” means an Administrative Questionnaire in substantially the form of [Exhibit E-2](#) or any other form approved by the Administrative Agent.

“Affiliate” means, with respect to any Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“Aggregate Commitments” means the Commitments of all the Lenders.

“Agreement” means this Credit Agreement.

~~“Adjustment Date” means the date that is three Business Days after the date on which the relevant financial statements are delivered to the Lenders pursuant to Section 6.01 for each fiscal quarter or fiscal year beginning with the first full fiscal quarter of the Borrower ending after the 2016 Incremental Effective Date.~~

“All-in Yield” shall mean, as to any Indebtedness, the effective interest rate with respect thereto thereon as reasonably determined by the Administrative Agent taking into account the interest rate margin, original issue discount, upfront fees, recurring periodic fees and eurodollar rate floor or alternate base rate floor; provided that original issue discount and upfront fees shall be equated to interest rate assuming a four-year life to maturity of such Indebtedness (or, if less, the stated life to maturity at the time of the incurrence of such Indebtedness); provided further that “All-in Yield” shall not include any arrangement, commitment, underwriting, structuring or similar fees paid to arrangers (or their affiliates) or any other fees, in each case that are not generally paid to or shared ratably with lenders with respect to such Indebtedness.

“Applicable Percentage” means, with respect to any Term Lender at any time, the percentage (carried out to the ninth decimal place) of the Term Facility represented by the principal amount of such Term Lender’s Term Loans at such time. The initial Applicable Percentage of each Lender in respect of the Facility is set forth opposite the name of such Lender on Schedule 2.01 or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, as applicable.

“Applicable Rate” means ~~(x) in respect of the 2014 Term Facility, 2.00%~~1.50% per annum for Base Rate Loans and ~~3.00%~~2.50% per annum for Eurodollar Rate Loans ~~and (y) in respect to the 2016 Term Facility; initially, a percentage per annum equal to (i) with respect to Eurodollar Rate 2016 Term Loans, 3.50% and (ii) with respect to Base Rate 2016 Term Loans, 2.50%; provided that on and after the first Adjustment Date, the Applicable Rate for the 2016 Term Loans will be determined in accordance with the Pricing Grid.~~

“Appropriate Lender” means, at any time a Lender that has a Commitment with respect to the Term Facility or holds a Term Loan.

“Approved Fund” means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“Arrangers” means Bank of America and Deutsche Bank Securities Inc., in their capacity as joint lead arrangers and joint bookrunners.

“Asset Sale” shall mean any sale, transfer or other disposition by the Borrower or any of its Subsidiaries to any Person (including by way of redemption by such Person) other than to the Borrower or a Wholly-Owned Subsidiary of the Borrower of any asset (including, without limitation, any capital stock or other securities of, or Equity Interests in, another Person), but excluding sales, transfers and other dispositions of assets pursuant to Sections 7.05 (a), (b), (c), (d), (e), (g), (h), (i), (j), (k), (l), (m), (n), ~~and (p) and~~, (r) and (s).

“Assignee Group” means two or more Eligible Assignees that are Affiliates of one another or two or more Approved Funds managed by the same investment advisor.

“Assignment and Assumption” means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required by Section 10.06(b)), and accepted by the Administrative Agent, in substantially the form of Exhibit E-1 or any other form (including electronic documentation generated by use of an electronic platform) approved by the Administrative Agent.

“Audited Financial Statements” means the audited consolidated balance sheet of the Borrower and its Subsidiaries for the fiscal year ended October 31, 2013, and the related consolidated statements of income or operations, shareholders’ equity and cash flows for such fiscal year of the Borrower and its Subsidiaries, including the notes thereto.



“Available Retained Excess Cash Flow” means, on any date of determination thereof, an amount equal to Retained Excess Cash Flow *minus* the sum of (x) the amount of such Retained Excess Cash Flow before such date used to make Investments pursuant to Section 7.03(w), (y) the amount of such Retained Excess Cash Flow before such date used to make or pay Dividends pursuant to Section 7.06(j) and (z) the amount of such Retained Excess Cash Flow before such date used to make repayments of Indebtedness permitted pursuant to Section 7.14(e).

“Bank of America” means Bank of America, N.A. and its successors.

“Base Rate” means for any day a fluctuating rate per annum equal to the highest of (a) the Federal Funds Rate plus 1/2 of 1% (b) the rate of interest in effect for such day as publicly announced from time to time by Bank of America as its “prime rate”, and (c) the Eurodollar Rate plus 1.00%; provided that the rate calculated pursuant to this clause (c) shall not be less than 1.75%. The “prime rate” is a rate set by Bank of America based upon various factors including Bank of America’s costs and desired return, general economic conditions and other factors, and is used as a reference point for pricing some loans, which may be priced at, above, or below such announced rate. Any change in such rate announced by Bank of America shall take effect at the opening of business on the day specified in the public announcement of such change.

“Base Rate Loan” means a Term Loan that bears interest based on the Base Rate.

“Borrower” has the meaning specified in the introductory paragraph hereto.

“Borrower Materials” has the meaning specified in Section 6.02.

“Borrowing” means a Term Borrowing.

“Business Day” means any day other than a Saturday, Sunday or other day on which commercial banks are authorized to close under the Laws of, or are in fact closed in, the state where the Administrative Agent’s Office is located and, if such day relates to any Eurodollar Rate Loan, means any such day that is also a London Banking Day.

“Calculation Period” shall mean, with respect to any Permitted Acquisition or any other event expressly required to be calculated on a Pro Forma Basis pursuant to the terms of this Agreement, the Test Period most recently ended prior to the date of such Permitted Acquisition or other event for which financial statements have been delivered to the Lenders pursuant to this Agreement.

“Call Spread Option” shall mean the call spread options on the Company Common Stock held by the Borrower on or after the Closing Date and, if purchased on or after the Closing Date, purchased in accordance with the terms of this Agreement relating to the Company Common Stock issuable upon conversion at final maturity of any series of Permitted Convertible Notes.

“Capitalized Expenditures” means, with respect to any Person, all expenditures by such Person which should be capitalized in accordance with GAAP and, without duplication, the amount of all Capitalized Leases incurred by such Person.

“Capitalized Leases” means, with respect to any Person, all rental obligations of such Person which, under GAAP, are or will be required to be capitalized on the books of such Person, in each case taken at the amount thereof accounted for as indebtedness in accordance with such principles.

“Cash Equivalents” shall mean, as to any Person, (i) securities issued or directly and fully guaranteed or insured by the United States or any agency or instrumentality thereof (provided that the full faith and credit of the United States is pledged in support thereof) having maturities of not more than 24 months from the date of acquisition, (ii) marketable direct obligations issued by any state of the United States or any political subdivision of any such state or any public instrumentality thereof maturing within 12 months from the date of acquisition thereof and, at the time of acquisition, having one of the two highest ratings obtainable from either S&P or Moody’s, (iii) U.S. Dollar-denominated time deposits, certificates of deposit and bankers acceptances of any Lender or any commercial bank having, or which is the principal banking subsidiary of a bank holding company having, a long-term unsecured debt rating of at least “A” or the equivalent thereof from S&P or “A2” or the equivalent thereof from Moody’s with maturities of not more

than 12 months from the date of acquisition by such Person, (iv) repurchase obligations with a term of not more than 30 days for underlying securities of the types described in clause (i) above entered into with any bank meeting the qualifications specified in clause (iii) above, (v) commercial paper issued by any Person incorporated in the United States rated at least A-1 or the equivalent thereof by S&P or at least P 1 or the equivalent thereof by Moody's and in each case maturing not more than 12 months after the date of acquisition by such Person, (vi) investments in money market funds regulated under Rule 2a-7 of the Investment Company Act of 1940, (vii) securities of the types described in clause (ii) above having maturities of not more than 24 months from the date of acquisition thereof so long as such securities are fully guaranteed for both principal and interest by an irrevocable letter of credit issued by a commercial bank with a minimum credit rating of Aa3 from Moody's or AA- from Standard & Poor's and ~~at least \$250,000,000,000 in consolidated total assets, and~~ (viii) in the case of any Foreign Subsidiary of the Borrower, substantially similar investments of the type described in clauses (i) through (vii) above denominated in foreign currencies and from similarly capitalized and rated foreign banks or other Persons in the jurisdiction in which such Foreign Subsidiary is organized.

“CERCLA” means the Comprehensive Environmental Response, Compensation and Liability Act of 1980.

“CERCLIS” means the Comprehensive Environmental Response, Compensation and Liability Information System maintained by the U.S. Environmental Protection Agency.

“Change in Law” means the occurrence, after the date of this Agreement, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law”, regardless of the date enacted, adopted or issued.

“Change of Control” shall mean (i) any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act), is or shall become the “beneficial owner” (as defined in Rules 13(d)-3 and 13(d)-5 under the Exchange Act), directly or indirectly, of 35% or more of the Voting Stock of the Borrower, (iii) during any period of 24 consecutive months, a majority of the members of the board of directors or other equivalent governing body of the Borrower cease to be composed of individuals (x) who were members of that board or equivalent governing body on the first day of such period, (y) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (x) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (z) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (x) and (y) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iv) a “change of control” or similar event shall occur as provided in the ABL Credit Agreement, any Permitted Convertible Notes Document, ~~any Cyan Convertible Notes Documents (other than as a result of the Cyan Acquisition)~~ or any Permitted Additional Indebtedness Document.

“Closing Date” means the first date all the conditions precedent in Section 4.01 are satisfied or waived in accordance with Section 10.01.

“Code” means the Internal Revenue Code of 1986.

“Collateral” means all of the “Collateral” and “Mortgaged Property” or “Trust Property” or other similar term referred to in the Collateral Documents and all of the other property that is or is intended under the terms of the Collateral Documents to be subject to Liens in favor of the Administrative Agent for the benefit of the Secured Parties; provided that the Collateral shall not include any “Excluded Assets”, as such term is defined in the Collateral Documents.

“Collateral Documents” means, collectively, the Security Agreement, the Intellectual Property Security Agreements, the Mortgages, each of the mortgages, collateral assignments, Security Agreement Supplements, security agreements, pledge agreements or other similar agreements delivered to the Administrative Agent pursuant to Section 6.12, and each of the other agreements, instruments or documents that creates or purports to create a Lien on the assets of the Loan Parties in favor of the Administrative Agent for the benefit of the Secured Parties.

“Commitment” means a Term Commitment.

“Committed Loan Notice” means a notice of (a) a Term Borrowing, (b) a conversion of Loans from one Type to the other, or (c) a continuation of Eurodollar Rate Loans, pursuant to Section 2.02(a), shall be substantially in the form of Exhibit A or such other form as may be approved by the Administrative Agent including any form on an electronic platform or electronic transmission system as shall be approved by the Administrative Agent), appropriately completed and signed by a Responsible Officer of the Borrower.

“Company Common Stock” means the authorized shares of common stock of the Borrower, together with any subsequently authorized shares of common stock of the Borrower.

“Connection Income Taxes” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“Consolidated EBITDA” shall mean, for any period, Consolidated Net Income for such period (without giving effect to (w) any extraordinary gains or losses, (x) any non-cash income, (y) any gains or losses from sales of assets other than inventory sold in the ordinary course of business, or (z) any foreign currency gains or losses) adjusted by (A) adding thereto (in each case to the extent deducted in determining Consolidated Net Income for such period), without duplication, the amount of (i) total ~~interest expense~~ Interest Expense (inclusive of amortization of deferred financing fees and other original issue discount and banking fees, charges and commissions (e.g., letter of credit issuance and facing fees, commitment fees and other banking transactional costs)) of the Borrower and its Subsidiaries determined on a consolidated basis for such period, (ii) provision for taxes based on income and foreign withholding taxes for the Borrower and its Subsidiaries (including state, franchise, capital and similar taxes paid or accrued) determined on a consolidated basis for such period, (iii) all depreciation and amortization expense of the Borrower and its Subsidiaries determined on a consolidated basis for such period, (iv) in the case of any period including the first fiscal quarter of the Borrower ending after the Closing Date, the amount of all fees and expenses incurred in connection with the Transaction during such fiscal quarter, (v) any unusual or non-recurring cash charges and any cash restructuring charges or reserves (which, for the avoidance of doubt, shall include retention, severance, system establishment costs, excess pension charges, contract and lease termination costs and costs to consolidate facilities and relocate employees) for such period (x) incurred in connection with a Permitted Acquisition or any other Investment permitted pursuant to Section 7.03 (other than intercompany Investments among the Borrower and its Subsidiaries and Investments in the ordinary course of business), in each case, consummated after the Closing Date or (y) otherwise incurred in connection with the Borrower’s and its Subsidiaries’ operations in an aggregate amount for all cash charges added back pursuant to this clause (v) not to exceed 10% of Consolidated EBITDA in any Test Period (calculated before giving effect to this clause (v)), (vi) any expenses incurred in connection with any actual or proposed Investment, incurrence or repayment of Indebtedness, issuance of Equity Interests or acquisition or disposition, in each case, outside the ordinary course of business for such period, (vii) expenses incurred to the extent covered by indemnification provisions in any agreement in connection with an acquisition to the extent reimbursed in cash to the Borrower or any of its Subsidiaries and such indemnification payments are not otherwise included in Consolidated Net Income, in each case, for such period, (viii) proceeds received by the Borrower or any of its Subsidiaries from any business interruption insurance to the extent such proceeds are not otherwise included in such Consolidated Net Income for such period, and (ix) all other non-cash charges of the Borrower and its Subsidiaries determined on a consolidated basis for such period, and (B) subtracting therefrom (to the extent not otherwise deducted in determining Consolidated Net Income for such period) the amount of all cash payments or cash charges made (or incurred) by the Borrower or any of its Subsidiaries for such period on account of any non-cash charges added back to Consolidated EBITDA pursuant to preceding sub-clause (A)(ix) in a previous period. For the avoidance of doubt, it is understood and agreed that, to the extent any amounts are excluded from Consolidated Net Income by virtue of the proviso to the definition thereof contained herein, any add backs to Consolidated Net Income in

determining Consolidated EBITDA as provided above shall be limited (or denied) in a fashion consistent with the proviso to the definition of Consolidated Net Income contained herein.

“Consolidated Interest Expense” shall mean, for any period, (i) the total consolidated cash interest expense of the Borrower and its Subsidiaries (including, without limitation, all commissions, discounts and other commitment and banking fees and charges (e.g., fees with respect to Swap Contracts, letter of credit issuance and facing fees ~~and other banking transactional costs~~) for such period, adjusted to exclude (to the extent same would otherwise be included in the calculation above in this clause (i)) the amortization of any deferred financing costs for such period and any interest expense actually “paid in kind” or accreted during such period, plus (ii) without duplication, (x) that portion of Capitalized Leases of the Borrower and its Subsidiaries on a consolidated basis representing the interest factor for such period and (y) the “deemed interest expense” (i.e., the interest expense which would have been applicable if the respective obligations were structured as on-balance sheet financing arrangements) with respect to all Indebtedness of the Borrower and its Subsidiaries of the type described in clause (viii) of the definition of Indebtedness contained herein (for the avoidance of doubt, excluding deemed interest arising from a financing arrangement constituting an operating lease) for such period.

“Consolidated Net Income” shall mean, for any period, the net income (or loss) of the Borrower and its Subsidiaries determined on a consolidated basis for such period (taken as a single accounting period) in accordance with GAAP (after any deduction for minority interests); provided that the following items shall be excluded in computing Consolidated Net Income (without duplication): (i) the net income (or loss) of any Person in which a Person or Persons other than the Borrower and its Wholly-Owned Subsidiaries has an Equity Interest or Equity Interests to the extent of such Equity Interests held by such Persons and (ii) except for determinations expressly required to be made on a Pro Forma Basis, the net income (or loss) of any Person accrued prior to the date it becomes a Subsidiary or all or substantially all of the property or assets of such Person are acquired by a Subsidiary

“Consolidated Net Senior Secured Indebtedness” shall mean, at any time, (A) the sum of (without duplication) (i) all Indebtedness of the Borrower and its Subsidiaries (on a consolidated basis) (other than of the type described in clause (vii) of the definition of Indebtedness and other Indebtedness evidenced by the Ottawa Capitalized Lease) that is secured by a Lien on any asset of the Borrower or any of its Subsidiaries as would be required to be reflected as debt or Capitalized Leases at such time on the liability side of a consolidated balance sheet of the Borrower and its Subsidiaries in accordance with GAAP, (ii) all Indebtedness of the Borrower and its Subsidiaries that is secured by a Lien on any asset of the Borrower or any of its Subsidiaries at such time of the type described in clauses (ii) and (viii) of the definition of Indebtedness and (iii) all Contingent Obligations of the Borrower and its Subsidiaries in respect of Indebtedness of any third Person of the type referred to in preceding clauses (i) and (ii) minus (B) the aggregate amount of Unrestricted cash and Cash Equivalents of the Borrower and its Subsidiaries not to exceed ~~\$50,000,000~~ 100,000,000 in the aggregate; provided that the aggregate amount available to be drawn (i.e., unfunded amounts) under all letters of credit, bankers’ acceptances, bank guaranties, surety bonds and similar obligations issued for the account of the Borrower or any of its Subsidiaries (but excluding, for avoidance of doubt, all unpaid drawings or other matured monetary obligations owing in respect of such letters of credit, bankers’ acceptances, bank guaranties, surety bonds and similar obligations) shall not be included in any determination of “Consolidated Net Senior Secured Indebtedness”; ~~provided further that the Cyan Convertible Notes shall not be included in any determination of “Consolidated Net Senior Secured Indebtedness” so long as the only collateral that secures the obligations in respect of the Cyan Convertible Notes is the Pledged Collateral (as defined in the Cyan Pledge and Escrow Agreement (as in effect on the Second Amendment Effective Date and thereafter as amended, restated, supplemented or otherwise modified from time to time so long as such amendment, restatement, supplement or modification is not adverse to the interests of the Lenders in any material respect)) that has been deposited into the Escrow Account (as defined in the Cyan Pledge and Escrow Agreement) by Cyan prior to the consummation of the Cyan Acquisition (and any investment earnings thereon).~~

“Consolidated Net Total Indebtedness” shall mean, at any time, (A) the sum of (without duplication) (i) all Indebtedness of the Borrower and its Subsidiaries (on a consolidated basis) (other than of the type described in clause (vii) of the definition of Indebtedness and other Indebtedness evidenced by the Ottawa Capitalized Lease) as would be required to be reflected as debt or Capitalized Leases at such time on the liability side of a consolidated balance sheet of the Borrower and its Subsidiaries in accordance with GAAP, (ii) all Indebtedness of the Borrower and its

Subsidiaries at such time of the type described in clauses (ii) and (viii) of the definition of Indebtedness and (iii) all Contingent Obligations of the Borrower and its Subsidiaries in respect of Indebtedness of any third Person of the type referred to in preceding clauses (i) and (ii) minus (B) the ~~aggre-gate~~aggregate amount of Unrestricted cash and Cash Equivalents of the Borrower and its Subsidiaries not to exceed \$~~50,000,000~~100,000,000 in the aggregate; provided that the aggregate amount available to be drawn (i.e., unfunded amounts) under all letters of credit, bankers' acceptances, bank guaranties, surety bonds and similar obligations issued for the account of the Borrower or any of its Subsidiaries (but excluding, for avoidance of doubt, all unpaid drawings or other matured monetary obligations owing in respect of such letters of credit, bankers' acceptances, bank guaranties, surety bonds and similar obligations) shall not be included in any determination of "Consolidated Net Total Indebtedness".

"Consolidated Total Assets" shall mean, at any time of determination thereof, the aggregate amount of all assets of the Borrower and its Subsidiaries as set forth in the most recent consolidated balance sheet of the Borrower and its Subsidiaries delivered to the Lenders pursuant to this Agreement and computed in accordance with GAAP.

"Contingent Obligation" shall mean, as to any Person, any obligation of such Person as a result of such Person being a general partner of any other Person, unless the underlying obligation is expressly made non-recourse as to such general partner, and any obligation of such Person guaranteeing or intended to guarantee any Indebtedness, leases, dividends or other obligations (solely for the purpose of this definition, "primary obligations") of any other Person (solely for the purpose of this definition, the "primary obligor") in any manner, whether directly or indirectly, including, without limitation, any obligation of such Person, whether or not contingent, (i) to purchase any such primary obligation or any property constituting direct or indirect security therefor, (ii) to advance or supply funds (x) for the purchase or payment of any such primary obligation or (y) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the primary obligor for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation, (iii) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation or (iv) otherwise to assure or hold harmless the holder of such primary obligation against loss in respect thereof; provided, however, that the term Contingent Obligation shall not include endorsements of instruments for deposit or collection in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the lesser of (x) the stated or determinable amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof (assuming such Person is required to perform thereunder) as determined by such Person in good faith and (y) the maximum amount for which the guaranteeing person may be liable pursuant to the terms of the instrument embodying such primary obligation.

"Contractual Obligation" means, as to any Person, any provision, of any security issued by such Person pursuant to any agreement, instrument or other written undertaking, or of any agreement, instrument or other written undertaking to which such Person is a party or by which it or any of its property is bound.

"Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. "Controlling" and "Controlled" have meanings correlative thereto.

"Credit Agreement Refinancing Indebtedness" shall mean (a) Permitted First Priority Refinancing Debt, (b) Permitted Junior Priority Refinancing Debt, (c) Permitted Unsecured Refinancing Debt or (d) subject to the provisions of Section 2.12, term loans under this Agreement; provided that, in each case, such Indebtedness is issued, incurred or otherwise obtained (including by means of the extension or renewal of existing Indebtedness) in exchange for, or to extend, renew, replace or refinance, in whole or in part, existing Term Loans, or any Term Loans under any then-existing incremental facility or refinancing facility, or any then-existing Credit Agreement Refinancing Indebtedness ("Refinanced Debt"); provided, further, that (i) except with respect to the Credit Agreement Refinancing Indebtedness under Section 2.12, which is subject to clause (iii) of the proviso in Section 2.12, the covenants, events of default and guarantees of such Indebtedness (excluding, for the avoidance of doubt, pricing, rate floors, discounts, fees and optional prepayment or redemption terms, in each case, which will be on such terms as agreed to among the Borrower and the lenders providing such Indebtedness) (when taken as a whole) are not more favorable to the lenders providing

such Indebtedness (as reasonably determined by the Borrower) than, or are otherwise substantially identical to, those applicable to the Refinanced Debt (other than covenants or other provisions applicable only to periods after the latest maturity date of the then-existing Term Loans) or shall be current market terms for such type of Indebtedness (as reasonably determined by the Borrower), (ii) such Indebtedness shall not have a greater principal amount than the principal amount of the Refinanced Debt plus accrued and/or capitalized interest, fees, premiums and penalties (if any) thereon and fees and expenses associated with the refinancing, (iii) such Refinanced Debt shall be repaid, defeased or satisfied and discharged on a dollar-for-dollar basis, and all accrued interest, fees, premiums and penalties (if any) in connection therewith shall be paid, substantially concurrently with the date such Credit Agreement Refinancing Indebtedness is issued, incurred or obtained, (iv) except with respect to the Credit Agreement Refinancing Indebtedness under Section 2.12, which is subject to clause (ii) of the proviso in Section 2.12, such Indebtedness will have a scheduled maturity date that is not prior to the 91st day after the scheduled maturity date of the class of Term Loans being refinanced at the time of issuance or incurrence of such Credit Agreement Refinancing Indebtedness and weighted average life to maturity that is not shorter than that applicable to the class of Term Loans being refinanced; and (v) shall not require any mandatory repayment or redemption (other than (A) customary change of control or asset sale or event of loss offers (or, in the case of Credit Agreement Refinancing Indebtedness in the form of term loans, (x) which are Loans under this agreement, mandatory prepayments which may be shared on a no greater than *pro rata* basis with the then-existing Term Loans or (y) which are Permitted Junior Priority Refinancing Debt, mandatory prepayment events subject to the prior payment in full of the Term Loans and Permitted First Priority Refinancing Debt), (B) early maturities customary for “bridge” loans so long as such maturities are automatically extendible or convertible absent a bankruptcy or payment event of default thereunder, (C) upon any event of default thereunder, (D) as a result of a scheduled maturity date, which is addressed in clause (iv) above or (E) amortization that is not in contravention of clause (iv) above) prior to the 91st day after the scheduled maturity date of the Refinanced Debt.

“Credit Extension” means a Borrowing.

“Cyan” shall mean Cyan, Inc., a Delaware corporation.

“Cyan Acquisition” shall mean the (i) acquisition by the Borrower of all the outstanding Equity Interests of Cyan pursuant to, and in accordance with, the terms of the Cyan Merger Agreement, pursuant to which Merger Sub shall merge with and into Cyan, with Cyan being the surviving entity, and (ii) substantially simultaneous merger of Cyan with and into the Borrower, with the Borrower being the surviving entity.

~~“Cyan Convertible Notes” shall mean the 8.00% senior secured convertible notes due December 15, 2019, issued by Cyan pursuant to the Cyan Indenture and assumed by the Borrower upon the consummation of the Cyan Acquisition.~~

~~“Cyan Convertible Notes Documents” shall mean the Cyan Convertible Notes, the Cyan Pledge and Escrow Agreement and the Cyan Indenture, as supplemented by one or more supplemental indentures thereto, which after giving effect to any such supplemental indentures, the terms of the Cyan Indenture shall (i) not be materially more restrictive than the terms of the Cyan Indenture as in effect on the Second Amendment Effective Date assuming for purposes of this clause (i) the application of Section 4.14 of the Cyan Indenture has occurred as a result of a Fundamental Change (as such term is defined in the Cyan Indenture) described in clause (a) or (b) of the definition thereof (it being agreed that the Borrower’s guaranty of, or assumption of the obligations under, the Cyan Convertible Notes and the substitution of reference property for determination of any conversion amount are deemed not to be materially more restrictive) or (ii) otherwise be acceptable to the Administrative Agent in its reasonable discretion, pursuant to which, among other things, upon the consummation of Cyan Acquisition, the Borrower may guaranty the Cyan Convertible Notes (prior to the assumption of the obligations thereof by the Borrower promptly after the consummation of the Cyan Acquisition) and the Borrower will assume the obligations of Cyan as issuer thereunder as successor by merger (which shall occur promptly after the consummation of the Cyan Acquisition).~~

~~“Cyan Indenture” shall mean the Indenture, dated as of December 12, 2014, between Cyan, as issuer, and U.S. Bank, National Association, as trustee, as supplemented by that certain First Supplemental Indenture, dated as of April 27,~~

~~2015, and as may be further amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.~~

“Cyan Merger Agreement” shall mean the Agreement and Plan of Merger dated as of May 3, 2015, among the Borrower, Merger Sub and Cyan, as amended, supplemented and otherwise modified from time to time.

~~“Cyan Pledge and Escrow Agreement” shall mean the Pledge and Escrow Agreement, dated as of December 12, 2014, between Cyan and U.S. Bank, National Association, as collateral agent, as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.~~

“Debtor Relief Laws” means the Bankruptcy Code of the United States, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

“Default” means any event or condition that constitutes an Event of Default or that, with the giving of any notice, the passage of time, or both, would be an Event of Default.

“Default Rate” means when used with respect to Obligations, an interest rate equal to (i) the Base Rate plus (ii) the Applicable Rate, if any, applicable to Base Rate Loans under the Term Facility plus (iii) 2% per annum; provided, however, that with respect to a Eurodollar Rate Loan, the Default Rate shall be an interest rate equal to the interest rate (including any Applicable Rate) otherwise applicable to such Loan plus 2% per annum.

“Defaulting Lender” means, subject to Section 2.15(b), any Lender that (a) has failed to (i) fund all or any portion of its Loans within two Business Days of the date such Loans were required to be funded hereunder unless such Lender notifies the Administrative Agent and the Borrower in writing that such failure is the result of such Lender’s determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, shall be specifically identified in such writing) has not been satisfied, or (ii) pay to the Administrative Agent or any other Lender any other amount required to be paid by it hereunder within two Business Days of the date when due, (b) has notified the Borrower or the Administrative Agent in writing that it does not intend to comply with its funding obligations hereunder, or has made a public statement to that effect (unless such writing or public statement relates to such lender’s obligation to fund a Loan hereunder and states that such position is based on such Lender’s determination that a condition precedent to funding (which condition precedent, together with any applicable default, shall be specifically identified in such writing or public statement) cannot be satisfied), (c) has failed, within three Business Days after written request by the Administrative Agent or the Borrower, to confirm in writing to the Administrative Agent and the Borrower that it will comply with its prospective funding obligations hereunder (provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent and the Borrower), or (d) has, or has a direct or indirect parent company that has, (i) become the subject of a proceeding under any Debtor Relief Law, or (ii) had appointed for it a receiver, custodian, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or assets, including the Federal Deposit Insurance Corporation or any other state or federal regulatory authority acting in such a capacity; provided that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any Equity Interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority so long as such ownership interest does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above, and of the effective date of such status, shall be conclusive and binding absent manifest error, and such Lender shall be deemed to be a Defaulting Lender (subject to Section 2.15(b)) as of the date established therefor by the Administrative Agent in a written notice of such determination, which shall be delivered by the Administrative Agent to the Borrower and each other Lender promptly following such determination.

“Designated Jurisdiction” means any country or territory to the extent that such country or territory itself is, or whose government is, the subject of any Sanction.

“Discharge of ABL Obligations” has the meaning specified in the Intercreditor Agreement.

“Disposition” or “Dispose” means the sale, transfer, license, lease or other disposition (including any sale and leaseback transaction) of any property by any Person, including any sale, assignment, transfer or other disposal, with or without recourse, of any notes or accounts receivable or any rights and claims associated therewith. For the purposes of clarity, an issuance of Equity Interests shall not be a Disposition by the issuer of such Equity Interests.

“Dividend” shall mean, with respect to any Person, that such Person has declared or paid a dividend, distribution or returned any equity capital to its stockholders, partners or members or authorized or made any other distribution, payment or delivery of property (other than common Equity Interests of such Person) or cash to its stockholders, partners or members in their capacity as such, or redeemed, retired, purchased or otherwise acquired, directly or indirectly, for a consideration any shares of any class of its capital stock or any other Equity Interests outstanding on or after the Closing Date (or any options or warrants issued by such Person with respect to its capital stock or other Equity Interests), or set aside any funds for any of the foregoing purposes, or shall have permitted any of its Subsidiaries to purchase or otherwise acquire for a consideration any shares of any class of the capital stock or any other Equity Interests of such Person outstanding on or after the Closing Date (or any options or warrants issued by such Person with respect to its capital stock or other Equity Interests). Without limiting the foregoing, “Dividends” with respect to any Person shall also include all payments made or required to be made by such Person to any other Person (solely in such other Person's capacity as an equity holder of such Person) with respect to any stock appreciation rights, plans, equity incentive or achievement plans or any similar plans or setting aside of any funds for the foregoing purposes. For the avoidance of doubt, no conversion of Permitted Convertible Notes ~~or the Cyan Convertible Notes~~ into Company Common Stock and no redemption, purchase, repayment or other acquisition or retirement of Permitted Convertible Notes ~~or the Cyan Convertible Notes~~ prior to the conversion thereof into Company Common Stock, and no election to settle any Permitted Convertible Notes in cash upon conversion thereof and the payment of such cash to effect settlement, shall constitute a Dividend.

“Dollar” and “\$” mean lawful money of the United States.

“Domestic Subsidiary” of any Person shall mean any Subsidiary of such Person incorporated or organized in the United States or any State thereof or the District of Columbia (other than any such Subsidiary where all or substantially all of its assets consist of Equity Interests of one or more Foreign Subsidiaries (for this purpose, determined without giving effect to this parenthetical) that are controlled foreign corporations as defined in Section 957 of the Code).

“ECF Percentage” has the meaning specified in Section 2.03(b) herein.

“Eligible Assignee” means any Person that meets the requirements to be an assignee under Sections 10.06(b)(i), (iii) and (v) (subject to such consents, if any, as may be required under Section 10.06(b)(iii)).

“Environment” means ambient air, indoor air, surface water, groundwater, drinking water, soil, surface and subsurface strata, and natural resources such as wetland, flora and fauna.

“Environmental Laws” means any and all Federal, state, local, and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, agreements or governmental restrictions relating to pollution or the protection of the Environment or human health (to the extent related to exposure to hazardous materials), including those relating to the manufacture, generation, handling, transport, storage, treatment or Release or threat of Release of hazardous materials.

“Environmental Liability” means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of or relating to the Borrower, any other Loan Party or any of their respective Subsidiaries resulting from or based upon (a) any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any



Hazardous Materials, (d) Release or threatened Release of any Hazardous Materials or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

“Environmental Permit” means any permit, approval, identification number, license or other authorization required under any Environmental Law.

“Equity Interests” of any Person shall mean any and all shares, interests, rights to purchase, warrants, options, participation or other equivalents of or interest in (however designated) equity of such Person, including any common stock, preferred stock, any limited or general partnership interest and any limited liability company membership interest, but excluding, for the avoidance of doubt, any Permitted Convertible Notes ~~and any Cyan Convertible Notes~~ to the extent that the same have not yet been converted into shares of Company Common Stock.

“ERISA” means the Employee Retirement Income Security Act of 1974.

“ERISA Affiliate” means any trade or business (whether or not incorporated) under common control with the Borrower within the meaning of Section 414(b) or (c) of the Code (and Sections 414(m) and (o) of the Code for purposes of provisions relating to Section 412 of the Code).

“ERISA Event” means (a) a Reportable Event with respect to a Pension Plan; (b) the withdrawal of the Borrower or any ERISA Affiliate from a Pension Plan subject to Section 4063 of ERISA during a plan year in which such entity was a “substantial employer” as defined in Section 4001(a)(2) of ERISA or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (c) a complete or partial withdrawal by the Borrower or any ERISA Affiliate from a Multiemployer Plan or notification that a Multiemployer Plan is in reorganization; (d) the filing of a notice of intent to terminate, the treatment of a Pension Plan amendment as a termination under Section 4041 or 4041A of ERISA; (e) the institution by the PBGC of proceedings to terminate a Pension Plan; (f) any event or condition which constitutes grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Pension Plan; (g) the determination that any Pension Plan is considered an at-risk plan or a plan in endangered or critical status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; (h) the imposition of any liability under Title IV of ERISA, other than for PBGC premiums due but not delinquent under Section 4007 of ERISA, upon the Borrower or any ERISA Affiliate; or (i) a failure by the Borrower or any ERISA Affiliate to meet all applicable requirements under the Pension Funding Rules in respect of a Pension Plan, whether or not waived, or the failure by the Borrower or any ERISA Affiliate to make any required contribution to a Multiemployer Plan.

“Eurodollar Rate” means:

(a) for any Interest Period with respect to a Eurodollar Rate Loan, the rate per annum equal to the London Interbank Offered Rate (“LIBOR”) or a comparable or successor rate, which rate is approved by the Administrative Agent, as published on the applicable Bloomberg screen page (or such other commercially available source providing such quotations as may be designated by the Administrative Agent from time to time) at approximately 11:00 a.m., London time, two Business Days prior to the commencement of such Interest Period, for Dollar deposits (for delivery on the first day of such Interest Period) with a term equivalent to such Interest Period; provided that such rate shall not be less than 0.75%; and

(b) for any interest calculation with respect to a Base Rate Loan on any date, the rate per annum equal to LIBOR, at or about 11:00 a.m., London time determined two Business Days prior to such date for U.S. Dollar deposits with a term of one month commencing that day;

provided that to the extent a comparable or successor rate is approved by the Administrative Agent in connection herewith, the approved rate shall be applied in a manner consistent with market practice; provided, further that to the extent such market practice is not administratively feasible for the Administrative Agent, such approved rate shall be applied in a manner as otherwise reasonably determined by the Administrative Agent.

“Eurodollar Rate Loan” means a Term Loan that bears interest at a rate based on clause (a) of the definition of the Eurodollar Rate.

“Event of Default” has the meaning specified in Section 8.01.

“Excess Cash Flow” means, for any fiscal year of the Borrower commencing with the fiscal year ending October 31, 2015, an amount equal to (which for the purposes of determination of Excess Cash Flow in any such period shall not be less than \$0) the excess (if any) of (a) the sum of (i) Consolidated EBITDA for such fiscal year plus (ii) any decrease in the Net Working Capital during such period (measured as the excess of the Net Working Capital at the beginning of such period over the Net Working Capital at the end thereof) over (b) the sum (for such fiscal year) of (i) Consolidated Interest Expenses actually paid in cash by the Borrower and its Subsidiaries, (ii) regularly-scheduled principal repayments, to the extent actually made, of Indebtedness (excluding payment of principal at maturity made in connection with a refinancing of all or any portion of such Indebtedness but including any election to settle any Permitted Convertible Notes in cash upon conversion of such Permitted Convertible Notes at maturity and the payment of such cash to effect settlement), (iii) all income and franchise taxes actually paid in cash by the Borrower and its Subsidiaries, (iv) Capitalized Expenditures actually made by the Borrower and its Subsidiaries in such fiscal year (other than Capitalized Expenditures to the extent financed with the proceeds of any sale or issuance of Equity Interests, the proceeds of any Asset Sale, the proceeds of any Recovery Event or the proceeds of any incurrence of Indebtedness (other than the incurrence of any Loans and any revolving loans under the ABL Credit Agreement), (v) any increase in the Net Working Capital during such period (measured as the excess of Net Working Capital at the end of such period over the Net Working Capital at the beginning of such period); and (vi) all other items added back to Consolidated EBITDA pursuant to (and subject to the limitations in) the definition of “Consolidated EBITDA” to the extent paid in cash during such fiscal period.

“Excluded Assets” has the meaning specified in the Security Agreement.

“Excluded Taxes” means any of the following Taxes imposed on or with respect to Recipient or required to be withheld or deducted from payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its Lending Office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment (other than pursuant to an assignment request by the Borrower under Section 10.13) or (ii) such Lender changes its lending office, except in each case to the extent that pursuant to Section 3.01, amounts with respect to such Taxes were payable either to such Lender’s assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its Lending Office, (c) Taxes attributable to such Recipient’s failure to comply with Section 3.01(e) and (d) any U.S. federal withholding Taxes imposed pursuant to FATCA.

“Existing Convertible Notes” shall mean, collectively, the ~~2015 Convertible Notes, the~~ 2017 Convertible Notes, the 2018 Convertible Notes and the 2020 Convertible Notes.

“Existing Term Loan Tranche” has the meaning specified in Section 2.14(a) herein.

“Extended Term Loans” has the meaning specified in Section 2.14(a) herein.

“Extending Term Lender” has the meaning specified in Section 2.14(b) herein.

“Extension Amendment” has the meaning specified in Section 2.14(c) herein.

“Extension Election” has the meaning specified in Section 2.14(b) herein.

“Facility” means the Term Facility.

“Fair Market Value” shall mean, with respect to any asset (including any Equity Interests of any Person), (i) the price thereof to the extent that the same is readily available on an active trading market or (ii) if such price is not so readily available, the price at which a willing buyer, not an Affiliate of the seller, and a willing seller who does not have to sell, would agree to purchase and sell such asset, as determined in good faith by the board of directors or other governing body or, pursuant to a specific delegation of authority by such board of directors or governing body, a designated senior executive officer, of the Borrower or the Subsidiary of the Borrower selling such asset.

“FASB ASC” means the Accounting Standards Codification of the Financial Accounting Standards Board.

“FATCA” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantially comparable and not materially more onerous to comply with) and any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1).

“FCPA” has the meaning specified in Section 5.20.

“Federal Funds Rate” means, for any day, the rate per annum equal to the weighted average of the rates on overnight Federal funds transactions with members of the FRB arranged by Federal funds brokers on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day; provided that (a) if such day is not a Business Day, the Federal Funds Rate for such day shall be such rate on such transactions on the next preceding Business Day as so published on the next succeeding Business Day, and (b) if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day shall be the average rate (rounded upward, if necessary, to a whole multiple of 1/100 of 1%) charged to Bank of America on such day on such transactions as determined by the Administrative Agent.

“Fee Letter” shall mean, collectively, (a) the Arranger Fee Letter, dated as of June 26, 2014, among the Borrower and the Arrangers and (b) the Administrative Agency Fee Letter, dated as of June 26, 2014, between the Borrower and the Administrative Agent.

“Foreign Pledge Agreement” means a local law pledge or charge agreement granting to the Administrative Agent (or a sub-agent thereof), for the benefit of the Secured Parties, a Lien on Equity Interests in a Foreign Subsidiary of the Borrower incorporated under the laws of Canada (or any province or territory thereof), Luxembourg or the United Kingdom, which agreement shall be in form and substance reasonably satisfactory to the Administrative Agent, as the same may be amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.

“Foreign Subsidiary” of any Person shall mean any Subsidiary of such Person that is not a Domestic Subsidiary of such Person.

“Foreign Lender” means (a) if the Borrower is a U.S. Person, a Lender that is not a U.S. Person, and (b) if the Borrower is not a U.S. Person, a Lender that is resident or organized under laws of a jurisdiction other than that in which the Borrower is resident for tax purposes. For purposes of this definition, the United States, each State thereof and the District of Columbia shall be deemed to constitute a single jurisdiction.

“FRB” means the Board of Governors of the Federal Reserve System of the United States.

“Fund” means any Person (other than a natural Person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its activities.

“GAAP” means generally accepted accounting principles in the United States set forth in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or such other principles as may be approved by a significant segment of the accounting profession in the United States, that are applicable to the circumstances as of the date of determination, consistently applied.

“Governmental Authority” means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

“Guarantee” means, as to any Person, any (a) obligation, contingent or otherwise, of such Person guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation payable or performable by another Person (the “primary obligor”) in any manner, whether directly or indirectly, and including any obligation of such Person, direct or indirect, (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation, (ii) to purchase or lease property, securities or services for the purpose of assuring the obligee in respect of such Indebtedness or other obligation of the payment or performance of such Indebtedness or other obligation, (iii) to maintain working capital, equity capital or any other financial statement condition or liquidity or level of income or cash flow of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation, or (iv) entered into for the purpose of assuring in any other manner the obligee in respect of such Indebtedness or other obligation of the payment or performance thereof or to protect such obligee against loss in respect thereof (in whole or in part), or (b) any Lien on any assets of such Person securing any Indebtedness or other obligation of any other Person, whether or not such Indebtedness or other obligation is assumed by such Person (or any right, contingent or otherwise, of any holder of such Indebtedness to obtain any such Lien). The amount of any Guarantee shall be deemed to be an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by the guaranteeing Person in good faith. The term “Guarantee” as a verb has a corresponding meaning.

“Guarantors” means, collectively, the Subsidiaries of the Borrower listed on Schedule 6.12 and each other Subsidiary of the Borrower that shall be required to execute and deliver a guaranty or guaranty supplement pursuant to Section 6.12; provided that no Immaterial Subsidiary shall be a Guarantor.

“Guaranty” means, collectively, the Guaranty Agreement made by the Guarantors in favor of the Administrative Agent for the benefit of the Secured Parties, substantially in the form of Exhibit F, together with each other guaranty and guaranty supplement delivered pursuant to Section 6.12.

“Hazardous Materials” means all explosive or radioactive substances or wastes and all hazardous or toxic substances, wastes or other pollutants including petroleum or petroleum distillates, natural gas, natural gas liquids, asbestos or asbestos-containing materials, polychlorinated biphenyls, radon gas, toxic mold, infectious or medical wastes and all other substances, wastes, chemicals, pollutants, contaminants or compounds of any nature in any form regulated pursuant to, or which can form the basis for liability under, any Environmental Law.

“Immaterial Subsidiary” shall mean, as of any date of determination, any Wholly-Owned Domestic Subsidiary of the Borrower (x) that has not guaranteed any other Indebtedness of the Borrower or is not a borrower under the ABL Credit Agreement and (y) whose consolidated total assets (as set forth in the most recent consolidated balance sheet of the Borrower and its Subsidiaries delivered to the Lenders pursuant to this Agreement and computed in accordance with GAAP), when added to the consolidated total assets of all other Immaterial Subsidiaries (as set forth in the most recent consolidated balance sheet of the Borrower and its Subsidiaries delivered to the Lenders pursuant to this Agreement and computed in accordance with GAAP), do not constitute more than 5.0% of the Consolidated Total Assets; provided, however, notwithstanding the foregoing or anything to the contrary contained in Section 6.12, the Borrower, at its option, may elect to cause an Immaterial Subsidiary to become a Guarantor pursuant to (and in accordance with the terms and conditions of) Section 6.12, in which case such Immaterial Subsidiary shall, upon satisfaction of the provisions of either such Section, no longer constitute an Immaterial Subsidiary for any purpose hereunder or under any other Loan Document.

“Impacted Loans” has the meaning assigned to such term in Section 3.03.

“Increase Effective Date” has the meaning assigned to such term in Section 2.13(b).

“Increase Joinder” has the meaning assigned to such term in Section 2.13(c).

“Incremental Term Commitments” has the meaning assigned to such term in Section 2.13(a).

“Incremental Term Loan Maturity Date” has the meaning assigned to such term in Section 2.13(c).

“Incremental Term Loans” means any loans made pursuant to any Incremental Term Commitments.

“Indebtedness” shall mean, as to any Person, without duplication, (i) all indebtedness of such Person for borrowed money or for the deferred purchase price of property or services, (ii) the maximum amount available to be drawn or paid under all letters of credit, bankers’ acceptances, bank guaranties, surety and appeal bonds and similar obligations issued for the account of such Person and all unpaid drawings and unreimbursed payments in respect of such letters of credit, bankers’ acceptances, bank guaranties, surety and appeal bonds and similar obligations, (iii) all indebtedness of the types described in clause (i), (ii), (iv), (v), (vi), (vii) or (viii) of this definition secured by any Lien on any property owned by such Person, whether or not such indebtedness has been assumed by such Person (provided that, if the Person has not assumed or otherwise become liable in respect of such indebtedness, such indebtedness shall be deemed to be in an amount equal to the lesser of (x) the Fair Market Value of the property to which such Lien relates and (y) the amount of the indebtedness secured), (iv) all Capitalized Leases of such Person, (v) all non-ordinary course obligations of such Person to pay a specified purchase price for goods or services, whether or not delivered or accepted, i.e., take-or-pay and similar obligations incurred outside the ordinary course of business, (vi) all Contingent Obligations of such Person in respect of Indebtedness set forth in another clause of this definition, (vii) all obligations under any Swap Contract or under any similar type of agreement (and with the amount of any such obligations to be equal at any time to the termination value of such agreement or arrangement giving rise to such obligations that would be payable by such Person at such time) and (viii) all Off-Balance Sheet Liabilities of such Person. The Indebtedness of any Person shall include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is directly liable therefor pursuant to applicable law, contract or organizational documents as a result of such Person’s ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor. Notwithstanding the foregoing, Indebtedness shall not include (i) trade payables, accrued expenses and deferred tax and other credits (including, for the avoidance of doubt, in respect of travel card, purchasing card or other corporate card purchasing programs) incurred by any Person in accordance with customary practices and in the ordinary course of business of such Person, (ii) any earn-out obligations until such obligation becomes a non-contingent liability on the balance sheet of such Person in accordance with GAAP or (iii) obligations incurred among the Loan Parties and their respective Subsidiaries in the ordinary course of business and consistent with past practice for the purchase of goods and services.

“Indemnified Taxes” means (a) Taxes other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

“Indemnitee” has the meaning specified in Section 10.04(b).

“Information” has the meaning specified in Section 10.07.

“Information Memorandum” means the information memorandum dated June 24, 2014 used by the Arrangers in connection with the syndication of the Commitments.

“Intellectual Property Security Agreement” has the meaning specified in Section 4.01(a)(v).

“Intercompany Loans” has the meaning specified in Section 7.03(d) herein.

“Intercompany Subordination Agreement” means an Intercompany Subordination Agreement, substantially in the form of Exhibit P, pursuant to which intercompany obligations and advances owed by any Loan Party are subordinated to the Obligations.

“Intercreditor Agreement” means the Intercreditor Agreement between the Administrative Agent and Deutsche Bank AG New York Branch, in its capacity as administrative agent under the ABL Credit Agreement, substantially in the form of Exhibit O, as amended, restated, amended and restated, supplemented or otherwise modified in accordance with the terms thereof.

“Interest Coverage Ratio” means, for any period, the ratio of (a) Consolidated EBITDA for such period to (b) Consolidated Interest Expense for such period.

“Interest Payment Date” means, as to any Eurodollar Rate Loan, the last day of each Interest Period applicable to such Loan and the Maturity Date of the Facility under which such Loan was made; provided, however, that if any Interest Period for a Eurodollar Rate Loan exceeds three months, the respective dates that fall every three months after the beginning of such Interest Period shall also be Interest Payment Dates; and (a) as to any Base Rate Loan the last Business Day of each January, April, July and October and the Maturity Date of the Facility under which such Loan was made.

“Interest Period” means, as to each Eurodollar Rate Loan, the period commencing on the date such Eurodollar Rate Loan is disbursed or converted to or continued as a Eurodollar Rate Loan and ending on the date one, two, three or six months thereafter, as selected by the Borrower in its Committed Loan Notice, or such other period that is twelve months or less (subject to availability) requested by the Borrower and consented to by the Appropriate Lenders; provided that:

(i) any Interest Period that would otherwise end on a day that is not a Business Day shall be extended to the next succeeding Business Day unless, in the case of a Eurodollar Rate Loan, such Business Day falls in another calendar month, in which case such Interest Period shall end on the next preceding Business Day;

(ii) any Interest Period pertaining to a Eurodollar Rate Loan that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall end on the last Business Day of the calendar month at the end of such Interest Period; and

(iii) no Interest Period shall extend beyond the Maturity Date.

“Investments” means directly or indirectly, lending money or credit or making advances to any Person, or purchasing or acquiring any stock, obligations or securities of, or any other Equity Interest in, or making any capital contribution to, any other Person, or purchasing or owning a futures contract or otherwise becoming liable for the purchase or sale of currency or other commodities at a future date in the nature of a futures contract, or holding any cash or Cash Equivalents.

“IP Rights” has the meaning specified in Section 5.17.

“IRS” means the United States Internal Revenue Service.

“Junior Refinancing Debt” means Permitted Junior Priority Refinancing Debt and Permitted Unsecured Refinancing Debt.

“Latest Maturity Date” means the latest of the Maturity Date for the Term Facility and any Incremental Term Loan Maturity Date applicable to existing Incremental Term Loans, as of any date of determination.

“Laws” means, collectively, all international, foreign, Federal, state and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“Lender” has the meaning specified in the introductory paragraph hereto.

“Lending Office” means, as to any Lender, the office or offices of such Lender described as such in such Lender’s Administrative Questionnaire, or such other office or offices as a Lender may from time to time notify the Borrower and the Administrative Agent, which office may include any Affiliate of such Lender or any domestic or foreign branch of such Lender or such Affiliate. Unless the context otherwise requires each reference to a Lender shall include its applicable Lending Office.

“Lien” means any mortgage, pledge, hypothecation, assignment, deposit arrangement, encumbrance, easement, right-of-way or other encumbrance on title to real property, lien (statutory or other), charge, or preference, priority or other security interest or preferential arrangement in the nature of a security interest of any kind or nature whatsoever (including any conditional sale or other title retention agreement, and any Capitalized Lease having substantially the same economic effect as any of the foregoing).

“Limited Condition Acquisition” means any Permitted Acquisition the consummation of which is not conditioned on the availability of, or on obtaining, third party financing.

“Loan” means an extension of credit by a Lender to the Borrower under Article II.

“Loan Documents” means, collectively, (a) this Agreement, (b) the Notes, (c) the Guaranty, (e) the Collateral Documents, (f) the Fee Letter and (g) the Intercreditor Agreement.

“Loan Parties” means, collectively, the Borrower and each Guarantor.

“London Banking Day” means any day on which dealings in Dollar deposits are conducted by and between banks in the London interbank eurodollar market.

“Material Adverse Effect” means (i) a material adverse change in, or a material adverse effect on, the operations, business, assets, properties, liabilities (actual or contingent) or financial condition (~~financial or otherwise~~) of the Borrower and its Subsidiaries, taken as a whole; (ii) a material impairment of the rights and remedies of the Administrative Agent or any Lender under any Loan Document, or (iii) a material impairment of the ability of the Borrower and the Guarantors, taken as a whole, to perform their obligations under any of the Loan Documents.

“Material Real Property” has the meaning specified in Section 6.12(a)(ii).

“Material Subsidiary” shall mean any Subsidiary that would be a “significant subsidiary” as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such Regulation S-X is in effect on the Closing Date; provided that each of the conditions of such Rule 1-02 shall be measured with a standard of 5% rather than 10%.

“Maturity Date” means ~~(x) with respect to the 2014 Term Loans, July 15, 2019 and (y) with respect to the 2016 Term Loans, April 25, 2024~~ January 30, 2022; provided, however, that, if such date is not a Business Day, the Maturity Date shall be the next preceding Business Day.

“Merger Sub” shall mean Neptune Acquisition Subsidiary, Inc., a Delaware corporation and Wholly-Owned Domestic Subsidiary of the Borrower.

“Moody’s” means Moody’s Investors Service, Inc. and any successor thereto.

“Mortgage Policies” has the meaning specified in Section 6.12(a)(ii)(B).

“Mortgaged Property” shall mean any Material Real Property owned by any Loan Party which is encumbered (or required to be encumbered) by a Mortgage pursuant to the terms of this Agreement or any Collateral Document.

“Mortgages” has the meaning specified in Section 6.12(a)(ii).

“Multiemployer Plan” means any employee benefit plan of the type described in Section 4001(a)(3) of ERISA, to which the Borrower or any ERISA Affiliate makes or is obligated to make contributions, or during the preceding five plan years, has made or been obligated to make contributions.

“Multiple Employer Plan” means a Plan which has two or more contributing sponsors (including the Borrower or any ERISA Affiliate) at least two of whom are not under common control, as such a plan is described in Section 4064 of ERISA.

“Net Cash Proceeds” shall mean, with respect to the incurrence or issuance of any Indebtedness, the excess of (a) the sum of cash and Cash Equivalents received in connection with such transaction over (b) the underwriting discounts and commissions, and other reasonable and customary out-of-pocket expenses, incurred by the issuer in connection therewith.

“Net Insurance Proceeds” shall mean, with respect to any Recovery Event, the cash proceeds received by the respective Person in connection with such Recovery Event (net of (a) reasonable costs and taxes incurred in connection with such Recovery Event and (b) required payments of any Indebtedness (other than Indebtedness secured pursuant to the Collateral Documents and the Permitted Additional Secured Indebtedness Documents) which is secured by the respective assets the subject of such Recovery Event).

“Net Sale Proceeds” shall mean, for any sale or other disposition of assets, the gross cash proceeds (including any cash received by way of deferred payment pursuant to a promissory note, receivable or otherwise, but only as and when received) received from such sale or other disposition of assets, net of (i) reasonable transaction costs (including, without limitation, any underwriting, brokerage or other customary selling commissions, reasonable legal, advisory and other fees and expenses (including title and recording expenses), associated therewith and sales, VAT and transfer taxes arising therefrom), (ii) payments of unassumed liabilities relating to the assets sold or otherwise disposed of at the time of, or within 30 days after, the date of such sale or other disposition, (iii) the amount of such gross cash proceeds required to be used to permanently repay any Indebtedness (other than Indebtedness secured pursuant to the Collateral Documents and the Permitted Additional Secured Indebtedness Documents) which is secured by the respective assets which were sold or otherwise disposed of, and (iv) the estimated net marginal increase in income taxes which will be payable by the Borrower’s consolidated group or any Subsidiary of the Borrower with respect to the fiscal year of the Borrower in which the sale or other disposition occurs as a result of such sale or other disposition; provided, however, that such gross proceeds shall not include any portion of such gross cash proceeds which the Borrower determines in good faith should be reserved for post-closing adjustments (to the extent the Borrower delivers to the Administrative Agent a certificate signed by a Responsible Officer of the Borrower as to such determination), it being understood and agreed that on the day that all such post-closing adjustments have been determined (which shall not be later than six months following the date of the respective asset sale), the amount (if any) by which the reserved amount in respect of such sale or disposition exceeds the actual post-closing adjustments payable by the Borrower or any of its Subsidiaries shall constitute Net Sale Proceeds on such date received by the Borrower and/or any of its Subsidiaries from such sale or other disposition.

“Net Working Capital” means the consolidated current assets (excluding cash and Cash Equivalents) of the Borrower and its Subsidiaries, minus the consolidated current liabilities (excluding current liabilities in respect of Indebtedness) of the Borrower and its Subsidiaries.

“Non-Consenting Lender” means any Lender that does not approve any consent, waiver or amendment that (i) requires the approval of all Lenders or all affected Lenders in accordance with the terms of Section 10.01 and (ii) has been approved by the Required Lenders.

“Non-Defaulting Lender” means, at any time, each Lender that is not a Defaulting Lender at such time.

“Non-Wholly-Owned Subsidiary” shall mean, as to any Person, each Subsidiary of such Person which is not a Wholly-Owned Subsidiary of such Person.



“Note” means a promissory note made by the Borrower in favor of a Term Lender evidencing Term Loans made by such Term Lender, substantially in the form of Exhibit C.

“NPL” means the National Priorities List under CERCLA.

“Original Closing Date” means July 15, 2014.

“Obligations” means all advances to, and debts, liabilities, obligations, covenants and duties of, any Loan Party arising under any Loan Document or otherwise with respect to any Loan Document, in each case whether direct or indirect (including those acquired by assumption), absolute or contingent, due or to become due, now existing or hereafter arising and including interest and fees that accrue after the commencement by or against any Loan Party or any Affiliate thereof of any proceeding under any Debtor Relief Laws naming such Person as the debtor in such proceeding, regardless of whether such interest and fees are allowed claims in such proceeding.

“OFAC” means the Office of Foreign Assets Control of the United States Department of the Treasury.

“Off-Balance Sheet Liabilities” of any Person shall mean (i) any repurchase obligation or liability of such Person with respect to accounts or notes receivable sold by such Person, (ii) any liability of such Person under any sale and leaseback transactions that does not create a liability on the balance sheet of such Person or (iii) any obligation under a Synthetic Lease.

“Organization Documents” means, (a) with respect to any corporation, the certificate or articles of incorporation and the bylaws (or equivalent or comparable constitutive documents with respect to any non-U.S. jurisdiction); (b) with respect to any limited liability company, the certificate or articles of formation or organization and operating agreement; and (c) with respect to any partnership, joint venture, trust or other form of business entity, the partnership, joint venture or other applicable agreement of formation or organization and any agreement, instrument, filing or notice with respect thereto filed in connection with its formation or organization with the applicable Governmental Authority in the jurisdiction of its formation or organization and, if applicable, any certificate or articles of formation or organization of such entity.

“Other Connection Taxes” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Documents).

“Other Financial Investments” shall mean (x) securities and other investments that, but for the maturity restrictions described in the definition of “Cash Equivalents”, would otherwise constitute Cash Equivalents and (y) corporate obligations issued by any Person (other than the Borrower or any Affiliate thereof) incorporated in the United States rated at least BBB- or the equivalent thereof by S&P or at least Baa3 or the equivalent thereof by Moody’s.

“Other Intercreditor Agreement” means an agreement reasonably satisfactory to the Administrative Agent providing for Liens on the Collateral that are *pari passu* or junior to the Liens of the Administrative Agent.

“Other Taxes” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 3.06).

“Ottawa Capitalized Lease” shall mean collectively, (i) that certain lease agreement, dated as of April 15, 2015, and (ii) that certain lease agreement, dated as of October 23, 2014, as amended on April 15, 2015, each between Innovation Blvd II Limited (and its permitted successors and assigns) and Ciena Canada, Inc. (and its permitted successors and

assigns), as amended, supplemented or otherwise modified from time to time, in connection with the multi-building complex located at Innovation Drive, Ottawa, Ontario (as more fully described therein).

“Outstanding Amount” means on any date, the aggregate outstanding principal amount of Term Loans after giving effect to any borrowings and prepayments or repayments of such, occurring on such date.

“Participant” has the meaning specified in Section 10.06(d).

“Participant Register” has the meaning specified in Section 10.06(d).

“Patriot Act” means the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)).

“Payment in Full” means all Commitments have terminated and all Obligations have been paid in full (other than contingent indemnification obligations as to which no claim has been made or notice has been given).

“PBGC” means the Pension Benefit Guaranty Corporation.

“Pension Act” means the Pension Protection Act of 2006.

“Pension Funding Rules” means the rules of the Code and ERISA regarding minimum required contributions (including any installment payment thereof) to Pension Plans and set forth in, with respect to plan years ending prior to the effective date of the Pension Act, Section 412 of the Code and Section 302 of ERISA, each as in effect prior to the Pension Act and, thereafter, Section 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

“Pension Plan” means any employee pension benefit plan (including a Multiple Employer Plan or a Multiemployer Plan) that is maintained or is contributed to by the Borrower and any ERISA Affiliate and is either covered by Title IV of ERISA or is subject to the minimum funding standards under Section 412 of the Code.

“Perfection Certificate” shall mean a certificate in the form of Exhibit I-1 or any other form approved by the Administrative Agent.

“Permitted Acquisition” shall mean the acquisition by a Loan Party of an Acquired Entity or Business, including indirectly (x) by way of merger or amalgamation through a direct, Wholly-Owned Subsidiary of such Loan Party that merges or amalgamates with ~~and~~ or into such Acquired Entity or Business and the surviving Person of such merger or amalgamation is a direct, Wholly-Owned Subsidiary of such Loan Party or (y) by way of a direct, Wholly-Owned Subsidiary of such Loan Party purchasing all or substantially all of the assets of, or the assets constituting a business, division or product line of, any Person not already a Subsidiary of the Borrower; provided that (in each case):

(a) the consideration paid or to be paid by the Loan Party consists solely of cash (including proceeds of Loans), Company Common Stock, Qualified Preferred Stock, the issuance or incurrence of Indebtedness otherwise permitted by Section 7.02 and the assumption/acquisition of any Indebtedness (calculated at face value) which is permitted to remain outstanding in accordance with the requirements of Section 7.02;

(b) in the case of the acquisition of the Equity Interests of any Acquired Entity or Business (including by way of merger), such Acquired Entity or Business shall own no Equity Interests of any other Person (other than immaterial amounts) unless either (i) such Acquired Entity or Business owns 100% of the Equity Interests of such other Person or (ii) if such Acquired Entity or Business owns Equity Interests in any other Person which is not a ~~Non-Wholly-Owned~~ Wholly-Owned Subsidiary of such Acquired Entity or Business, (A) such ~~Acquired Entity or Business~~ Person shall not have been created or established in contemplation of, or for purposes of, the respective Permitted Acquisition; and (B) ~~any such Non-Wholly Owned Subsidiary of the Acquired Entity or Business shall have been a Non-Wholly Owned Subsidiary of such Acquired Entity or Business prior to the date of the respective Permitted Acquisition and shall not have been created or established in contemplation thereof and~~ (C) such Acquired Entity or Business and/

or its Wholly-Owned Subsidiaries own at least 80% of the total value of all the assets owned by such Acquired Entity or Business and its Subsidiaries (for purposes of such determination, excluding the value of the Equity Interests of Non-Wholly-Owned Subsidiaries held by such Acquired Entity or Business and its Wholly-Owned Subsidiaries);

(c) the Acquired Entity or Business acquired pursuant to the respective Permitted Acquisition is in a business permitted by Section 7.07;

(d) the Acquired Entity or Business acquired pursuant to the respective Permitted Acquisition is acquired in a "non-hostile" transaction approved by the board of directors (or similar body) of such Acquired Entity or Business;

(e) all requirements of Sections 7.03 and 7.04 applicable to Permitted Acquisitions are satisfied;

(f) the Borrower shall have given to the Administrative Agent at least ~~105~~ Business Days' prior written notice of any Permitted Acquisition (or such shorter period of time as may be reasonably acceptable to the Administrative Agent), which notice shall describe in reasonable detail the principal terms and conditions of such Permitted Acquisition;

(g) all representations and warranties contained herein and in the other Loan Documents shall be true and correct in all material respects with the same effect as though such representations and warranties had been made on and as of the date of such Permitted Acquisition (both before and after giving effect thereto); unless stated to relate to a specific earlier date, in which case such representations and warranties shall be true and correct in all material respects as of such earlier date (it being understood that any representation or warranty that is qualified as to "materiality", "Material Adverse Effect" or any similar language shall be true and correct in all respects as of any such date); provided that, in connection with any Limited Condition Acquisition (x) all representations and warranties contained herein and in the other Loan Documents shall be true and correct in all material respects with the same effect as though such representations and warranties had been made on and as of the date the definitive agreements for such Limited Condition Acquisition are entered into and (y) the Specified Representations shall be true and correct in all material respects with the same effect as though such representations and warranties had been made on and as of the date of such Limited Condition Acquisition, both before and after giving effect thereto, in each case of clauses (x) and (y), unless stated to relate to a specific earlier date, in which case such representations and warranties shall be true and correct in all material respects as of such earlier date unless stated to relate to a specific earlier date, in which case such representations and warranties shall be true and correct in all material respects as of such earlier date;

(h) no Default or Event of Default then exists or would result therefrom; provided that, in the case of a Limited Condition Acquisition, (x) no Default or Event of Default shall exist or would result therefrom at the time the definitive agreements for such Limited Condition Acquisition are entered into and (y) at the time of closing of such Limited Condition Acquisition, no Specified Event of Default shall exist or would result therefrom;

(i) the Borrower shall have delivered to the Administrative Agent a certificate executed by a Responsible Officer of the Borrower, certifying to such officer's knowledge, compliance with the requirements of preceding clauses (f) through (h), inclusive;

(j) at the time of each Permitted Acquisition involving the creation or acquisition of a Subsidiary, or the acquisition of capital stock or other Equity Interest of any Person, the capital stock or other Equity Interests thereof created or acquired in connection with such Permitted Acquisition shall be pledged for the benefit of the Secured Parties pursuant to (and to the extent required by) the Security Agreement;

(k) the Borrower will cause each Subsidiary which is formed to effect, or is acquired pursuant to, a Permitted Acquisition to comply with, and to execute and deliver all of the documentation as and to the extent required by, Section 6.12, to the reasonable satisfaction of the Administrative Agent; and

(l) the consummation of each Permitted Acquisition shall be deemed to be a representation and warranty by the Borrower that the certifications pursuant to this definition are true and correct and that all conditions thereto (to the extent not subject to the determination of the Administrative Agent or the Required Lenders) have been satisfied and

that same is permitted in accordance with the terms of this Agreement, which representation and warranty shall be deemed to be a representation and warranty for all purposes hereunder;

Notwithstanding anything to the contrary contained in the immediately preceding sentence, an acquisition which does not otherwise meet the requirements set forth above in the definition of “Permitted Acquisition” shall constitute a Permitted Acquisition if, and to the extent, the Borrower and the Required Lenders agree in writing, prior to the consummation thereof, that such acquisition shall constitute a Permitted Acquisition for purposes of this Agreement.

“Permitted Additional Indebtedness” shall mean Permitted Additional Unsecured Indebtedness and Permitted Additional Secured Indebtedness.

“Permitted Additional Indebtedness Documents” shall mean Permitted Additional Unsecured Indebtedness Documents and Permitted Additional Secured Indebtedness Documents.

“Permitted Additional Secured Indebtedness” shall have the meaning provided in Section 7.02(n).

“Permitted Additional Secured Indebtedness Documents” shall mean, on and after the execution and delivery thereof, each note, indenture, purchase agreement, loan agreement, credit agreement, guaranty, security agreement, pledge agreement, mortgage, other security document and other document relating to the incurrence or issuance of any Permitted Additional Secured Indebtedness, as the same may be amended, modified, restated, renewed, extended and/or supplemented from time to time in accordance with the terms hereof and thereof.

“Permitted Additional Unsecured Indebtedness” have the meaning provided in Section 7.02(n).

“Permitted Additional Unsecured Indebtedness Documents” shall mean, on and after the execution and delivery thereof, each note, indenture, purchase agreement, loan agreement, credit agreement, guaranty and other document relating to the incurrence or issuance of any Permitted Additional Unsecured Indebtedness, as the same may be amended, modified, restated, renewed, extended and/or supplemented from time to time in accordance with the terms hereof and thereof.

“Permitted Convertible Notes” shall mean, collectively, the ~~2015 Convertible Notes, the~~ 2017 Convertible Notes, the 2018 Convertible Notes, the 2020 Convertible Notes and any Additional Convertible Notes.

“Permitted Convertible Notes Documents” shall mean, collectively, the ~~2015 Convertible Notes Documents, the~~ 2017 Convertible Notes Documents, the 2018 Convertible Notes Documents, the 2020 Convertible Notes Documents and any Additional Convertible Notes Documents.

“Permitted Convertible Notes Indentures” shall mean, collectively, the ~~2015 Convertible Notes Indenture, the~~ 2017 Convertible Notes Indenture, the 2018 Convertible Notes Indenture, the 2020 Convertible Notes Indenture and any Additional Convertible Notes Indenture.

“Permitted Encumbrance” shall mean, with respect to any Mortgaged Property, such exceptions to title as are set forth in the Mortgage Policy delivered with respect thereto, all of which exceptions must be acceptable to the Administrative Agent in its reasonable discretion.

“Permitted First Priority Refinancing Debt” shall mean any secured Indebtedness incurred by any Loan Party in the form of one or more series of additional Loans pursuant to Section 2.12 or one or more series of senior secured notes; provided that (i) such Indebtedness is secured by the Collateral on a *pari passu* basis (but without regard to the control of remedies) with the Obligations and is not secured by any property or assets of the Borrower or any Subsidiary other than the Collateral, (ii) such Indebtedness satisfies the applicable requirements set forth in the provisos to the definition of “Credit Agreement Refinancing Indebtedness,” (iii) such Indebtedness is not at any time guaranteed by any Subsidiaries of the Borrower other than Subsidiaries that are Guarantors and (iv) to the extent not addressed in the Intercreditor Agreement, the Borrower, the holders of such Indebtedness (or their representative)

and the Administrative Agent shall be party to an intercreditor agreement in form and substance reasonably satisfactory to the Administrative Agent.

“Permitted Junior Priority Refinancing Debt” shall mean secured Indebtedness incurred by any Loan Party in the form of one or more series of second lien (or other junior lien) secured notes or debentures or second lien (or other junior lien) secured loans; provided that (i) such Indebtedness is secured by the Collateral on a second priority (or other junior priority) basis to the Liens securing the Obligations and the obligations in respect of any Permitted First Priority Refinancing Debt and is not secured by any property or assets of the Borrower or any Subsidiary other than the Collateral, (ii) such Indebtedness satisfies the applicable requirements set forth in the provisos in the definition of “Credit Agreement Refinancing Indebtedness” (provided, that such Indebtedness may be secured by a Lien on the Collateral that is junior to the Liens securing the Obligations and the obligations in respect of any Permitted First Priority Refinancing Debt, notwithstanding any provision to the contrary contained in the definition of “Credit Agreement Refinancing Indebtedness”), (iii) the holders of such Indebtedness (or their representative) and the Administrative Agent shall be party to an intercreditor agreement in form and substance reasonably satisfactory to the Administrative Agent and the Borrower and (iv) such Indebtedness is not at any time guaranteed by any Subsidiaries of the Borrower other than Subsidiaries that are Guarantors.

“Permitted Unsecured Refinancing Debt” shall mean unsecured Indebtedness incurred by any Loan Party in the form of one or more series of senior unsecured loans or notes or Subordinated Indebtedness; provided that (i) such Indebtedness satisfies the applicable requirements set forth in the provisos in the definition of “Credit Agreement Refinancing Indebtedness” and (ii) such Indebtedness is not at any time guaranteed by any Subsidiaries of the Borrower other than Subsidiaries that are Guarantors.

“Person” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

“Plan” means any employee benefit plan within the meaning of Section 3(3) of ERISA (including a Pension Plan), maintained for employees of the Borrower or any ERISA Affiliate or any such Plan to which the Borrower or any ERISA Affiliate is required to contribute on behalf of any of its employees.

“Platform” has the meaning specified in Section 6.02.

“Preferred Equity”, as applied to the Equity Interests of any Person, shall mean Equity Interests of such Person (other than common Equity Interests of such Person) of any class or classes (however designed) that ranks prior, as to the payment of dividends or as to the distribution of assets upon any voluntary or involuntary liquidation, dissolution or winding up of such Person, to shares of Equity Interests of any other class of such Person, and shall include any Qualified Preferred Stock.

“Pricing Grid” means, ~~with respect to the 2016 Term Loans, the table set forth below:~~

Level	Total Net Leverage Ratio	Applicable Rate for Eurodollar Rate Loans	Applicable Rate for Base Rate Loans
I	>3.00:1.00	3.50%	2.50%
II	≤3.00:1.00	3.25%	2.25%

~~For purposes of the Pricing Grid, changes in the Applicable Rate resulting from changes in the Total Net Leverage Ratio pursuant to the applicable Pricing Certificate will become effective on the applicable Adjustment Date and shall remain in effect until the next change to be effected pursuant to this paragraph.~~

~~If any financial statements are not delivered within the time periods specified in Section 6.01 together with a Pricing Certificate (which delivery of such Pricing Certificate shall be at the sole discretion of the Borrower), then at the option of the Administrative Agent or the Required 2016 Term Lenders, Level I pricing shall apply as of the third Business Day after the date on which such financial statements and Pricing Certificate were to have been delivered and shall apply until the date that is three Business Days after the date on which such financial statements and/or Pricing Certificate, as applicable, are thereafter delivered. Notwithstanding the foregoing, the election of the Borrower not to deliver a Pricing Certificate with any such financial statements shall not result in a Default or Event of Default, and the sole effect of such non-delivery of such Pricing Certificate shall be the application of Level I pricing in accordance with the immediately preceding sentence.~~

“Pricing Certificate” means a certification by the Borrower together with back-up calculations demonstrating the Total Net Leverage Ratio for the most recently ended Test Period.

“Pro Forma Basis” shall mean, in connection with any calculation of compliance with any financial ratio or financial term, the calculation thereof after giving effect on a pro forma basis to (x) the incurrence of any Indebtedness after the first day of the relevant Calculation Period or Test Period, as the case may be, as if such Indebtedness had been incurred (and the proceeds thereof applied) on the first day of such Test Period or Calculation Period, as the case may be, (y) the permanent repayment of any Indebtedness after the first day of the relevant Test Period or Calculation Period, as the case may be, as if such Indebtedness had been retired or repaid on the first day of such Test Period or Calculation Period, as the case may be, and (z) any Permitted Acquisition then being consummated as well as any other Permitted Acquisition if consummated after the first day of the relevant Test Period or Calculation Period, as the case may be, and on or prior to the date of the respective Permitted Acquisition, ~~as the case may be~~, then being effected, with the following rules to apply in connection therewith:

(i) all Indebtedness (x) incurred or issued after the first day of the relevant Test Period or Calculation Period (whether incurred to finance a Permitted Acquisition, to refinance or repay Indebtedness or otherwise) shall be deemed to have been incurred or issued (and the proceeds thereof applied) on the first day of such Test Period or Calculation Period, as the case may be, and remain outstanding through the date of determination and (y) permanently retired or redeemed after the first day of the relevant Test Period or Calculation Period, as the case may be, shall be deemed to have been retired or redeemed on the first day of such Test Period or Calculation Period, as the case may be, and remain retired through the date of determination;

(ii) all Indebtedness assumed to be outstanding pursuant to preceding clause (i) shall be deemed to have borne interest at (x) the rate applicable thereto, in the case of fixed rate indebtedness, or (y) the rates which would have been applicable thereto during the respective period when same was deemed outstanding, in the case of floating rate Indebtedness (although interest expense with respect to any Indebtedness for periods while same was actually outstanding during the respective period shall be calculated using the actual rates applicable thereto while same was actually outstanding); provided that all Indebtedness (whether actually outstanding or deemed outstanding) bearing interest at a floating rate of interest shall be tested on the basis of the rates applicable at the time the determination is made pursuant to said provisions; and

(iii) in making any determination of Consolidated EBITDA on a Pro Forma Basis, pro forma effect shall be given to any Permitted Acquisition if effected during the respective Calculation Period or Test Period as if same had occurred on the first day of the respective Calculation Period or Test Period, as the case may be, and taking into account, in the case of any Permitted Acquisition, factually supportable and identifiable cost savings and expenses which would otherwise be accounted for as an adjustment pursuant to Article 11 of Regulation S-X under the Securities Act, as if such cost savings or expenses were realized on the first day of the respective period.

“Public Lender” has the meaning specified in Section 6.02.

“PWC” shall mean Pricewaterhouse Coopers LLP, a Delaware limited liability partnership.

“Qualified Preferred Stock” shall mean any Preferred Equity of the Borrower so long as the terms of any such Preferred Equity (and the terms of any Equity Interests into which such Preferred Equity is convertible or for which it is exchangeable, either mandatorily or at the option of the holder thereof) (v) do not contain any mandatory put, redemption, repayment, sinking fund or other similar provision, (w) do not require the cash payment of dividends or distributions that would otherwise be prohibited by the terms of this Agreement, (x) do not contain any covenants (other than periodic reporting requirements), (y) do not grant the holders thereof any voting rights except for (I) voting rights required to be granted to such holders under applicable law and (II) customary voting rights on fundamental matters such as authorizing or issuing shares that rank prior to or in parity with such Preferred Equity, amending the certificate of incorporation or certificate of designation for such Preferred Equity, the payment of dividends or distributions on junior shares, the purchase, redemption or retirement of junior shares, mergers, consolidations, sales of all or substantially all of the assets of the Borrower, or liquidations involving the Borrower, and (z) are otherwise reasonably satisfactory to the Administrative Agent.

“Real Property” of any Person shall mean all the right, title and interest of such Person in and to land (including any improvements and fixtures thereon).

“Register” has the meaning specified in Section 10.06(c).

“Recipient” means the Administrative Agent, any Lender or any other recipient of any payment to be made by or on account of any obligation of any Loan Party hereunder.

“Recovery Event” shall mean any event that gives rise to the receipt by the Borrower or any of its Subsidiaries of any cash insurance proceeds or condemnation awards payable (i) by reason of theft, loss, physical destruction, damage, taking or any other similar event with respect to any property or assets of the Borrower or any of its Subsidiaries or (ii) under any policy of insurance maintained by any of them.

“Refinancing Amendment” means any other amendment to this Agreement in form and substance reasonably satisfactory to the Administrative Agent and the Borrower executed by (a) each Loan Party, (b) the Administrative Agent and (c) each Lender or Eligible Assignee that agrees to provide any portion of the Credit Agreement Refinancing Indebtedness being incurred pursuant thereto in accordance with Section 2.12.

“Related Parties” means, with respect to any Person, such Person’s Affiliates and the partners, directors, officers, employees, agents, trustees and advisors of such Person and of such Person’s Affiliates.

“Release” means any release, spill, emission, discharge, deposit, disposal, leaking, pumping, pouring, dumping, emptying, injection, migrating or leaching into the Environment, or into, from or through any building, structure or facility.

“Reportable Event” means any of the events set forth in Section 4043(c) of ERISA, other than events for which the 30 day notice period has been waived.

“Repricing Transaction” means the prepayment, refinancing, substitution or replacement of all or a portion of the Term Loans with the incurrence by the Borrower or any Guarantor of any debt financing having an All-in Yield that is less than the All-in Yield of such Term Loans so repaid, refinanced, substituted or replaced, including without limitation, as may be effected through any amendment to this Agreement relating to the interest rate for, or weighted average yield of, such Term Loans or the incurrence of any replacement Term Loans.

“Request for Credit Extension” means a Committed Loan Notice.

~~“Required 2014 Term Lenders” means Lenders holding more than 50% of the sum of the 2014 Outstandings.~~

~~“Required 2016 Term Lenders” means Lenders holding more than 50% of the sum of the 2016 Outstandings.~~

“Required Lenders” means, at any time, Lenders holding more than 50% of the sum of the Total Outstandings.

“Responsible Officer” means the chief executive officer, president, chief operating officer, chief financial officer, treasurer, or any other senior or executive officer of a Loan Party and, solely for purposes of the delivery of incumbency certificates pursuant to Section 4.01, the secretary or any assistant secretary of a Loan Party and, solely for purposes of notices given to Article II, any other officer or employee of the applicable Loan Party so designated by any of the foregoing officers in a notice to the Administrative Agent or any other officer or employee of the applicable Loan Party designated in or pursuant to an agreement between the applicable Loan Party and the Administrative Agent. Any document delivered hereunder that is signed by a Responsible Officer of a Loan Party shall be conclusively presumed to have been authorized by all necessary corporate, partnership and/or other action on the part of such Loan Party and such Responsible Officer shall be conclusively presumed to have acted on behalf of such Loan Party.

“Restricted” shall mean, when referring to cash or Cash Equivalents of the Borrower or any of its Subsidiaries, that such cash or Cash Equivalents (i) appears (or would be required to appear) as “restricted” on a consolidated balance sheet of the Borrower or of any such Subsidiary (unless such appearance is related to the ABL Credit Documents, the Loan Documents or Liens created thereunder [or Permitted Liens under Section 7.01\(t\)](#)), (ii) are subject to any Lien in favor of any Person other than (x) the Administrative Agent for the benefit of the Secured Parties and (y) Liens permitted under [Sections 7.01\(a\), \(c\), \(q\) and \(t\)](#) or (iii) are not otherwise generally available for use by the Borrower or such Subsidiary.

“Retained Excess Cash Flow” means, on any date of determination, the aggregate amount of Excess Cash Flow, during the period from the Closing Date through and including such date, that is not required to be applied to repay Loans pursuant to Section 2.03(b).

“Sanction(s)” means any sanction administered or enforced by the United States Government (including without limitation, OFAC and the U.S. State Department), the European Union, Her Majesty's Treasury or other relevant sanctions authority.

“S&P” means Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., and any successor thereto.

“SEC” means the Securities and Exchange Commission, or any Governmental Authority succeeding to any of its principal functions.

“Second Amendment Effective Date” shall mean July 2, 2015.

“Secured Parties” means, collectively, the Administrative Agent, the Lenders, each co-agent or sub-agent appointed by the Administrative Agent from time to time pursuant to Section 9.05, and the other Persons the Obligations owing to which are or are purported to be secured by the Collateral under the terms of the Collateral Documents.

“Security Agreement” has the meaning specified in Section 4.01(a)(iii).

“Security Agreement Supplement” has the meaning specified in Article VII of the Security Agreement.

“Solvent” and “Solvency” mean, with respect to any Person on any date of determination, that on such date (i) the sum of the assets, at a fair valuation, of such Person will exceed its debts, (ii) such Person has not incurred and does not intend to incur, and does not believe that it will incur, debts beyond its ability to pay such debts as such debts mature in the ordinary course of business, and (iii) such Person will have sufficient capital with which to conduct its business. For purposes of this definition, "debt" means any liability on a claim, and "claim" means right to payment, whether or not such a right is reduced to judgment, liquidated, unliquidated, fixed, contingent, matured, unmatured, disputed, undisputed, legal, equitable, secured, or unsecured. The amount of contingent liabilities at any time shall be computed as the amount that, in the light of all the facts and circumstances available at such time, represents the amount that can reasonably be expected to become an actual or matured liability.

“Specified Event of Default” shall mean an Event of Default under clause (a), (f) or (g) of Section 8.01.



“Specified Representations” shall mean the representations of the Borrower set forth in Sections 5.01(a) (solely with respect to the Loan Parties), Section 5.02 (other than clauses (b) and (c) thereof), Section 5.04, Section 5.14, Section 5.18, Section 5.19, Section 5.20 and Section 5.21 (solely, in the case of Sections 5.19, 5.20 and 5.21, with respect to the use of proceeds).

“Subordinated Indebtedness” means any Indebtedness that by its terms is subordinated to the Obligations hereunder in right of payment.

“Subsidiary” shall mean, as to any Person, (i) any corporation more than 50% of whose stock of any class or classes having by the terms thereof ordinary voting power to elect a majority of the directors of such corporation (irrespective of whether or not at the time stock of any class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time owned by such Person and/or one or more Subsidiaries of such Person or (ii) any partnership, limited liability company, association, joint venture or other entity in which such Person and/or one or more Subsidiaries of such Person has more than a 50% equity interest at the time. Unless otherwise qualified, all references to a “Subsidiary” or to “Subsidiaries” in this Agreement shall refer to a Subsidiary or Subsidiaries of the Borrower.

“Swap Contract” means (a) any and all rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, interest rate options, forward foreign exchange transactions, cap transactions, floor transactions, collar transactions, currency swap transactions, cross-currency rate swap transactions, currency options, spot contracts, or any other similar transactions or any combination of any of the foregoing (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement, and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement (any such master agreement, together with any related schedules, a “Master Agreement”), including any such obligations or liabilities under any Master Agreement.

“Swap Termination Value” means, in respect of any one or more Swap Contracts, after taking into account the effect of any legally enforceable netting agreement relating to such Swap Contracts, (a) for any date on or after the date such Swap Contracts have been closed out and termination value(s) determined in accordance therewith, such termination value(s), and (b) for any date prior to the date referenced in clause (a), the amount(s) determined as the mark-to-market value(s) for such Swap Contracts, as determined based upon one or more mid-market or other readily available quotations provided by any recognized dealer in such Swap Contracts (which may include a Lender or any Affiliate of a Lender).

“Synthetic Lease” shall mean a lease transaction under which the parties intend that (i) the lease will be treated as an “operating lease” by the lessee and (ii) the lessee will be entitled to various tax and other benefits ordinarily available to owners (as opposed to lessees) of like property.

“Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Term Borrowing” means a borrowing consisting of simultaneous Term Loans of the same Type and, in the case of Eurodollar Rate Loans, having the same Interest Period made by each of the Term Lenders pursuant to Section 2.01.

“Term Commitment” means, as to each Term Lender, its obligation to make Term Loans to the Borrower pursuant to Section 2.01 in an aggregate principal amount at any one time outstanding not to exceed the amount set forth opposite such Term Lender’s name on Schedule 2.01 under the caption “Term Commitment” or opposite such caption in the Assignment and Assumption pursuant to which such Term Lender becomes a party hereto, as applicable, as such amount may be adjusted from time to time in accordance with this Agreement.

“Term Facility” means, at any time, (a) on or prior to the Closing Date, the aggregate amount of the Term Commitments at such time and (b) thereafter, the aggregate principal amount of the Term Loans of all Term Lenders outstanding at such time.

“Term Lender” means (a) at any time on or prior to the Closing Date, any Lender that has a Term Commitment at such time and (b) at any time after the Closing Date, any Lender that holds Term Loans at such time.

“Term Loan” means an advance made by any Term Lender under the Term Facility.

“Term Loan Extension Request” has the meaning specified in Section 2.14(a) herein.

“Term Loan Extension Series” has the meaning specified in Section 2.14(a) herein.

“Term Loan Portion” means, with respect to the Net Sale Proceeds of any Asset Sale or the Net Insurance Proceeds of any Recovery Event, (a) if such Asset Sale or Recovery Event involved only Term Priority Collateral, 100%, (b) if such Asset Sale or Recovery Event involved only ABL Priority Collateral, (x) prior to the Discharge of ABL Obligations, the amount of such Net Sale Proceeds or Net Insurance Proceeds available to the Borrower and its Subsidiaries after payment in full of all principal and interest, and if required cash collateralization of letters of credit, in each case, outstanding at such time under the ABL Credit Agreement and (y) after the Discharge of ABL Obligations, 100% and (c) if such Asset Sale or Recovery Event involved both Term Priority Collateral and ABL Priority Collateral, a portion calculated in accordance with Section 4.01(c) of the Intercreditor Agreement.

“Term Priority Collateral” has the meaning specified in the Intercreditor Agreement.

“Test Period” shall mean each period of four consecutive fiscal quarters of the Borrower then last ended, in each case taken as one accounting period.

“Threshold Amount” means ~~\$20,000,000~~ 30,000,000.

“Total Net Leverage Ratio” shall mean, on any date of determination, the ratio of (x) Consolidated Net Total Indebtedness on such date to (y) Consolidated EBITDA for the Test Period most recently ended on or prior to such date; provided that for purposes of any calculation of the Total Net Leverage Ratio pursuant to this Agreement, Consolidated EBITDA shall be determined on a Pro Forma Basis in accordance with the requirements of the definition of “Pro Forma Basis” contained herein.

“Total Outstandings” means the aggregate Outstanding Amount of all Loans.

“Total Secured Net Leverage Ratio” shall mean, on any date of determination, the ratio of (x) Consolidated Net Senior Secured Indebtedness on such date to (y) Consolidated EBITDA for the Test Period most recently ended on or prior to such date; provided that (i) for purposes of calculating the Total Secured Net Leverage Ratio, when any commitment for Additional ABL Capacity under the ABL Credit Agreement is in effect, the total principal amount of such commitments for Additional ABL Capacity will be deemed to be fully-drawn at all times and (ii) for purposes of any calculation of the Total Secured Net Leverage Ratio pursuant to this Agreement, Consolidated EBITDA shall be determined on a Pro Forma Basis in accordance with the requirements of the definition of “Pro Forma Basis” contained herein.

“Transaction” shall mean, collectively, the execution and delivery by each Loan Party of the Loan Documents to which it is a party on the Closing Date, the incurrence of Loans on the Closing Date and the use of proceeds thereof.

“Type” means, with respect to a Loan, its character as a Base Rate Loan or a Eurodollar Rate Loan.

“UCC” means the Uniform Commercial Code as in effect in the State of New York provided that, if perfection or the effect of perfection or non-perfection or the priority of any security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of New York, “UCC” means the Uniform

Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

“United States” and “U.S.” mean the United States of America.

“Unrestricted” shall mean, when referring to cash or Cash Equivalents of the Borrower or any of its Subsidiaries, that such cash or Cash Equivalents are not Restricted.

“U.S. Person” means any Person that is a “United States Person” as defined in Section 7701(a)(30) of the Code.

“U.S. Tax Compliance Certificate” has the meaning specified in Section 3.01(e)(ii)(B)(3).

“Voting Stock” shall mean, as to any entity, all classes of Equity Interests of such entity then outstanding and normally entitled to vote in the election of directors of such entity or, in the case of any Foreign Subsidiaries of the Borrower, all interests in such entity with the ability to control the management or actions of such entity.

“Wholly-Owned Subsidiary” shall mean, as to any Person, (i) any corporation 100% of whose capital stock is at the time owned by such Person and/or one or more Wholly-Owned Subsidiaries of such Person and (ii) any partnership, limited liability company, association, joint venture or other entity in which such Person and/or one or more Wholly-Owned Subsidiaries of such Person has a 100% equity interest at such time (other than, in the case of a Foreign Subsidiary of the Borrower with respect to the preceding clauses (i) and (ii), directors’ qualifying shares and/or other nominal amounts of shares required to be held by Persons other than the Borrower and its Subsidiaries under applicable law).

1.02. Other Interpretive Provisions. With reference to this Agreement and each other Loan Document, unless otherwise specified herein or in such other Loan Document:

(a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless the context requires otherwise, (i) any definition of or reference to any agreement, instrument or other document (including any Organization Document) shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or in any other Loan Document), (ii) any reference herein to any Person shall be construed to include such Person’s successors and assigns, (iii) the words “hereto,” “herein,” “hereof” and “hereunder,” and words of similar import when used in any Loan Document, shall be construed to refer to such Loan Document in its entirety and not to any particular provision thereof, (iv) all references in a Loan Document to Articles, Sections, Preliminary Statements, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Preliminary Statements, Exhibits and Schedules to, the Loan Document in which such references appear, (v) any reference to any law shall include all statutory and regulatory provisions consolidating, amending, replacing or interpreting such law and any reference to any law or regulation shall, unless otherwise specified, refer to such law or regulation as amended, modified or supplemented from time to time, and (vi) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

(b) In the computation of periods of time from a specified date to a later specified date, the word “from” means “from and including,” the words “to” and “until” each mean “to but excluding,” and the word “through” means “to and including.”

(c) Section headings herein and in the other Loan Documents are included for convenience of reference only and shall not affect the interpretation of this Agreement or any other Loan Document.

1.03. Accounting Terms. (a) Generally. All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial data (including financial ratios and other financial calculations) required to be submitted pursuant to this Agreement shall be prepared in conformity with, GAAP applied on a consistent basis, as in effect from time to time, applied in a manner consistent with that used in preparing the [2016](#) Audited Financial Statements, except as otherwise specifically prescribed herein. Notwithstanding the foregoing, for purposes of determining compliance with any covenant (including the computation of any financial covenant) contained herein, Indebtedness of the Borrower and its Subsidiaries shall be deemed to be carried at 100% of the outstanding principal amount thereof, and the effects of FASB ASC 825 on financial liabilities shall be disregarded.

(b) Changes in GAAP. If at any time any change in GAAP would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either the Borrower or the Required Lenders shall so request, the Administrative Agent, the Lenders and the Borrower shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) the Borrower shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP. Without limiting the foregoing, leases shall continue to be classified and accounted for on a basis consistent with that reflected in the [2016](#) Audited Financial Statements for all purposes of this Agreement, notwithstanding any change in GAAP relating thereto, unless the parties hereto shall enter into a mutually acceptable amendment addressing such changes, as provided for above.

(c) Consolidation of Variable Interest Entities. All references herein to consolidated financial statements of the Borrower and its Subsidiaries or to the determination of any amount for the Borrower and its Subsidiaries on a consolidated basis or any similar reference shall, in each case, be deemed to include each variable interest entity that the Borrower is required to consolidate pursuant to FASB ASC 810 as if such variable interest entity were a Subsidiary as defined herein.

1.04. Rounding. Any financial ratios required to be maintained by the Borrower pursuant to this Agreement shall be calculated by dividing the appropriate component by the other component, carrying the result to one place more than the number of places by which such ratio is expressed herein and rounding the result up or down to the nearest number (with a rounding-up if there is no nearest number).

1.05. Times of Day; Rates. Unless otherwise specified, all references herein to times of day shall be references to Eastern time (daylight or standard, as applicable)

The Administrative Agent does not warrant, nor accept responsibility, nor shall the Administrative Agent have any liability with respect to the administration, submission or any other matter related to the rates in the definition of "Eurodollar Rate" or with respect to any comparable or successor rate thereto.

1.06. Currency Equivalents Generally. Any amount specified in this Agreement (other than in [Articles II](#) and [IX](#)) or any of the other Loan Documents to be in Dollars shall also include the equivalent of such amount in any currency other than Dollars, such equivalent amount thereof in the applicable currency to be determined by the Administrative Agent at such time on the basis of the Spot Rate (as defined below) for the purchase of such currency with Dollars. For purposes of this Section 1.06, the "Spot Rate" for a currency means the rate determined by the Administrative Agent to be the rate quoted by the Person acting in such capacity as the spot rate for the purchase by such Person of such currency with another currency through its principal foreign exchange trading office at approximately 11:00 a.m. on the date two Business Days prior to the date of such determination; provided that the Administrative Agent may obtain such spot rate from another financial institution designated by the Administrative Agent if the Person acting in such capacity does not have as of the date of determination a spot buying rate for any such currency. For purposes of determining compliance with [Article VII](#) with respect to any amount of Indebtedness or Investment in a currency other than Dollars, no Default or Event of Default shall be deemed to have occurred solely as a result of changes in rates of currency exchange occurring after the time such Indebtedness or Investment is incurred (so long

as such Indebtedness or Investment, at the time incurred, made or acquired, was permitted hereunder). For purposes of determining compliance with any Dollar-denominated restriction on the incurrence of Indebtedness, the Dollar-equivalent principal amount of Indebtedness denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was incurred, in the case of term debt, or first committed, in the case of revolving credit debt; provided that if such Indebtedness is incurred to extend, replace, refund, refinance, renew or defease other Indebtedness denominated in a foreign currency, and such extension, replacement, refunding, refinancing, renewal or defeasance would cause the applicable Dollar-denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such extension, replacement, refunding, refinancing, renewal or defeasance, such Dollar-denominated restriction shall be deemed not to have been exceeded so long as the principal amount of such Refinancing Indebtedness does not exceed the principal amount of such Indebtedness being extended, replaced, refunded, refinanced, renewed or defeased, plus the aggregate amount of fees, underwriting discounts, premiums (including tender premiums) and other reasonable costs and expenses (including original issue discount) incurred in connection with such refinancing.

## ARTICLE II THE COMMITMENTS AND CREDIT EXTENSIONS

### 2.01. The Loans.

(a) Subject to the terms and conditions set forth herein, each Term Lender severally agrees to make a single loan to the Borrower on the ~~Closing~~2017 Refinancing Amendment Effective Date in an amount not to exceed such Term Lender's Applicable Percentage of the Term Facility. The Term Borrowing shall consist of Term Loans made simultaneously by the Term Lenders in accordance with their respective Applicable Percentage of the Term Facility.

~~(b) Each Lender party to the 2016 Incremental Joinder severally agrees, subject to the terms and conditions set forth in the 2016 Incremental Joinder, to make a single loan to the Borrower on the 2016 Incremental Effective Date in an amount not to exceed such Lender's commitment set forth in the 2016 Incremental Joinder.~~

~~(c)~~ Amounts borrowed under this Section 2.01 and repaid or prepaid may not be reborrowed. Term Loans may be Base Rate Loans or Eurodollar Rate Loans, as further provided herein.

2.02. Borrowings, Conversions and Continuations of Loans. (a) Each Term Borrowing, each conversion of Term Loans from one Type to the other, and each continuation of Eurodollar Rate Loans shall be made upon the Borrower's irrevocable notice to the Administrative Agent, which may be given by (A) telephone, or (B) a Committed Loan Notice; provided that any telephone notice must be confirmed promptly by delivery to the Administrative Agent of a Committed Loan Notice. Each such Committed Loan Notice must be received by the Administrative Agent not later than 11:00 a.m. (i) three Business Days prior to the requested date of any Borrowing of, conversion to or continuation of Eurodollar Rate Loans or of any conversion of Eurodollar Rate Loans to Base Rate Loans or ~~(x)~~ in the case of a Committed Loan Notice delivered in connection with the initial Credit Extension on the Closing Date or (y) in the case of a Committed Loan Notice delivered in connection with the making of the 2017 Term Loans on the 2017 Refinancing Amendment Effective Date, one Business Day prior, and (ii) on the requested date of any Borrowing of Base Rate Loans; provided, however, that if the Borrower wishes to request Eurodollar Rate Loans having an Interest Period other than one, two, three or six months in duration as provided in the definition of "Interest Period," the applicable notice must be received by the Administrative Agent not later than 11:00 a.m. four Business Days prior to the requested date of such Borrowing, conversion or continuation, whereupon the Administrative Agent shall give prompt notice to the Appropriate Lenders of such request and determine whether the requested Interest Period is acceptable to all of them. Not later than 11:00 a.m., three Business Days before the requested date of such Borrowing, conversion or continuation, the Administrative Agent shall notify the Borrower (which notice may be by telephone) whether or not the requested Interest Period has been consented to by all the Lenders. Each Borrowing of, conversion to or continuation of Eurodollar Rate Loans shall be in a principal amount of \$5,000,000 or a whole multiple of \$1,000,000 in excess thereof. Each Borrowing of or conversion to Base Rate Loans shall be in a principal

amount of \$500,000 or a whole multiple of \$100,000 in excess thereof. Each Committed Loan Notice shall specify (i) whether the Borrower is requesting a Term Borrowing, a conversion of Term Loans or a continuation of Eurodollar Rate Loans, (ii) the requested date of the Borrowing, conversion or continuation, as the case may be (which shall be a Business Day), (iii) the principal amount of Loans to be borrowed, converted or continued, (iv) the Type of Loans to be borrowed or to which existing Term Loans are to be converted, and (v) if applicable, the duration of the Interest Period with respect thereto. If the Borrower fails to specify a Type of Loan in a Committed Loan Notice or if the Borrower fails to give a timely notice requesting a conversion or continuation, then the applicable Term Loans shall be made as, or converted to, Base Rate Loans. Any such automatic conversion to Base Rate Loans shall be effective as of the last day of the Interest Period then in effect with respect to the applicable Eurodollar Rate Loans. If the Borrower requests a Borrowing of, conversion to, or continuation of Eurodollar Rate Loans in any such Committed Loan Notice, but fails to specify an Interest Period, it will be deemed to have specified an Interest Period of one month.

(b) Following receipt of a Committed Loan Notice, the Administrative Agent shall promptly notify each Lender of the amount of its Applicable Percentage under the applicable Facility of the applicable Term Loans and if no timely notice of a conversion or continuation is provided by the Borrower, the Administrative Agent shall notify each Lender of the details of any automatic conversion to Base Rate Loans described in Section 2.02(a). In the case of a Term Borrowing each Appropriate Lender shall make the amount of its Loan available to the Administrative Agent in immediately available funds at the Administrative Agent's Office not later than 1:00 p.m. on the Business Day specified in the applicable Committed Loan Notice. Upon satisfaction of the applicable conditions set forth in Section 4.02 (and, if such Borrowing is the initial Credit Extension, Section 4.01), the Administrative Agent shall make all funds so received available to the Borrower in like funds as received by the Administrative Agent either by (i) crediting the account of the Borrower on the books of Bank of America with the amount of such funds or (ii) wire transfer of such funds, in each case in accordance with instructions provided to (and reasonably acceptable to) the Administrative Agent by the Borrower.

(c) Except as otherwise provided herein, unless the Borrower provides one Business Day's prior notice and pays the amount due, if any, under [Section 3.05](#) in connection therewith, a Eurodollar Rate Loan may be continued or converted only on the last day of an Interest Period for such Eurodollar Rate Loan. During the existence of an Event of Default, no Loans may be requested as, converted to or continued as Eurodollar Rate Loans without the consent of the Required Lenders.

(d) The Administrative Agent shall promptly notify the Borrower and the Lenders of the interest rate applicable to any Interest Period for Eurodollar Rate Loans upon determination of such interest rate. At any time that Base Rate Loans are outstanding, the Administrative Agent shall notify the Borrower and the Lenders of any change in Bank of America's prime rate used in determining the Base Rate promptly following the public announcement of such change.

(e) After giving effect to all Term Borrowings, all conversions of Term Loans from one Type to the other, and all continuations of Term Loans as the same Type, there shall not be more than five Interest Periods in effect in respect of the Term Facility.

(f) [For the avoidance of doubt, the 2017 Term Loans made on the 2017 Refinancing Amendment Effective Date \(x\) shall constitute Term Loans for all purposes of this Agreement, \(y\) shall mature and shall become due and payable on the Maturity Date and \(z\) shall be repaid in quarterly installments in accordance with Section 2.05.](#)

2.03. **Prepayments.** (a) **Optional.** The Borrower may, upon notice to the Administrative Agent, at any time or from time to time voluntarily prepay Term Loans in whole or in part without premium or penalty (subject to Section 2.03(a)(i)); provided that (A) such notice must be received by the Administrative Agent not later than 11:00 a.m. (1) three Business Days prior to any date of prepayment of Eurodollar Rate Loans and (2) on the date of prepayment of Base Rate Loans; (B) any prepayment of Eurodollar Rate Loans shall be in a principal amount of \$5,000,000 or a whole multiple of \$1,000,000 in excess thereof or, if less, the entire principal amount thereof then outstanding; and (C) any prepayment of Base Rate Loans shall be in a principal amount of \$500,000 or a whole multiple of \$100,000

in excess thereof or, if less, the entire principal amount thereof then outstanding. Each such notice shall specify the date and amount of such prepayment and the Type(s) of Loans to be prepaid and, if Eurodollar Rate Loans are to be prepaid, the Interest Period(s) of such Loans. The Administrative Agent will promptly notify each Lender of its receipt of each such notice, and of the amount of such Lender's ratable portion of such prepayment (based on such Lender's Applicable Percentage in respect of the relevant Facility). If such notice is given by the Borrower, unless rescinded pursuant to clause (iii) below, the Borrower shall make such prepayment and the payment amount specified in such notice shall be due and payable on the date specified therein. Any prepayment of a Eurodollar Rate Loan shall be accompanied by all accrued interest on the amount prepaid, together with any additional amounts required pursuant to Section 3.05. Each prepayment of the outstanding Term Loans pursuant to this Section 2.03(a) shall be applied to the principal repayment installments thereof as directed by the Borrower, and subject to Section 2.15, each such prepayment shall be paid to the Lenders in accordance with their respective Applicable Percentages in respect of the Term Facility, ~~provided that the 2016 Term Loans may be prepaid on a less than pro rata basis with the 2014 Term Loans as directed by the Borrower (including directing the application of such prepayments entirely to the 2014 Term Loans).~~

~~(i) In the event that:~~

~~(A) on or prior to the date that is six months after the Closing Date, other than in connection with a Change of Control, the Borrower (x) prepays, refinances, substitutes or replaces any 2014 Term Loans pursuant to a Repricing Transaction (including, for avoidance of doubt, any prepayment made pursuant to Section 2.03(b)(ii) that constitutes a Repricing Transaction), or (y) effects any amendment, amendment and restatement or other modification of this Agreement resulting in a Repricing Transaction, the Borrower shall pay to the Administrative Agent, for the ratable account of each of the applicable 2014 Term Lenders, (I) in the case of clause (x), a prepayment premium of 1.00% of the aggregate principal amount of the 2014 Term Loans so prepaid, refinanced, substituted or replaced and (II) in the case of clause (y), a fee equal to 1.00% of the aggregate principal amount of the applicable 2014 Term Loans outstanding immediately prior to such amendment. If, on or prior to the date that is six months after the Closing Date, any 2014 Term Lender that is a Non-Consenting Lender and is replaced pursuant to Section 10.13 in connection with any amendment, amendment and restatement or other modification of this Agreement resulting in a Repricing Transaction, such 2014 Term Lender (and not any Person who replaces such 2014 Term Lender pursuant to Section 3.07(a)) shall receive its *pro rata* portion (as determined immediately prior to it being so replaced) of the prepayment premium or fee described in the preceding sentence. Such amounts shall be due and payable on the date of effectiveness of such Repricing Transaction.~~

~~(B) In the event that~~ on or prior to the date that is six months after the ~~2016 Incremental~~2017 Refinancing Amendment Effective Date, other than in connection with a Change of Control, the Borrower (x) prepays, refinances, substitutes or replaces any ~~2016~~ Term Loans pursuant to a Repricing Transaction (including, for avoidance of doubt, any prepayment made pursuant to Section 2.03(b)(ii) that constitutes a Repricing Transaction), or (y) effects any amendment, amendment and restatement or other modification of this Agreement resulting in a Repricing Transaction, the Borrower shall pay to the Administrative Agent, for the ratable account of each of the applicable ~~2016~~ Term Lenders, (I) in the case of clause (x), a prepayment premium of 1.00% of the aggregate principal amount of the ~~2016~~ Term Loans so prepaid, refinanced, substituted or replaced and (II) in the case of clause (y), a fee equal to 1.00% of the aggregate principal amount of the applicable ~~2016~~ Term Loans outstanding immediately prior to such amendment. If, on or prior to the date that is six months after the ~~2016 Incremental~~2017 Refinancing Amendment Effective Date, any Term Lender that is a Non-Consenting Lender and is replaced pursuant to Section 10.13 in connection with any amendment, amendment and restatement or other modification of this Agreement resulting in a Repricing Transaction, such ~~2016~~ Term Lender (and not any Person who replaces such ~~2016~~ Term Loan Lender pursuant to Section 3.07(a)) shall receive its *pro rata* portion (as determined immediately prior to it being so replaced) of the prepayment premium or fee described in the preceding sentence. Such amounts shall be due and payable on the date of effectiveness of such Repricing Transaction.

(ii) Notwithstanding anything in any Loan Document to the contrary, so long as no Default or Event of Default has occurred and is continuing, any Loan Party may prepay the outstanding Term Loans (which shall, for the avoidance of doubt, be automatically and permanently canceled immediately upon such prepayment) (or any of its Subsidiaries may purchase such outstanding Loans and immediately cancel them) on the basis set forth in Annex I hereto.

(iii) Notwithstanding anything to the contrary contained in this Agreement, the Borrower may rescind any notice of prepayment under Section 2.03(a) if such prepayment would have resulted from a refinancing of all or any portion of the Term Loans or occurrence of any other event which would have provided the cash proceeds for such prepayment, which refinancing or other such event shall not be consummated or shall otherwise be delayed, subject to payment of amounts under Section 3.05.

(b) Mandatory. Within five Business Days after financial statements have been delivered pursuant to Section 6.01(a), commencing with the delivery of financial statements for the fiscal year ending October 31, 2015, the Borrower shall prepay an aggregate principal amount of Loans equal to the excess (if any) of (A) 50% of Excess Cash Flow (such percentage, the “ECF Percentage”) for the fiscal year covered by such financial statements over (B) the amount of any voluntary prepayments made on the Loans during such period or fiscal year or after such period or fiscal year (in the case of payments pursuant to Section 2.03(a)(ii), calculated as the amount of cash actually expended to make such payment) and prior to when such Excess Cash Flow prepayment is due; and provided, further, that, to the extent any voluntary prepayments of Loans made during the current period or fiscal year are applied to reduce the Excess Cash Flow payment for the prior period or fiscal year pursuant to the foregoing sentence, then such prepayments shall not be deducted with respect to the Excess Cash Flow prepayment for the current period or fiscal year; provided that if the Total Secured Net Leverage Ratio for the fiscal year ended prior to such prepayment date is less than 2.50 to 1.00, the ECF Percentage shall be reduced to 0%.

(i) In addition to any other mandatory prepayments pursuant to this Section 2.03(b), on each date on or after the Closing Date upon which the Borrower or any other Loan Party receives any cash proceeds from any Asset Sale, to the extent the aggregate Net Sale Proceeds from all prior Asset Sales in the same fiscal year exceed \$~~5,000,000~~15,000,000, an amount equal to 100% of the Term Loan Portion of Net Sale Proceeds from such Asset Sale shall be applied within three Business Days thereafter as a mandatory prepayment; provided, however, that such Net Sale Proceeds shall not be required to be so applied on such date so long as no Default then exists and such Net Sale Proceeds shall be used to purchase (or commit to purchase) assets used or to be used in the businesses permitted pursuant to Section 7.07 within 365 days following the date of such Asset Sale, and provided, further, that if all or any portion of such Net Sale Proceeds are not so reinvested within such 365-day period (or committed to be reinvested pursuant to a legally binding commitment within such 365-day period and not so reinvested within 180 days thereafter) (or such earlier date, if any, as the Borrower or the relevant Loan Party determines not to reinvest the Net Sale Proceeds from such Asset Sale as set forth above), such remaining portion shall be applied on the last day of such period (or such earlier date, as the case may be) as provided above in this Section 2.03(b)(i) without regard to the preceding proviso.

(ii) Upon the incurrence or issuance by the Borrower or any of its Subsidiaries of any Indebtedness (other than Indebtedness permitted to be incurred or issued pursuant to Section 7.02), the Borrower shall prepay an aggregate principal amount of Loans equal to 100% of all Net Cash Proceeds received therefrom promptly upon receipt thereof by the Borrower or such Subsidiary.

(iii) In addition to any other mandatory prepayments pursuant to this Section 2.03(b), on each date on or after the Closing Date upon which the Borrower or any other Loan Party receives any cash proceeds from any Recovery Event to the extent the aggregate Net Insurance Proceeds from all prior Recovery Events in the same fiscal year exceed \$~~5,000,000~~15,000,000, an amount equal to 100% of the Term Loan Portion of such Net Insurance Proceeds from such Recovery Event shall be applied within three Business Days thereafter as a mandatory repayment; provided, however, that such Net Insurance Proceeds shall not be required to be so applied on such date so long as no Default shall have occurred and be continuing and such Net Insurance Proceeds shall be used to replace or restore any properties or assets in respect of which such Net Insurance Proceeds were paid (or committed to be paid) or



purchase (or commit to purchase) assets used or to be used in the businesses permitted pursuant to Section 7.07, in each case, within 365 days following the date of the receipt of such Net Insurance Proceeds, and provided, further that if all or any portion of such Net Insurance Proceeds are not so used within 365 days after the date of the receipt of such Net Insurance Proceeds (or if committed to be so applied pursuant to a legally binding commitment within such 365-day period and not so used within 180 days thereafter) (or such earlier date, if any, as the Borrower or the relevant Loan Party determines not to reinvest the Net Insurance Proceeds relating to such Recovery Event as set forth above), such remaining portion shall be applied on the last day of such period (or such earlier date, as the case may be) as provided above in this Section 2.03(v)(iii), without regard to the immediately preceding proviso.

(iv) Each prepayment of the outstanding Term Loans pursuant to the foregoing provisions of this Section 2.03(b) shall be applied to the principal repayment installments thereof in direct order of maturity, and subject to Section 2.15, each such prepayment shall be paid to the Lenders in accordance with their respective Applicable Percentages in respect of the Term Facility.

2.04. Termination of Commitments. The aggregate Term Commitments shall be automatically and permanently reduced to zero on the date of the Term Borrowing.

2.05. Repayment of Loans.

(a) Commencing on ~~October 31~~April 30, 2014~~2017~~, the Borrower shall repay to the ~~2014~~2017 Term Loan Lenders on the last day of each July, October, January and April an amount equal to (a) the aggregate principal amount of ~~2014~~2017 Term Loans borrowed on the ~~Closing~~2017 Refinancing Amendment Effective Date multiplied by (b) 0.25%; provided, however, that the final principal repayment installment of the ~~2014~~2017 Term Loans shall be repaid on the Maturity Date ~~for the 2014 Term Facility~~ and in any event shall be in an amount equal to the aggregate principal amount of all ~~2014~~2017 Term Loans outstanding on such date.

~~(b) Commencing on July 31, 2016, the Borrower shall repay to the 2016 Term Lenders on the last day of each April, July, October and January an amount equal to (a) the aggregate principal amount of 2016 Term Loans borrowed on the 2016 Incremental Effectiveness Date multiplied by (b) 0.25%; provided, however, that the final principal repayment installment of the 2016 Term Loans shall be repaid on the Maturity Date for the 2016 Term Facility and in any event shall be in an amount equal to the aggregate principal amount of all 2016 Term Loans outstanding on such date.~~

2.06. Interest. (a) Subject to the provisions of Section 2.06(b), (i) each Eurodollar Rate Loan under the Facility shall bear interest on the outstanding principal amount thereof for each Interest Period at a rate per annum equal to the Eurodollar Rate for such Interest Period plus the Applicable Rate for such Facility and (ii) each Base Rate Loan under the Facility shall bear interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate plus the Applicable Rate for such Facility.

(b) Following the occurrence and during the continuance of any Default or Event of Default under Sections 8.01(a), (f) or (g), each Loan shall bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(c) Interest on each Loan shall be due and payable in arrears on each Interest Payment Date applicable thereto and at such other times as may be specified herein. Interest hereunder shall be due and payable in accordance with the terms hereof before and after judgment, and before and after the commencement of any proceeding under any Debtor Relief Law.

2.07. Fees. (a) The Borrower shall pay to the Arrangers and the Administrative Agent for their own respective accounts fees in the amounts and at the times specified in the Fee Letter. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

(b) The Borrower shall pay to the Lenders such fees as shall have been separately agreed upon in writing in the amounts and at the times so specified. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

2.08. Computation of Interest and Fees. All computations of interest for Base Rate Loans (including Base Rate Loans determined by reference to the Eurodollar Rate) shall be made on the basis of a year of 365 or 366 days, as the case may be, and actual days elapsed. All other computations of fees and interest shall be made on the basis of a 360-day year and actual days elapsed (which results in more fees or interest, as applicable, being paid than if computed on the basis of a 365-day year). Interest shall accrue on each Loan for the day on which the Loan is made, and shall not accrue on a Loan, or any portion thereof, for the day on which the Loan or such portion is paid; provided that any Loan that is repaid on the same day on which it is made shall, subject to Section 2.10(a), bear interest for one day. Each determination by the Administrative Agent of an interest rate or fee hereunder shall be conclusive and binding for all purposes, absent manifest error.

2.09. Evidence of Debt. (a) The Credit Extensions made by each Lender shall be evidenced by one or more accounts or records maintained by such Lender and by the Administrative Agent in the ordinary course of business. The accounts or records maintained by the Administrative Agent and each Lender shall be conclusive absent manifest error of the amount of the Credit Extensions made by the Lenders to the Borrower and the interest and payments thereon. Any failure to so record or any error in doing so shall not, however, limit or otherwise affect the obligation of the Borrower hereunder to pay any amount owing with respect to the Obligations. In the event of any conflict between the accounts and records maintained by any Lender and the accounts and records of the Administrative Agent in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error. Upon the request of any Lender made through the Administrative Agent, the Borrower shall execute and deliver to such Lender (through the Administrative Agent) a Note, which shall evidence such Lender's Loans in addition to such accounts or records. Each Lender may attach schedules to its Note and endorse thereon the date, Type (if applicable), amount and maturity of its Loans and payments with respect thereto. Upon request of the Borrower, promptly following Payment in Full, each Lender shall return to the Borrower any Note issued to it, or in the case of any loss, theft or destruction of any such Note, a lost note affidavit in customary form.

2.10. Payments Generally; Administrative Agent's Clawback. (a) General. All payments to be made by the Borrower shall be made free and clear of and without condition or deduction for any counterclaim, defense, recoupment or setoff. Except as otherwise expressly provided herein, all payments by the Borrower hereunder shall be made to the Administrative Agent, for the account of the respective Lenders to which such payment is owed, at the Administrative Agent's Office in Dollars and in immediately available funds not later than 2:00 p.m. on the date specified herein. The Administrative Agent will promptly distribute to each Lender its Applicable Percentage in respect of the relevant Facility (or other applicable share as provided herein) of such payment in like funds as received by wire transfer to such Lender's Lending Office. All payments received by the Administrative Agent after 2:00 p.m. shall be deemed received on the next succeeding Business Day and any applicable interest or fee shall continue to accrue. If any payment to be made by the Borrower shall come due on a day other than a Business Day, payment shall be made on the next following Business Day, and such extension of time shall be reflected on computing interest or fees, as the case may be.

(b) Funding by Lenders; Presumption by Administrative Agent. Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing of Eurodollar Rate Loans (or, in the case of any Borrowing of Base Rate Loans, prior to 12:00 noon on the date of such Borrowing) that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with Section 2.02 (or, in the case of a Borrowing of Base Rate Loans, that such Lender has made such share available in accordance with and at the time required by Section 2.02) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount in immediately available funds with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding

the date of payment to the Administrative Agent, at (A) in the case of a payment to be made by such Lender, the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the Administrative Agent in connection with the foregoing, and (B) in the case of a payment to be made by the Borrower, the interest rate applicable to Base Rate Loans. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. If such Lender pays its share of the applicable Borrowing to the Administrative Agent, then the amount so paid shall constitute such Lender's Loan included in such Borrowing. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

(i) Payments by Borrower; Presumptions by Administrative Agent. Unless the Administrative Agent shall have received notice from the Borrower prior to the time at which any payment is due to the Administrative Agent for the account of the Lenders hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Appropriate Lenders, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Appropriate Lenders, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender in immediately available funds with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

A notice of the Administrative Agent to any Lender or the Borrower with respect to any amount owing under this subsection (b) shall be conclusive, absent manifest error.

(c) Failure to Satisfy Conditions Precedent. If any Lender makes available to the Administrative Agent funds for any Loan to be made by such Lender as provided in the foregoing provisions of this Article II, and such funds are not made available to the Borrower by the Administrative Agent because the conditions to the applicable Credit Extension set forth in Article IV are not satisfied or waived in accordance with the terms hereof, the Administrative Agent shall return such funds (in like funds as received from such Lender) to such Lender, without interest.

(d) Obligations of Lenders Several. The obligations of the Lenders hereunder to make Term Loans and to make payments pursuant to Section 10.04(c) are several and not joint. The failure of any Lender to make any Loan, to fund any such participation or to make any payment under Section 10.04(c) on any date required hereunder shall not relieve any other Lender of its corresponding obligation to do so on such date, and no Lender shall be responsible for the failure of any other Lender to so make its Loan, to purchase its participation or to make its payment under Section 10.04(c).

(e) Funding Source. Nothing herein shall be deemed to obligate any Lender to obtain the funds for any Loan in any particular place or manner or to constitute a representation by any Lender that it has obtained or will obtain the funds for any Loan in any particular place or manner.

(f) Insufficient Funds. If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, interest and fees then due hereunder, such funds shall be applied (i) first, toward payment of interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and (ii) second, toward payment of principal then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of principal then due to such parties.

2.11. Sharing of Payments by Lenders. If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of (a) Obligations due and payable to such Lender hereunder and under the other Loan Documents at such time in excess of its ratable share (according to the proportion of (i) the amount of

such Obligations due and payable to such Lender at such time to (ii) the aggregate amount of the Obligations due and payable to all Lenders hereunder and under the other Loan Documents at such time) of payments on account of the Obligations due and payable to all Lenders hereunder and under the other Loan Documents at such time obtained by all the Lenders at such time or (b) Obligations owing (but not due and payable) to such Lender hereunder and under the other Loan Documents at such time in excess of its ratable share (according to the proportion of (i) the amount of such Obligations owing (but not due and payable) to such Lender at such time to (ii) the aggregate amount of the Obligations owing (but not due and payable) to all Lenders hereunder and under the other Loan Documents at such time) of payment on account of the Obligations owing (but not due and payable) to all Lenders hereunder and under the other Loan Documents at such time obtained by all of the Lenders at such time then the Lender receiving such greater proportion shall (a) notify the Administrative Agent of such fact, and (b) purchase (for cash at face value) participations in the Loans of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of Obligations then due and payable to the Lenders or owing (but not due and payable) to the Lenders, as the case may be, provided that:

(i) if any such participations or subparticipations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations or subparticipations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this Section shall not be construed to apply to any payment made by or on behalf of the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), or any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans to any assignee or participant, other than an assignment to the Borrower or any Subsidiary thereof (as to which the provisions of this Section shall apply).

The Borrower consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Borrower rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Borrower in the amount of such participation.

2.12. Refinancing Amendment. Without limiting the provisions of Section 7.02(o) and the other terms of this Agreement permitting Credit Agreement Refinancing Indebtedness to be incurred outside of this Agreement, the Borrower may, with the consent of the Administrative Agent (not to be unreasonably withheld), obtain, from any Lender or any other bank, financial institution or other institutional lender or investor that would be an Eligible Assignee, Credit Agreement Refinancing Indebtedness in the form of term loans, to refinance all or any portion of the Loans hereunder, pursuant to a Refinancing Amendment; provided (i) such Credit Agreement Refinancing Indebtedness will have such pricing, fees (including upfront fees and OID), optional prepayment terms, redemption premiums and subordination terms as may be agreed by the Borrower and the lenders thereof, (ii) such Credit Agreement Refinancing Indebtedness, will have a maturity date that is not prior to the maturity date of the class of Term Loans being refinanced, and will have a weighted average life to maturity that is not shorter than the remaining weighted average life to maturity of the class of Term Loans being refinanced, (iii) such Credit Agreement Refinancing Indebtedness (unless it consists of amortizing term loans of the type commonly referred to as “term loan A,” which may be subject to more restrictive terms and conditions) will have terms and conditions (excluding, for the avoidance of doubt, pricing, rate floors, discounts, fees and optional prepayment or redemption terms), taken as a whole, not more restrictive than the terms of this Agreement (as reasonably determined by the Borrower) unless the Administrative Agent and the Borrower shall amend the provisions of this Agreement to provide for such more restrictive term to apply to the Loans hereunder (which amendment may be effected by the Administrative Agent and the Borrower without the consent of any other Lender), (iv) the interest rate margins applicable to such Credit Refinancing Indebtedness shall be agreed between the Borrower and the investors thereunder, (v) without limiting the provisions of Section 7.02(o) and the other terms of this agreement permitting Credit Agreement Refinancing Indebtedness to be incurred outside of this Agreement, such Credit Agreement Refinancing Indebtedness incurred pursuant to a Refinancing Amendment shall (A) rank *pari passu* in right of payment to the other Loans outstanding; (B) shall be Guaranteed by the Loan Parties; and (C) shall be secured by the Collateral on an equal and ratable basis

with the Obligations pursuant to the Collateral Documents and (vi) such Credit Agreement Refinancing Indebtedness shall share ratably in any prepayments pursuant to Section 2.03 (or otherwise provide for more favorable prepayment treatment for the then outstanding Term Facility). The effectiveness of any Refinancing Amendment shall be subject to the satisfaction on the date thereof of each of the conditions set forth in Section 4.02, and to the extent reasonably requested by the Administrative Agent, receipt by the Administrative Agent of legal opinions, board resolutions, officers' certificates and/or reaffirmation of agreements delivered on the Closing Date (it being understood that all references to "the date of such Credit Event" or similar language in such Sections shall be deemed to refer to the effective date of such Refinancing Amendment). Each class of Credit Agreement Refinancing Indebtedness incurred under this Section 2.13 shall be in an aggregate principal amount that is not less than \$25,000,000 and an integral multiple of \$5,000,000 in excess thereof (or such lesser amounts as the Administrative Agent may agree). The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Refinancing Amendment. Each of the parties hereto hereby agrees that, upon the effectiveness of any Refinancing Amendment, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Credit Agreement Refinancing Indebtedness incurred pursuant thereto (including any amendments necessary to treat any Credit Agreement Refinancing Indebtedness in the form of loans as Loans hereunder). Any Refinancing Amendment may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent and the Borrower, to effect the provisions of this Section 2.12. This Section shall supersede any provisions in Section 2.11 or 10.01 to the contrary.

### 2.13. Incremental Facilities.

(a) Borrower Request. The Borrower may by written notice to the Administrative Agent elect to request the establishment of one or more new term loan commitments (each, an "Incremental Term Commitment"), by an aggregate amount not in excess of the greater of (x) \$100,000,000 and (y) an amount such that after giving pro forma effect thereto, the Total Secured Net Leverage Ratio is no greater than 2.50 to 1.00. Each such notice shall specify (i) the date (each, an "Increase Effective Date") on which the Borrower proposes that the Incremental Term Commitments shall be effective, which shall be a date not less than 10 Business Days after the date on which such notice is delivered to the Administrative Agent (or such other date as agreed to by the Administrative Agent) and (ii) the identity of each Eligible Assignee to whom the Borrower proposes any portion of such Incremental Term Commitments be allocated and the amounts of such allocations; provided that any existing Lender approached to provide all or a portion of the Incremental Term Commitments may elect or decline, in its sole discretion, to provide such Incremental Term Commitment. Each Incremental Term Commitment shall be in an aggregate amount of \$10,000,000 or any whole multiple of \$500,000 in excess thereof (provided that such amount may be less than \$10,000,000 if such amount represents all remaining availability under the aggregate limit in respect of Incremental Term Commitments set forth in above).

(b) Conditions. The Incremental Term Commitments shall become effective as of the Increase Effective Date; provided that:

(i) each of the conditions set forth in Section 4.02 shall be satisfied; provided that that if the proceeds of the Incremental Term Loans are being used to finance a Limited Condition Acquisition, (x) the conditions set forth in Section 4.02 shall be satisfied as of the date the Incremental Term Commitments in respect of such Limited Condition Acquisition are established and the definitive agreements for such Limited Condition Acquisition are entered into, (y) at the time of funding of such Incremental Term Loans, no Specified Event of Default shall exist or would result therefrom and (z) the lenders providing the Incremental Term Loans in connection with such Limited Condition Acquisition may waive the satisfaction of the condition set forth in clause (a) of Section 4.02 at the time of the funding of such Incremental Term Loans, other than with respect to the accuracy of the Specified Representations;

(ii) no Default shall have occurred and be continuing or would result from the borrowings to be made on the Increase Effective Date; provided that if the proceeds of the Incremental Term Loans are being used to finance a Limited Condition Acquisition, (x) no Default or Event of Default shall exist or would result therefrom

at the time the Incremental Commitments in respect of such Limited Condition Acquisition are established and the definitive agreements for such Limited Condition Acquisition are entered into and (y) at the time of funding of such Incremental Term Loans, no Specified Event of Default shall exist or would result therefrom;

(iii) the representations and warranties contained in Article V and the other Loan Documents are true and correct in all material respects on and as of the Increase Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall have been true and correct in all material respects as of such earlier date, and except that for purposes of this Section 2.13(c), the representations and warranties contained in Section 5.05(a) and Section 5.05(b) shall be deemed to refer to the most recent financial statements furnished pursuant to subsections (a) and (b), respectively, of Section 6.01; ~~and~~ provided that to the extent the proceeds of the Incremental Term Loans are being used to finance a Limited Condition Acquisition, (x) the representations and warranties contained in Article V and the other Loan Documents shall be true and correct in all material respects on and as of the date the Incremental Term Commitments in respect of such Limited Condition Acquisition are established and the definitive agreements for such Limited Condition Acquisition are entered into, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall have been true and correct in all material respects as of such earlier date, and except that for purposes of this Section 2.13(c), the representations and warranties contained in Section 5.05(a) and Section 5.05(b) shall be deemed to refer to the most recent financial statements furnished pursuant to subsections (a) and (b), respectively, of Section 6.01 and (y) the lenders providing the Incremental Term Loans in connection with such Limited Condition Acquisition may waive the satisfaction of the condition set forth in this clause (iii) at the time of the funding of such Incremental Term Loans, other than with respect to the accuracy of the Specified Representations; and

(iv) the Borrower shall deliver or cause to be delivered officer's certificates and legal opinions of the type delivered on the Closing Date to the extent reasonably requested by, and in form and substance reasonably satisfactory to, the Administrative Agent.

(c) Terms of New Loans and Commitments. The terms and provisions of Loans made pursuant to Incremental Term Commitments shall be as follows:

(i) terms and provisions of Incremental Term Loans shall be, except as otherwise set forth herein or in the Increase Joinder, identical to the Term Loans (it being understood that Incremental Term Loans may be a part of the Term Loans) and to the extent that the terms and provisions of Incremental Term Loans are not identical to the Term Loans (except to the extent permitted by clauses (ii), (iii), (iv), (v) or (vi) below) (unless such Incremental Term Loans are amortizing term loans of the type commonly referred to as "term loan A," which may be subject to more restrictive terms and conditions) they shall be (in the reasonable judgment of the Borrower), taken as a whole, not more restrictive than the terms of this Agreement (as reasonably determined by the Borrower) unless the Administrative Agent and the Borrower shall amend the provisions of this Agreement to provide for such more restrictive term to apply to the then-existing Term Loans hereunder (which amendment may be effected by the Administrative Agent and the Borrower without the consent of any other Lender); provided that in any event the Incremental Term Loans must comply with clauses (ii), (iii), (iv), (v) and (vi) below;

(ii) shall (x) rank *pari passu* in right of payment and of security with the Term Loans and (y) have no obligors other than the Loan Parties,

(iii) unless otherwise agreed by the Lenders making such Loans (to accept a less than ratable share), shall participate on a *pro rata* basis in any prepayments of Term Loans hereunder;

(iv) the weighted average life to maturity of any Incremental Term Loans shall be no shorter than the remaining weighted average life to maturity of the then existing Term Loans;

(v) the maturity date of Incremental Term Loans (the "Incremental Term Loan Maturity Date") shall not be earlier than the then Latest Maturity Date; and

(vi) the All-in Yield for Incremental Term Loans shall be determined by the Borrower and the Lenders of the Incremental Term Loans; provided that in the event that the All-in Yield for any Incremental Term Loan incurred within eighteen (18) months after the Closing Date is greater than the All-in Yield for the Term Loans by more than 50 basis points, then the Applicable Rate for the Term Loans shall be increased to the extent necessary so that the All-in Yield for the Incremental Term Loans is 50 basis points higher than the All-in Yield for the Term Loans; provided, further, that in the case of the ~~2016~~2017 Term Loans, in the event that the All-in Yield for any Incremental Term Loan incurred at any time after the ~~2016 Incremental~~2017 Refinancing Amendment Effective Date is greater than the All-in Yield for the ~~2016~~2017 Term Loans by more than 50 basis points, then the Applicable Rate for the ~~2016~~2017 Term Loans shall be increased to the extent necessary so that the All-in Yield for the Incremental Term Loans is 50 basis points higher than the All-in Yield for the ~~2016~~2017 Term Loans;

The Incremental Term Commitments shall be effected by a joinder agreement (the “Increase Joinder”) executed by the Borrower, the Administrative Agent and each Lender making such Incremental Term Commitment, in form and substance reasonably satisfactory to each of them. Notwithstanding the provisions of Section 10.01, the Increase Joinder may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent, to effect the provisions of this Section 2.13. In addition, unless otherwise specifically provided herein, all references in Loan Documents to Term Loans shall be deemed, unless the context otherwise requires, to include references to Incremental Term Loans that are Term Loans, made pursuant to this Agreement. This Section 2.13 shall supersede any provisions in Section 2.11 or 10.01 to the contrary.

(d) Making of New Term Loans. On any Increase Effective Date on which new Commitments for Term Loans are effective, subject to the satisfaction of the foregoing terms and conditions, each Lender of such new Commitment shall make a Term Loan to the Borrower in an amount equal to its new Commitment.

(e) Equal and Ratable Benefit. The Loans and Commitments established pursuant to this paragraph shall constitute Loans and Commitments under, and shall be entitled to all the benefits afforded by, this Agreement and the other Loan Documents, and shall, without limiting the foregoing, benefit equally and ratably from the Guarantees and security interests created by the Collateral Documents, except that the new Loans may be subordinated in right of payment or the Liens securing the new Loans may be subordinated, in each case, to the extent set forth in the Increase Joinder. The Loan Parties shall take any actions reasonably required by the Administrative Agent to ensure and/or demonstrate that the Lien and security interests granted by the Collateral Documents continue to be perfected under the UCC or otherwise, in each case, as required by the Collateral Documents, after giving effect to the establishment of any such class of Term Loans or any such new Commitments.

#### 2.14. Extension of Term Loans.

(a) Extension of Term Loans. The Borrower may at any time and from time to time request that all or a portion of the Term Loans of a given Class (each, an “Existing Term Loan Tranche”) be amended to extend the scheduled maturity date(s) with respect to all or a portion of any principal amount of such Term Loans (any such Term Loans which have been so amended, “Extended Term Loans”) and to provide for other terms consistent with this Section 2.14. In order to establish any Extended Term Loans, the Borrower shall provide a notice to the Administrative Agent (who shall provide a copy of such notice to each of the Lenders under the applicable Existing Term Loan Tranche) (each, a “Term Loan Extension Request”) setting forth the proposed terms of the Extended Term Loans to be established, which shall (x) be identical as offered to each Lender under such Existing Term Loan Tranche (including as to the proposed interest rates and fees payable) and offered *pro rata* to each Lender under such Existing Term Loan Tranche and (y) be identical to the Term Loans under the Existing Term Loan Tranche from which such Extended Term Loans are to be amended, except that: (i) all or any of the scheduled amortization payments of principal of the Extended Term Loans may be delayed to later dates than the scheduled amortization payments of principal of the Term Loans of such Existing Term Loan Tranche, to the extent provided in the applicable Extension Amendment; (ii) the effective yield with respect to the Extended Term Loans (whether in the form of interest rate margin, upfront fees, original issue discount or otherwise) may be different than the effective yield for the Term Loans of such Existing Term Loan Tranche, in each case, to the extent provided in the applicable Extension

Amendment; (iii) the Extension Amendment may provide for other covenants and terms that apply solely to any period after the Latest Maturity Date that is in effect on the effective date of the Extension Amendment (immediately prior to the establishment of such Extended Term Loans); and (iv) Extended Term Loans may have call protection as may be agreed by the Borrower and the Lenders thereof; provided, that (A) no Default shall have occurred and be continuing at the time a Term Loan Extension Request is delivered to Lenders, (B) in no event shall the final maturity date of any Extended Term Loans of a given Term Loan Extension Series at the time of establishment thereof be earlier than the Maturity Date of the Existing Term Loan Tranche from which such Extended Term Loans are to be amended, (C) the weighted average life to maturity of any Extended Term Loans of a given Term Loan Extension Series at the time of establishment thereof shall be no shorter (other than by virtue of amortization or prepayment of such Indebtedness prior to the time of incurrence of such Extended Term Loans) than the remaining weighted average life to maturity of the Existing Term Loan Tranche from which such Extended Term Loans are to be amended, (D) any such Extended Term Loans (and the Liens securing the same) shall be permitted by the terms of the Intercreditor Agreement (to the extent any Intercreditor Agreement is then in effect), (E) all documentation in respect of such Extension Amendment shall be consistent with the foregoing and (F) any Extended Term Loans may participate on a *pro rata* basis or less than a *pro rata* basis (but not greater than a *pro rata* basis) in any mandatory repayments or prepayments hereunder, in each case as specified in the respective Extension Amendment. Any Extended Term Loans amended pursuant to any Term Loan Extension Request shall be designated a series (each, a “Term Loan Extension Series”) of Extended Term Loans for all purposes of this Agreement; provided that any Extended Term Loans amended from an Existing Term Loan Tranche may, to the extent provided in the applicable Extension Amendment, be designated as an increase in any previously established Term Loan Extension Series with respect to such Existing Term Loan Tranche. Each Term Loan Extension Series of Extended Term Loans incurred under this Section 2.14 shall be in an aggregate principal amount that is not less than \$25,000,000.

(b) Extension Request. The Borrower shall provide the applicable Extension Request at least five (5) Business Days (or such shorter period of time as the Administrative Agent shall agree) prior to the date on which Lenders under the Existing Term Loan Tranche, are requested to respond, and shall agree to such procedures, if any, as may be established by, or acceptable to, the Administrative Agent, in each case acting reasonably to accomplish the purposes of this Section 2.14. No Lender shall have any obligation to agree to have any of its Term Loans of any Existing Term Loan Tranche amended into Extended Term Loans, pursuant to any Extension Request. Any Lender holding a Loan under an Existing Term Loan Tranche (each, an “Extending Term Lender”) wishing to have all or a portion of its Term Loans under the Existing Term Loan Tranche subject to such Extension Request amended into Extended Term Loans shall notify the Administrative Agent (each, an “Extension Election”) on or prior to the date specified in such Extension Request of the amount of its Term Loans under the Existing Term Loan Tranche which it has elected to request be amended into Extended Term Loans (subject to any minimum denomination requirements imposed by the Administrative Agent). In the event that the aggregate principal amount of Term Loans under the Existing Term Loan Tranche in respect of which applicable Term Lenders shall have accepted the relevant Extension Request exceeds the amount of Extended Term Loans requested to be extended pursuant to the Extension Request, Term Loans subject to Extension Elections shall be amended to Extended Term Loans, on a *pro rata* basis (subject to rounding by the Administrative Agent, which shall be conclusive) based on the aggregate principal amount of Term Loans, included in each such Extension Election.

(c) Extension Amendment. Extended Term Loans shall be established pursuant to an amendment (each, a “Extension Amendment”) to this Agreement among the Borrower, the Administrative Agent and each Extending Term Lender, providing an Extended Term Loan thereunder, which shall be consistent with the provisions set forth in Sections 2.14(a) above, (but which shall not require the consent of any other Lender). The effectiveness of any Extension Amendment shall be subject to the satisfaction on the date thereof of each of the conditions set forth in Section 4.02 and, to the extent reasonably requested by the Administrative Agent, receipt by the Administrative Agent of (i) legal opinions, board resolutions and officers’ certificates consistent with those delivered on the Closing Date other than changes to such legal opinion resulting from a change in law, change in fact or change to counsel’s form of opinion reasonably satisfactory to the Administrative Agent and (ii) reaffirmation agreements and/or such amendments to the Collateral Documents as may be reasonably requested by the Administrative Agent in order to ensure that the Extended Term Loans, are provided with the benefit of the applicable Loan Documents (provided any such reaffirmations and/or amendments may be provided within a time period after such effectiveness if agreed



by the Administrative Agent in its reasonable discretion). The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Extension Amendment. Each of the parties hereto hereby agrees that this Agreement and the other Loan Documents may be amended pursuant to an Extension Amendment, without the consent of any other Lenders, to the extent (but only to the extent) necessary to (i) reflect the existence and terms of the Extended Term Loans incurred pursuant thereto, (ii) modify the scheduled repayments set forth in Section 2.03(b) or 2.05 with respect to any Existing Term Loan Tranche subject to an Extension Election to reflect a reduction in the principal amount of the Term Loans thereunder in an amount equal to the aggregate principal amount of the Extended Term Loans amended pursuant to the applicable Extension (with such amount to be applied ratably to reduce scheduled repayments of such Term Loans required pursuant to Section 2.03(b) and 2.05), (iii) modify the prepayments set forth in Section 2.03 to reflect the existence of the Extended Term Loans and the application of prepayments (including prepayments occurring prior to the effective date of any Extension Amendment) with respect thereto, (iv) make such other changes to this Agreement and the other Loan Documents consistent with the provisions and intent of the second paragraph of Section 10.01 (without the consent of the Required Lenders called for therein) and (v) effect such other amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent and the Borrower, to effect the provisions of this Section 2.14, and the Lenders hereby expressly authorize the Administrative Agent to enter into any such Extension Amendment.

(d) No conversion of Loans pursuant to any Extension in accordance with this Section 2.14 shall constitute a voluntary or mandatory payment or prepayment for purposes of this Agreement.

2.15. Defaulting Lenders. (a) Adjustments. Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as that Lender is no longer a Defaulting Lender, to the extent permitted by applicable Law:

(i) Waivers and Amendments. Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in Section 10.01 and in the definition of "Required Lender".

(ii) Defaulting Lender Waterfall. Any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article VIII or otherwise) shall be applied at such time or times as may be determined by the Administrative Agent as follows: *first*, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; *second*, as the Borrower may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; *third*, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released *pro rata* in order to satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement; *fourth*, to the payment of any amounts owing to the Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *fifth*, so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and *sixth*, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; provided that if (x) such payment is a payment of the principal amount of any Loans in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Loans were made at a time when the conditions set forth in Section 4.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of all Non-Defaulting Lenders on a *pro rata* basis prior to being applied to the payment of any Loans of such Defaulting Lender until such time as all Loans are held by the Lenders *pro rata* in accordance with the Commitments hereunder. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender pursuant to this Section 2.15(a)(ii) shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(b) Defaulting Lender Cure. If the Borrower and the Administrative Agent agree in writing that a Lender is no longer a Defaulting Lender, the Administrative Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice and subject to any conditions set forth therein, that Lender will, to the extent applicable, purchase at par that portion of outstanding Loans of the other Lenders or take such other actions as the Administrative Agent may determine to be necessary to cause the Committed Loans to be held on a *pro rata* basis by the Lenders in accordance with their Applicable Percentages, whereupon such Lender will cease to be a Defaulting Lender; provided that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and provided, further, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

### ARTICLE III

#### TAXES, YIELD PROTECTION AND ILLEGALITY

##### 3.01. Taxes. (a) Payments Free of Taxes; Obligation to Withhold; Payments on Account of Taxes.

(i) Any and all payments by or on account of any obligation of any Loan Party hereunder or under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable Laws. If the Code or any other applicable Laws (as determined in the good faith discretion of the Administrative Agent) require the deduction or withholding of any Tax from any such payment by the Administrative Agent or a Loan Party, including both United States Federal backup withholding and withholding taxes, then the Administrative Agent or such Loan Party shall be entitled to make such deduction or withholding upon the basis of the information and documentation it has received pursuant to subsection (e) below.

(ii) The applicable Loan Party or the Administrative Agent shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with such Laws, and to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made.

(b) Payment of Other Taxes by the Borrower. Without limiting the provisions of subsection (a) above, the Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(c) Tax Indemnifications. (i) The Borrower shall, and does hereby, indemnify each Recipient, and shall make payment in respect thereof within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 3.01) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent, or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.)

(ii) Each Lender shall, and does hereby, severally indemnify, and shall make payment in respect thereof within 10 days after demand therefor, (x) the Administrative Agent against any Indemnified Taxes attributable to such Lender (but only to the extent that the Borrower has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Borrower to do so), (y) the Administrative Agent and the Borrower, as applicable, against any Taxes attributable to such Lender's failure to comply with the provisions of Section 10.06(d) relating to the maintenance of a Participant Register and (z) the Administrative Agent and the Borrower, as applicable, against any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent or the Borrower in connection with any Loan Document, and any reasonable

expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender, as the case may be, under this Agreement or any other Loan Document against any amount due to the Administrative Agent under this clause (ii).

(d) Evidence of Payments. Upon request by the Borrower or the Administrative Agent, as the case may be, after any payment of Taxes by the Borrower or by the Administrative Agent to a Governmental Authority as provided in this Section 3.01, the Borrower shall deliver to the Administrative Agent or the Administrative Agent shall deliver to the Borrower, as the case may be, the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of any return required by Laws to report such payment or other evidence of such payment reasonably satisfactory to the Borrower or the Administrative Agent, as the case may be.

(e) Status of Lenders; Tax Documentation.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 3.01(e)(ii) (A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Person,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed originals of IRS Form W-8BEN ~~(or W-8BEN-E, as applicable (in each case, or~~ an applicable successor form) establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN ~~(or W-8BEN-E, as applicable (in each case, or~~ an applicable successor form) establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed originals of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of [Exhibit H-1](#) to the effect that such Foreign Lender is not a “bank” within the meaning of Section 881(c)(3)(A) of the Code, a “10 percent shareholder” of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code (a “[U.S. Tax Compliance Certificate](#)”) and (y) executed originals of IRS Form W-8BEN ~~(or W-8BEN-E, as applicable (in each case,~~ or an applicable successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form ~~W-8ECI~~, IRS Form W-8BEN ~~(or W-8BEN-E, as applicable (in each case,~~ or an applicable successor form), a U.S. Tax Compliance Certificate substantially in the form of [Exhibit H-2](#) or [Exhibit H-3](#), IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of [Exhibit H-4](#) on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender’s obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), “FATCA” shall include any amendments made to FATCA after the date of this Agreement. [For the avoidance of doubt, this Credit Agreement is not a “grandfathered obligation” within the meaning of Treasury Regulation Section 1.1471-2\(b\)\(2\)\(i\).](#)

(iii) Each Lender agrees that if any form or certification it previously delivered pursuant to this Section 3.01 expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(f) Treatment of Certain Refunds. Unless required by applicable Laws, at no time shall the Administrative Agent have any obligation to file for or otherwise pursue on behalf of a Lender, or have any obligation to pay to any Lender, any refund of Taxes withheld or deducted from funds paid for the account of such Lender, as the case may be. If any Recipient determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified by the Borrower or with respect to which the Borrower has paid additional amounts pursuant to this Section 3.01, it shall pay to the Borrower an amount equal to such refund (but only to the extent of indemnity payments made, or additional amounts paid, by the Borrower under this Section 3.01 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) incurred by such Recipient, and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund), provided that the Borrower, upon the request of the Recipient, agrees to repay the amount paid over to the Borrower

(plus any penalties, interest or other charges imposed by the relevant Governmental Authority) to the Recipient in the event the Recipient is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this subsection, in no event will the applicable Recipient be required to pay any amount to the Borrower pursuant to this subsection the payment of which would place the Recipient in a less favorable net after-Tax position than such Recipient would have been in if Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such tax had never been paid. This subsection shall not be construed to require any Recipient to make available its tax returns (or any other information relating to its taxes that it deems confidential) to the Borrower or any other Person.

(g) Survival. Each party's obligations under this Section 3.01 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all other Obligations.

3.02. Illegality. If any Lender determines that any Law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for any Lender or its applicable Lending Office to make, maintain or fund Loans whose interest is determined by reference to the Eurodollar Rate, or to determine or charge interest rates based upon the Eurodollar Rate, or any Governmental Authority has imposed material restrictions on the authority of such Lender to purchase or sell, or to take deposits of, Dollars in the London interbank market, then, on notice thereof by such Lender to the Borrower through the Administrative Agent, (i) any obligation of such Lender to make or continue Eurodollar Rate Loans or to convert Base Rate Loans to Eurodollar Rate Loans shall be suspended, and (ii) if such notice asserts the illegality of such Lender making or maintaining Base Rate Loans the interest rate on which is determined by reference to the Eurodollar Rate component of the Base Rate, the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Eurodollar Rate component of the Base Rate, in each case until such Lender notifies the Administrative Agent and the Borrower that the circumstances giving rise to such determination no longer exist. Upon receipt of such notice, (x) the Borrower shall, upon demand from such Lender (with a copy to the Administrative Agent), prepay or, if applicable, convert all Eurodollar Rate Loans of such Lender to Base Rate Loans (the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Eurodollar Rate component of the Base Rate), either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain such Eurodollar Rate Loans to such day, or immediately, if such Lender may not lawfully continue to maintain such Eurodollar Rate Loans and (y) if such notice asserts the illegality of such Lender determining or charging interest rates based upon the Eurodollar Rate, the Administrative Agent shall during the period of such suspension compute the Base Rate applicable to such Lender without reference to the Eurodollar Rate component thereof until the Administrative Agent is advised in writing by such Lender that it is no longer illegal for such Lender to determine or charge interest rates based upon the Eurodollar Rate. Upon any such prepayment or conversion, the Borrower shall also pay accrued interest on the amount so prepaid or converted.

3.03. Inability to Determine Rates. If in connection with any request for a Eurodollar Rate Loan or a conversion to or continuation thereof, (a) the Administrative Agent determines that (i) Dollar deposits are not being offered to banks in the London interbank Eurodollar market for the applicable amount and Interest Period of such Eurodollar Rate Loan, or (ii) adequate and reasonable means do not exist for determining the Eurodollar Rate for any requested Interest Period with respect to a proposed Eurodollar Rate Loan or in connection with an existing or proposed Base Rate Loan (in each case with respect to clause (a)(i) above, "Impacted Loans"), or (b) the Administrative Agent or the Required Lenders determine that for any reason the Eurodollar Rate for any requested Interest Period with respect to a proposed Eurodollar Rate Loan does not adequately and fairly reflect the cost to such Lenders of funding such Eurodollar Rate Loan, the Administrative Agent will promptly so notify the Borrower and each Lender. Thereafter, (x) the obligation of the Lenders to make or maintain Eurodollar Rate Loans shall be suspended (to the extent of the affected Eurodollar Rate Loans or Interest Periods) and (y) in the event of a determination described in the preceding sentence with respect to the Eurodollar Rate component of the Base Rate, the utilization of the Eurodollar Rate component in determining the Base Rate shall be suspended, in each case until the Administrative Agent upon the instruction of the Required Lenders revokes such notice. Upon receipt of such

notice, the Borrower may revoke any pending request for a Borrowing of, conversion to or continuation of Eurodollar Rate Loans (to the extent of the affected Eurodollar Rate Loans or Interest Periods) or, failing that, will be deemed to have converted such request into a request for a Committed Borrowing of Base Rate Loans in the amount specified therein.

Notwithstanding the foregoing, if the Administrative Agent has made the determination described in clause (a)(i) of this section, the Administrative Agent, in consultation with the Borrower and the affected Lenders, may establish an alternative interest rate for the Impacted Loans, in which case, such alternative rate of interest shall apply with respect to the Impacted Loans until (1) the Administrative Agent revokes the notice delivered with respect to the Impacted Loans under clause (a) of the first sentence of this section, (2) the Administrative Agent or the Required Lenders notify the Administrative Agent and the Borrower that such alternative interest rate does not adequately and fairly reflect the cost to such Lenders of funding the Impacted Loans, or (3) any Lender determines that any Law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for such Lender or its applicable Lending Office to make, maintain or fund Loans whose interest is determined by reference to such alternative rate of interest or to determine or charge interest rates based upon such rate or any Governmental Authority has imposed material restrictions on the authority of such Lender to do any of the foregoing and provides the Administrative Agent and the Borrower written notice thereof.

3.04. Increased Costs; Reserves on Eurodollar Rate Loans. (a) Increased Costs Generally. If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender (except any reserve requirement contemplated by Section 3.04(e));

(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or the London interbank market any other condition, cost or expense affecting this Agreement or Eurodollar Rate Loans made by such Lender or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making, converting to, continuing or maintaining any Loan the interest on which is determined by reference to the Eurodollar Rate (or, in the case of clause (ii) above, any Loan), or of maintaining its obligation to make any such Loan, or to increase the cost to such Lender, or to reduce the amount of any sum received or receivable by such Lender hereunder (whether of principal, interest or any other amount) then, upon request of such Lender, the Borrower will pay to such Lender, as the case may be, such additional amount or amounts as will compensate such Lender, as the case may be, for such additional costs incurred or reduction suffered; provided that, notwithstanding anything to the contrary in this Section 3.04, it shall be a condition to an Lender's of its rights, if any, under this Section 3.04 that such Lender shall generally be exercising its rights with respect to similarly situated borrowers under similar provisions in comparable syndicated credit facilities to which it is a party to the extent contractually permitted to do so and allowed to do so under applicable law.

(b) Capital Requirements. If any Lender determines that any Change in Law affecting such Lender or any Lending Office of such Lender or such Lender's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's capital or on the capital of such Lender's holding company, if any, as a consequence of this Agreement, the Commitments of such Lender or the Loans made by, such Lender, to a level below that which such Lender or such Lender's holding company could have achieved but for such Change in Law (taking into consideration such Lender's policies and the policies of such Lender's holding company with respect to capital adequacy), then from time to time the Borrower will pay

to such Lender, as the case may be, such additional amount or amounts as will compensate such Lender or such Lender's holding company for any such reduction suffered.

(c) Certificates for Reimbursement. A certificate of a Lender setting forth the amount or amounts necessary to compensate such Lender or its holding company, as the case may be, as specified in subsection (a) or (b) of this Section and delivered to the Borrower shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 days after receipt thereof.

(d) Delay in Requests. Failure or delay on the part of any Lender to demand compensation pursuant to the foregoing provisions of this Section 3.04 shall not constitute a waiver of such Lender's right to demand such compensation, provided that the Borrower shall not be required to compensate a Lender pursuant to the foregoing provisions of this Section for any increased costs incurred or reductions suffered more than nine months prior to the date that such Lender or, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the nine-month period referred to above shall be extended to include the period of retroactive effect thereof).

(e) Reserves on Eurodollar Rate Loans. The Borrower shall pay to each Lender, as long as such Lender shall be required to maintain reserves with respect to liabilities or assets consisting of or including Eurocurrency funds or deposits (currently known as "Eurocurrency liabilities"), additional interest on the unpaid principal amount of each Eurodollar Rate Loan equal to the actual costs of such reserves allocated to such Loan by such Lender (as determined by such Lender in good faith, which determination shall be conclusive), which shall be due and payable on each date on which interest is payable on such Loan, provided the Borrower shall have received at least 10 days' prior notice (with a copy to the Administrative Agent) of such additional interest from such Lender. If a Lender fails to give notice 10 days prior to the relevant Interest Payment Date, such additional interest shall be due and payable 10 days from receipt of such notice.

3.05. Compensation for Losses. Upon demand of any Lender (with a copy to the Administrative Agent) from time to time, the Borrower shall promptly compensate such Lender for and hold such Lender harmless from any loss, cost or expense (excluding loss of anticipated profits) incurred by it as a result of:

(a) any continuation, conversion, payment or prepayment of any Loan other than a Base Rate Loan on a day other than the last day of the Interest Period for such Loan (whether voluntary, mandatory, automatic, by reason of acceleration, or otherwise);

(b) any failure by the Borrower (for a reason other than the failure of such Lender to make a Loan) to prepay, borrow, continue or convert any Loan other than a Base Rate Loan on the date or in the amount notified by the Borrower; or

(c) any assignment of a Eurodollar Rate Loan on a day other than the last day of the Interest Period therefor as a result of a request by the Borrower pursuant to Section 10.13;

including any loss or expense (excluding anticipated profits) arising from the liquidation or reemployment of funds obtained by it to maintain such Loan or from fees payable to terminate the deposits from which such funds were obtained. The Borrower shall also pay any reasonable and customary administrative fees charged by such Lender in connection with the foregoing.

For purposes of calculating amounts payable by the Borrower to the Lenders under this Section 3.05, each Lender shall be deemed to have funded each Eurodollar Rate Loan made by it at the Eurodollar Rate for such Loan by a matching deposit or other borrowing in the London interbank eurodollar market for a comparable amount and for a comparable period, whether or not such Eurodollar Rate Loan was in fact so funded.

3.06. Mitigation Obligations; Replacement of Lenders. (a) Designation of a Different Lending Office. Each Lender may make any Credit Extension to the Borrower through any Lending Office, provided that the exercise of this option shall not affect the obligation of the Borrower to repay the Credit Extension in accordance with the terms of this Agreement. If any Lender requests compensation under Section 3.04, or requires the Borrower to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 3.01, or if any Lender gives a notice pursuant to Section 3.02, then at the request of the Borrower such Lender shall, as applicable, use reasonable efforts to designate a different Lending Office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 3.01 or 3.04, as the case may be, in the future, or eliminate the need for the notice pursuant to Section 3.02, as applicable, and (ii) in each case, would not subject such Lender, to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Borrower hereby agrees to pay all reasonable and documented out-of-pocket costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) Replacement of Lenders. If any Lender requests compensation under Section 3.04, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 3.01, or if any Lender ceases to make Eurodollar Rate Loans as a result of any condition described in Section 3.02, and in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 3.06(a), the Borrower may replace such Lender in accordance with Section 10.13.

3.07. Survival. All of the Borrower's obligations under this Article III shall survive termination of the Aggregate Commitments, repayment of all other Obligations hereunder, and resignation of the Administrative Agent.

#### ARTICLE IV CONDITIONS PRECEDENT TO CREDIT EXTENSIONS

4.01. Conditions of Initial Credit Extension. The obligation of each Lender to make its initial Credit Extension hereunder is subject to satisfaction of the following conditions precedent:

(a) The Administrative Agent's receipt of the following, each of which shall be originals or telecopies (followed promptly by originals) unless otherwise specified, each properly executed by a Responsible Officer of the signing Loan Party, each dated the Closing Date (or, in the case of certificates of governmental officials, a recent date before the Closing Date):

(i) executed counterparts of this Agreement, the Intercreditor Agreement and the Guaranty, sufficient in number for distribution to the Administrative Agent, each Lender and the Borrower;

(ii) a Note executed by the Borrower in favor of each Lender requesting a Note;

(iii) a security agreement, in substantially the form of Exhibit G-1 and a pledge agreement, in substantially the form of Exhibit G-2 (together with each other security agreement and security agreement supplement delivered pursuant to Section 6.12, in each case as amended, collectively, the "Security Agreement"), duly executed by each Loan Party, together with:

(A) certificates and instruments representing the Securities Collateral referred to therein that are certificated accompanied by undated stock powers or instruments of transfer executed in blank,

(B) proper Financing Statements in form appropriate for filing under the Uniform Commercial Code of all jurisdictions that the Administrative Agent may deem necessary or desirable in order to perfect the Liens created under the Security Agreement, covering the Collateral described in the Security Agreement,



- (C) certified copies of UCC, United States Patent and Trademark Office and United States Copyright Office, tax and judgment lien searches, or equivalent reports or searches, each of a recent date listing all effective financing statements, lien notices or comparable documents (together with copies of such financing statements and documents) that name any Loan Party as debtor and that are filed in those state and county jurisdictions in which any Loan Party is organized or maintains its principal place of business and such other searches the Administrative Agent deems reasonably necessary or appropriate, none of which encumber the Collateral covered or intended to be covered by the Collateral Documents (other than Liens permitted under Section 7.01),
- (D) A Perfection Certificate, in substantially the form of Exhibit I-1, duly executed by each of the Loan Parties, and
- (E) evidence that all other actions, recordings and filings that the Administrative Agent may reasonably deem necessary or desirable in order to perfect the Liens created under the Security Agreement has been taken;
- (iv) [Reserved];
- (v) a Patent Security Agreement and a Trademark Security Agreement (as each such term is defined in Security Agreement and to the extent applicable) (together with each other intellectual property security agreement delivered pursuant to Section 6.12, in each case as amended, the “Intellectual Property Security Agreement”), duly executed by each Loan Party, together with evidence that all action that the Administrative Agent may reasonably deem necessary or desirable in order to perfect the Liens created under the Intellectual Property Security Agreement has been taken;
- (vi) such certificates of resolutions or other action, incumbency certificates and/or other certificates of Responsible Officers of each Loan Party as the Administrative Agent may require evidencing the identity, authority and capacity of each Responsible Officer thereof authorized to act as a Responsible Officer in connection with this Agreement and the other Loan Documents to which such Loan Party is a party or is to be a party;
- (vii) such documents and certifications as the Administrative Agent may reasonably require to evidence that each Loan Party is duly organized or formed, and that each Loan Party is validly existing, in good standing and qualified to engage in business in such Loan Party’s jurisdiction of organization;
- (viii) a favorable opinion of Hogan Lovells US LLP, counsel to the Loan Parties, addressed to the Administrative Agent and each Lender, as to such matters concerning the Loan Parties and the Loan Documents as the Administrative Agent may reasonably request;
- (ix) the historical financial statements referred to in Sections 5.05(a) and (b);
- (x) a certificate of a Responsible Officer of each Loan Party either (A) attaching copies of all consents, licenses and approvals required in connection with the consummation by such Loan Party of the Transaction and the execution, delivery and performance by such Loan Party and the validity against such Loan Party of the Loan Documents to which it is a party, and such consents, licenses and approvals shall be in full force and effect, or (B) stating that no such consents, licenses or approvals are so required;
- (xi) a certificate signed by a Responsible Officer of the Borrower certifying (A) that the conditions specified in Sections 4.02(a) and (b) have been satisfied, (B) that there has been no event or circumstance since the date of the Audited Financial Statements that has had or could be reasonably expected to have, either individually or in the aggregate, a Material Adverse Effect and (C) as of the Closing Date, there are no actions, suits, claims, demands, investigations, inspections, audits, charges or proceedings pending or to the knowledge of any Responsible Officer of a Loan Party, threatened in writing (i) with respect to this Agreement or any other Loan Document, or (ii) which has had, or could reasonably be expected to have, a Material Adverse Effect;

(xii) certificates attesting to the Solvency of the Borrower and its Subsidiaries, on a consolidated basis, before and after giving effect to the Transaction, from its chief financial officer, substantially in the form of Exhibit N;

(xiii) evidence that all insurance required to be maintained pursuant to the Loan Documents has been obtained and is in effect, together with the certificates of insurance, naming the Administrative Agent, on behalf of the Secured Parties, as an additional insured or loss payee, as the case may be, under all insurance policies (including flood insurance policies) maintained with respect to the assets and properties of the Loan Parties that constitutes Collateral;

(xiv) evidence that the ABL Credit Agreement has been amended to permit the Borrower and each other Loan Party's entry into the Loan Documents; and

(xv) such other assurances, certificates, documents, consents or opinions as the Administrative Agent or any Lender reasonably may require.

(b) (i) All fees required to be paid to the Administrative Agent and the Arrangers on or before the Closing Date shall have been paid and (ii) all fees required to be paid to the Lenders on or before the Closing Date shall have been paid.

(c) Unless waived by the Administrative Agent, the Borrower shall have paid all reasonable and documented out-of-pocket fees, charges and disbursements of counsel to the Administrative Agent (directly to such counsel if requested by the Administrative Agent) to the extent invoiced at least two Business Days prior to the Closing Date, plus such additional amounts of such fees, charges and disbursements as shall constitute its reasonable estimate of such fees, charges and disbursements incurred or to be incurred by it through the closing proceedings (provided that such estimate shall not thereafter preclude a final settling of accounts between the Borrower and the Administrative Agent).

(d) Not later than the fifth Business Day prior to the Closing Date, the Administrative Agent and the Lenders shall have received from the Loan Parties all documentation and other information required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the Patriot Act.

Without limiting the generality of the provisions of the last paragraph of Section 9.03, for purposes of determining compliance with the conditions specified in this Section 4.01, each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless the Administrative Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its objection thereto.

4.02. Conditions to All Credit Extensions. The obligation of each Lender to honor any Request for Credit Extension (other than a Committed Loan Notice requesting only a conversion of Loans to the other Type, or a continuation of Eurodollar Rate Loans) is subject to the following conditions precedent:

(a) The representations and warranties of the Borrower contained in Article V or any other Loan Document, or which are contained in any document furnished at any time under or in connection herewith or therewith, shall be true and correct in all material respects (or, with respect to any such representation or warranty that is qualified by materiality or Material Adverse Effect, in all respects as drafted) on and as of the date of such Credit Extension, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects (or, with respect to any such representation or warranty that is qualified by materiality or Material Adverse Effect, in all respects as drafted) as of such earlier date, and except that for purposes of this Section 4.02, the representations and warranties contained in Sections 5.05(a) and (b) shall be deemed to refer to the most recent statements furnished pursuant to Sections 6.01(a) and (b), respectively.

- (b) No Default shall exist, or would result from such proposed Credit Extension or from the application of the proceeds thereof.
- (c) The Administrative Agent shall have received a Request for Credit Extension in accordance with the requirements hereof.

Each Request for Credit Extension (other than a Committed Loan Notice requesting only a conversion of Loans to the other Type or a continuation of Eurodollar Rate Loans) submitted by the Borrower shall be deemed to be a representation and warranty that the conditions specified in Sections 4.02(a) and (b) have been satisfied on and as of the date of the applicable Credit Extension.

## ARTICLE V REPRESENTATIONS AND WARRANTIES

The Borrower represents and warrants to the Administrative Agent and the Lenders that:

5.01. Existence, Qualification and Power. Each Loan Party and each of its Subsidiaries (a) is duly organized or formed, validly existing and, as applicable, in good standing under the Laws of the jurisdiction of its incorporation or organization (to the extent such concept is applicable in the relevant jurisdiction), (b) has all requisite power and authority and all requisite governmental licenses, authorizations, consents and approvals to (i) own or lease its assets and carry on its business and (ii) execute, deliver and perform its obligations under the Loan Documents to which it is a party and consummate the Transaction, and (c) is duly qualified and is licensed and, as applicable, in good standing (to the extent such concept is applicable in the relevant jurisdiction) under the Laws of each jurisdiction where its ownership, lease or operation of properties or the conduct of its business requires such qualification or license; except in each case referred to in clause (a)(solely in the case of any Subsidiary that is not a Loan Party), (b)(i) or (c), to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect.

5.02. Authorization; No Contravention. The execution, delivery and performance by each Loan Party of each Loan Document to which such Person is or is to be a party have been duly authorized by all necessary corporate or other organizational action, and do not and will not (a) contravene the terms of any of such Person's Organization Documents; (b) conflict with or result in any breach or contravention of, or the creation of any Lien (other than Liens created under the Loan Documents) under, or require any payment to be made under (i) any material Contractual Obligation to which such Person is a party or affecting such Person or the properties of such Person or any of its Subsidiaries or (ii) any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Person or its property is subject; or (c) violate any Law.

5.03. Governmental Authorization; Other Consents. No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with (a) the execution, delivery or performance by any Loan Party of this Agreement or any other Loan Document, or for the consummation of the Transaction, (b) the grant by any Loan Party of the Liens granted by it pursuant to the Collateral Documents, or (c) the perfection or maintenance of the Liens created under the Collateral Documents (including, subject to the Intercreditor Agreement, the first priority nature thereof) other than (i) those that have already been obtained and are now in full force and effect, (ii) filings to perfect the Liens created by the Collateral Documents, (iii) those actions as contemplated by Section 2.1 of Security Agreement, and (iv) filings of the Loan Documents with the SEC after the Closing Date in accordance with the requirements thereof.

5.04. Binding Effect. This Agreement has been, and each other Loan Document, when delivered hereunder, will have been, duly executed and delivered by each Loan Party that is party thereto. This Agreement constitutes, and each other Loan Document when so delivered will constitute, a legal, valid and binding obligation of such Loan Party, enforceable against each Loan Party that is party thereto in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

5.05. Financial Statements; No Material Adverse Effect. (a) The Audited Financial Statements (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; (ii) fairly present in all material respects the financial condition of the Borrower and its Subsidiaries as of the date thereof and their results of operations, cash flows and changes in shareholders' equity for the period covered thereby in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; and (iii) show all material indebtedness and other material liabilities, direct or contingent, of the Borrower and its Subsidiaries as of the date thereof in accordance with GAAP, including liabilities for Taxes, material commitments and Indebtedness.

(b) The unaudited consolidated balance sheets of the Borrower and its Subsidiaries dated April 30, 2014, and the related consolidated statements of income or operations, shareholders' equity and cash flows for the fiscal quarter ended on that date (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein, (ii) fairly present in all material respects the financial condition of the Borrower and its Subsidiaries as of the date thereof and their results of operations, cash flows and changes in shareholders' equity for the period covered thereby, subject, in the case of clauses (i) and (ii), to the absence of footnotes and to normal year-end audit adjustments, and (iii) show all material indebtedness and other material liabilities, direct or contingent, of the Borrower and its consolidated Subsidiaries as of the date of such financial statements, including liabilities for Taxes, material commitments and Indebtedness.

(c) Since the date of the balance sheet included in the 2016 Audited Financial Statements, there has been no event or circumstance, either individually or in the aggregate, that has had or could reasonably be expected to have a Material Adverse Effect.

(d) Except as disclosed in the Audited Financial Statements, and except for the Indebtedness incurred under the Loan Documents and existing Indebtedness permitted pursuant to Section 7.02(d), there were as of the Closing Date no liabilities or obligations with respect to the Borrower or any of its Subsidiaries of any nature whatsoever (whether absolute, accrued, contingent or otherwise and whether or not due) which, either individually or in the aggregate, could reasonably be expected to be material to the Borrower and its Subsidiaries (taken as a whole).

(e) The projections delivered to the Administrative Agent and the Lenders prior to the Closing Date have been prepared in good faith and are based on assumptions believed to be reasonable at the time made and at the time such projections were made available to Administrative Agent and the Lenders. It being recognized by the Lenders, however, that projections as to future events are not to be viewed as facts or guaranties of future performance, that the actual results during the period or periods covered by the projections may differ from the projected results included in such projections and such differences may be material and that no assurances are being given that such projections will be in fact realized.

5.06. Litigation. There are no actions, suits, proceedings, investigations, claims or disputes pending or, to the knowledge of any Responsible Officer of the Borrower, threatened or contemplated in writing, at law, in equity, in arbitration or before any Governmental Authority, by or against the Borrower or any of its Subsidiaries or against any of their properties or revenues that (a) purport to affect or pertain to this Agreement, any other Loan Document or the consummation of the Transaction, or (b) either individually or in the aggregate could reasonably be expected to have a Material Adverse Effect.

5.07. No Default. Neither any Loan Party nor any Subsidiary thereof is in default under or with respect to, or a party to, any Contractual Obligation that could, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. No Default has occurred and is continuing or would result from the consummation of the transactions contemplated by this Agreement or any other Loan Document.

5.08. Ownership of Property; Liens; Investments. (a) As of the Closing Date, neither the Loan Parties nor any of their Subsidiaries owns any Real Property. Each Loan Party and each of its Subsidiaries has a valid leasehold interest

in, all real property necessary or used in the ordinary conduct of its business, except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(b) Schedule 5.08(b) sets forth as of the date hereof a complete and accurate list of all Liens on the property or assets of each Loan Party and each of its Subsidiaries, showing as of the date hereof the lienholder thereof, the principal amount of the obligations secured thereby and the property or assets of such Loan Party or such Subsidiary subject thereto. The property of each Loan Party and each of its Subsidiaries is subject to no Liens, other than Liens set forth on Schedule 5.08(b), and as otherwise permitted by Section 7.01.

(c) [Reserved].

(d) (i) Schedule 5.08(d)(i) sets forth as of the date hereof a complete and accurate list of all leases of real property in the United States with annual rental payments of more than \$500,000 under which any Loan Party is the lessee, showing as of the date hereof the street address, county or other relevant jurisdiction, state, lessor, lessee, expiration date and annual rental cost thereof. Except as could not reasonably be expected to have a Material Adverse Effect, each such lease is the legal, valid and binding obligation of such Loan Party thereof, enforceable in accordance with its terms.

(ii) Schedule 5.08(d)(ii) sets forth as of the date hereof a complete and accurate list of all leases of real property in the United States with annual rental payments of more than \$500,000 under which any Loan Party is the lessor, showing as of the date hereof the street address, county or other relevant jurisdiction, state, lessor, lessee, expiration date and annual rental cost thereof. Except as could not reasonably be expected to have a Material Adverse Effect, each such lease is the legal, valid and binding obligation of such Loan Party, enforceable in accordance with its terms.

(e) Mortgages executed and delivered after the Closing Date will be, effective to create in favor of the Administrative Agent (for the benefit of the Secured Parties) a legal, valid and enforceable Lien on all of the applicable Loan Parties' right, title and interest in and to the Mortgaged Property (as such term is defined in the applicable Mortgage) thereunder and the proceeds thereof, and when such Mortgages are filed or recorded in the proper real estate filing or recording offices, and all relevant mortgage taxes and recording charges are duly paid, the Administrative Agent (for the benefit of the Secured Parties) shall have a perfected first priority Lien on, and security interest in, all right, title, and interest of the applicable Loan Parties in such Mortgaged Property and, to the extent applicable, subject to Section 9-315 of the Uniform Commercial Code, the proceeds thereof, in each case prior and superior in right to the Lien of any other person, except for Permitted Encumbrances and other Liens permitted under Section 7.01 of this Agreement.

5.09. Environmental Compliance. (a) The Loan Parties and their respective Subsidiaries conduct in the ordinary course of business a review of the effect of existing Environmental Laws and claims alleging potential liability under or relating to violations of any Environmental Law on their respective businesses, operations and properties, and as a result thereof the Borrower has reasonably concluded that, except as specifically disclosed in Schedule 5.09, such Environmental Laws and claims could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(b) Except as otherwise set forth in Schedule 5.09, (1) none of the properties currently or formerly owned or operated by any Loan Party or any of its Subsidiaries is listed or, to the knowledge of any Responsible Officer of any Loan Party or its Subsidiaries, proposed for listing on the NPL or on the CERCLIS or any analogous foreign, state or local list; (2) there are no and to the knowledge of any Responsible Officer of any Loan Party or its Subsidiaries never have been any underground or above-ground storage tanks or any surface impoundments, septic tanks, pits, sumps or lagoons in which Hazardous Materials are being or have been treated, stored or disposed on any property currently or formerly owned, leased or operated by any Loan Party or any of its Subsidiaries; (3) there is no asbestos or asbestos-containing material on, at or in any property currently owned, leased or operated by any Loan Party or any of its Subsidiaries; and (4) Hazardous Materials have not been Released on, at, under or from any property currently or formerly owned, leased or operated by any Loan Party or any of its Subsidiaries, in the case of each of

clauses (1) – (4) in a manner, condition, form or amount which could reasonably be expected to result, individually or in the aggregate, in a Material Adverse Effect.

(c) Except as otherwise set forth on Schedule 5.09, or as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, (1) neither any Loan Party nor any of its Subsidiaries is undertaking, and has not completed, either individually or together with other potentially responsible parties, any investigation or assessment or remedial or response action relating to any actual or threatened Release of Hazardous Materials at, on, under, or from any site, location or operation, either voluntarily or pursuant to the order of any Governmental Authority or the requirements of any Environmental Law; and (2) all Hazardous Materials generated, used, treated, handled or stored at, or transported to or from, any property currently or formerly owned, leased or operated by any Loan Party or any of its Subsidiaries have been disposed of in a manner which could not reasonably be expected to result in liability to any Loan Party or any of its Subsidiaries.

(d) Except as could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, the Loan Parties and their respective Subsidiaries: (i) are, and have been, in compliance with all applicable Environmental Laws; (ii) hold all Environmental Permits (each of which is in full force and effect) required for any of their current or intended operations or for any property owned, leased, or otherwise operated by any of them; (iii) are, and have been, in compliance with all of their Environmental Permits; and (iv) to the extent within the control of the Loan Parties and their respective Subsidiaries, each of their Environmental Permits will be timely renewed and complied with, any additional Environmental Permits that may be required of any of them will be timely obtained and complied with, and compliance with any Environmental Law that is or is expected to become applicable to any of them will be timely attained and maintained.

5.10. Insurance. The properties of the Borrower and its Subsidiaries are insured with financially sound and reputable insurance companies not Affiliates of the Borrower, in such amounts, with such deductibles and covering such risks as are customarily carried by companies engaged in similar businesses and owning similar properties in localities where the Borrower or the applicable Subsidiary operates.

5.11. Taxes. The Borrower and each of its Subsidiaries have timely filed all federal, state and other material tax returns and reports required to be filed (including extensions as applicable), and have timely paid all federal, state and other material Taxes (whether or not shown on a tax return), including in its capacity as a withholding agent, levied or imposed upon it or its properties, income or assets otherwise due and payable, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided in accordance with GAAP. There are no proposed tax assessments or other claims against, and no tax audits with respect to, the Borrower or any Subsidiary thereof that could, if made, reasonably be expected to have a Material Adverse Effect, either individually or in the aggregate. As of the Closing Date, neither any Loan Party nor any Subsidiary thereof is party to any tax sharing agreement.

5.12. ERISA Compliance. (a) Each Plan is in compliance in form and operation with its terms and with ERISA and the Code (including without limitation the Code provisions compliance with which is necessary for any intended favorable tax treatment) and all other applicable laws and regulations, except where any failure to comply could not reasonably be expected, either individually or in the aggregate, to result in a Material Adverse Effect. ~~Each Plan which is intended to be qualified under Section 401(a) of the Code has received a favorable determination letter from the IRS or has applied to the IRS for such a determination letter to the effect that it meets the requirements of Sections 401(a) and 501(a) of the Code covering all applicable tax law changes or is comprised of a master or prototype plan that has received a favorable opinion letter from the IRS, and to the knowledge of any Responsible Officer of the Borrower and each of its Subsidiaries, nothing has occurred since the date of such determination that would reasonably be expected to adversely affect such determination (or, in the case of a Plan with no determination, to the knowledge of any Responsible Officer of the Borrower or any of its Subsidiaries, nothing has occurred that would reasonably be expected to materially adversely affect the issuance of a favorable determination letter or otherwise materially adversely affect such qualification);~~

(b) There are no pending or, to the best knowledge of the Borrower, threatened claims, actions or lawsuits, or action by any Governmental Authority, with respect to any Plan that could reasonably be expected to have a Material Adverse Effect. There has been no prohibited transaction or violation of the fiduciary responsibility rules with respect to any Plan that has resulted or could reasonably be expected to result in a Material Adverse Effect.

(c) (i) No ERISA Event has occurred, and neither the Borrower nor any ERISA Affiliate is aware of any fact, event or circumstance that could reasonably be expected to constitute or result in an ERISA Event with respect to any Pension Plan or Multiemployer Plan, in any event, that could reasonably be expected to have a Material Adverse Effect; (ii) as of the most recent valuation date for any Pension Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is 60% or higher and neither the Borrower nor any ERISA Affiliate knows of any facts or circumstances that could reasonably be expected to cause the funding target attainment percentage for any such plan to drop below 60% as of the most recent valuation date; (iii) neither the Borrower nor any ERISA Affiliate has incurred any liability to the PBGC other than for the payment of premiums, and there are no premium payments which have become due that are unpaid; (iv) neither the Borrower nor any ERISA Affiliate has engaged in a transaction that could be subject to Section 4069 or Section 4212(c) of ERISA; and (v) no Pension Plan has been terminated by the PBGC, and no event or circumstance has occurred or exists that could reasonably be expected to cause the PBGC to institute proceedings under Title IV of ERISA to terminate any Pension Plan.

(d) Neither the Borrower ~~nor~~ any ERISA Affiliate maintains or contributes to, or has any unsatisfied obligation to contribute to, or liability under, any active or terminated Pension Plan other than (i) on the Closing Date, those listed on Schedule 5.12(d) hereto and (ii) thereafter, Pension Plans not otherwise prohibited by this Agreement.

5.13. Subsidiaries; Equity Interests; Loan Parties. As of the Closing Date, the Borrower has no Subsidiaries other than those specifically disclosed in Part (a) of Schedule 5.13, and all of the outstanding Equity Interests in such Subsidiaries have been validly issued, to the extent applicable, are fully paid and non-assessable and are owned by a Loan Party or Subsidiary of a Loan Party in the amounts specified on Part (a) of Schedule 5.13 free and clear of all Liens except those permitted by Section 7.01. As of the Closing Date, the Borrower has no equity investments in any other corporation or entity other than those specifically disclosed in Part (b) of Schedule 5.13. Set forth on Part (c) of Schedule 5.13 is a complete and accurate list of all Loan Parties as of the Closing Date, showing as of the Closing Date (as to each Loan Party) the jurisdiction of its incorporation, the address of its principal place of business and its U.S. taxpayer identification number. As of the Closing Date, the copy of the charter of each Loan Party and each amendment thereto provided pursuant to Section 4.01(a)(vii) is a true and correct copy of each such document, each of which is valid and in full force and effect.

5.14. Margin Regulations; Investment Company Act. (a) The Borrower is not engaged and will not engage, principally or as one of its important activities, in the business of purchasing or carrying margin stock (within the meaning of Regulation U issued by the FRB), or extending credit for the purpose of purchasing or carrying margin stock. No part of the proceeds of the any Borrowing will be used to purchase or carry margin stock or to extend credit to others for the purpose of purchasing or carrying margin stock (within the meaning of Regulation U of the FRB). If requested by Administrative Agent, Borrower will furnish to Administrative Agent a statement to the foregoing effect in conformity with the requirements of Form FR U-1 referred to in Regulation U.

(b) None of the Borrower, any Person Controlling the Borrower, or any Subsidiary is or is required to be registered as an “investment company” under the Investment Company Act of 1940.

5.15. Disclosure. No written report, financial statement, certificate or other information furnished (other than projections, budgets, forecasts, forward looking estimates and other forward looking information or information of a general economic or industry specific nature) by or on behalf of any Loan Party to the Administrative Agent or any Lender in connection with the transactions contemplated hereby and the negotiation of this Agreement or delivered hereunder or under any other Loan Document, at the Closing Date (in the case of the Information Memorandum) or at the time furnished (in the case of all other reports, financial statements, certificates or other information), when taken as a whole with all other information furnished, contains any material misstatement of fact or omitted to state

any material fact necessary to make the statements therein (taken as a whole), in the light of the circumstances under which they were made, not materially misleading; provided that, with respect to projected financial information, the Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time prepared and at the time such information was made available to the Administrative Agent and the Lenders (it being understood and agreed that projections as to future events are not to be viewed as facts or guaranties of future performance, that actual results during the period or periods covered by such projections may differ from the projected results and that such differences may be material and that the Loan Parties make no representation that such projections will in fact be realized).

5.16. Compliance with Laws. Each Loan Party and each Subsidiary thereof is in compliance in all material respects with the requirements of all Laws and all orders, writs, injunctions and decrees applicable to it or to its properties, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted or (b) the failure to comply therewith, either individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

5.17. Intellectual Property; Licenses, Etc. The Borrower and each of its Subsidiaries own, or possess the right to use, all of the trademarks, service marks, trade names, domain names, copyrights, patents, patent rights, know-how, trade secrets, franchises, licenses and other intellectual property rights (collectively, "IP Rights") that are reasonably necessary for or used or held for use in the operation of their respective businesses, except where the failure to own or possess any such IP Rights could not reasonably be expected, either individually or in the aggregate, to have a Material Adverse Effect. To the knowledge of any Responsible Officer of the Borrower, none of the Borrower nor any of its Subsidiaries has infringed upon, misappropriated or otherwise violated any IP Rights held by any other Person and no slogan or other advertising device, product, process, method, substance, part or other material now employed, or now contemplated to be employed, by the Borrower or any of its Subsidiaries infringes, misappropriates or otherwise violates any IP Rights held by any other Person, except for such infringements, misappropriations or violations which, either individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect. Except as specifically disclosed in Schedule 5.17, no claim or litigation regarding any IP Rights is pending or, to the knowledge of any Responsible Officer of the Borrower, threatened in writing against or affecting the Borrower or any of its Subsidiaries, which, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

5.18. Solvency. As of the Closing Date, the Borrower and its Subsidiaries, on a consolidated basis, are Solvent.

5.19. OFAC. Neither the Borrower, nor any of its Subsidiaries, nor any director or officer thereof, nor, to the knowledge of any Responsible Officer of the Borrower, any employee or affiliate of the Borrower or any of its Subsidiaries, is an individual or entity that is, or is owned or controlled by any individual or entity that is (i) the subject or target of any Sanctions or (ii) located, organized or resident in a Designated Jurisdiction. The Borrower and its Subsidiaries are in compliance with all applicable Sanctions in all material respects.

5.20. Anti-Corruption Laws. Neither the Borrower, nor any of its Subsidiaries nor, to the knowledge of any Responsible Officer of the Borrower, any director, officer, agent, employee or other person acting on behalf of the Borrower or any of its Subsidiaries, or has taken any action, directly or indirectly, that would result in a material violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA") or any other applicable anti-corruption law; and the Borrower and its Subsidiaries have instituted and maintained policies and procedures designed to promote and achieve compliance with all applicable anti-corruption laws.

5.21. Money Laundering and Counter-Terrorist Financing Laws. The Borrower and its Subsidiaries are in compliance in all material respects with the Bank Secrecy Act, as amended by Title III of the Patriot Act, and all other applicable anti-money laundering and counter-terrorist financing laws and regulations.



ARTICLE VI  
AFFIRMATIVE COVENANTS

Until the Payment in Full of the Obligations, the Borrower shall, and shall (except in the case of the covenants set forth in Sections 6.01, 6.02, 6.03 and 6.11) cause each Subsidiary to:

6.01. Financial Statements. Deliver to the Administrative Agent:

(a) as soon as available, but in any event within 90 days after the end of each fiscal year of the Borrower (commencing with the fiscal year ended October 31, 2014), a consolidated balance sheet of the Borrower and its Subsidiaries as at the end of such fiscal year, and the related consolidated statements of income or operations, changes in shareholders' equity, and cash flows for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and prepared in accordance with GAAP, audited and accompanied by a report and opinion of PWC or any other independent certified public accountant of nationally recognized standing reasonably acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or like qualification or exception or any qualification or exception as to the scope of such audit except for (i) qualifications relating to changes in accounting principles or practices reflecting changes in GAAP and required or approved by such independent certified public accountants or (ii) any going concern qualification or exception that is solely with respect to, or resulting solely from, an upcoming maturity date under the Facility occurring within one year from the time such report is delivered (the Lenders agree that the Borrower's obligations under this paragraph (a) will be satisfied in respect of any such fiscal year by delivery to the Administrative Agent within 90 days after the end of such fiscal year of its annual report for such fiscal year on Form 10-K as filed with the SEC);

(b) as soon as available, but in any event within 45 days after the end of each of the first three fiscal quarters of each fiscal year of the Borrower (commencing with the fiscal quarter ended July 31, 2014), a consolidated balance sheet of the Borrower and its Subsidiaries as at the end of such fiscal quarter, and the related consolidated statements of income or operations, changes in shareholders' equity, and cash flows for such fiscal quarter and for the portion of the Borrower's fiscal year then ended, setting forth in each case in comparative form the figures for the corresponding fiscal quarter of the previous fiscal year and the corresponding portion of the previous fiscal year, all in reasonable detail, certified by the chief executive officer, chief financial officer, treasurer or controller of the Borrower as fairly presenting in all material respects the financial condition, results of operations, shareholders' equity and cash flows of the Borrower and its Subsidiaries in accordance with GAAP, subject only to normal year-end audit adjustments and the absence of footnotes (the Lenders agree that the Borrower's obligations under this paragraph (b) will be satisfied in respect of any such fiscal quarter by delivery to the Administrative Agent within 45 days after the end of such fiscal quarter of its quarterly report for such fiscal quarter on Form 10-Q as filed with the SEC);

6.02. Certificates; Other Information. Deliver to the Administrative Agent:

(a) [reserved];

(b) Promptly after the filing or delivery thereof, copies of all annual, regular, periodic and special reports, proxy statements and registration statements which the Borrower or any of its Subsidiaries shall (i) publicly file with the SEC or any successor thereto or with any equivalent national securities exchange or similar governing body or (ii) deliver to holders (or any trustee, agent or other representative therefor) of any Qualified Preferred Stock, ~~following the consummation of the Cyan Acquisition, any Cyan Convertible Notes,~~ any Permitted Convertible Notes or any Permitted Additional Indebtedness pursuant to the terms of the documentation governing the same (other than notices, reports or information of an administrative or ministerial nature);

(c) not later than five Business Days after receipt thereof by any Loan Party or any Subsidiary thereof, copies of all notices, requests and other documents (including amendments, waivers and other modifications) so received under or pursuant to any instrument, indenture, loan or credit or similar agreement in respect of Indebtedness

regarding or related to any breach or default by any party thereto or any other event relating to such Indebtedness, in each case, that could reasonably be expected to have a Material Adverse Effect and, from time to time upon reasonable request by the Administrative Agent, such information and reports regarding such instruments, indentures and loan and credit and similar agreements as the Administrative Agent may reasonably request;

(d) [reserved];

(e) as soon as available, but in any event within 60 days after the end of each fiscal year of the Borrower, (i) a report supplementing Schedules 5.08(d)(i) and (d)(ii), including an identification of all leased real property with annual rental payments of more than ~~\$500,000~~ \$2,500,000 disposed of by any Loan Party thereof during such fiscal year, a list and description (including the street address, county or other relevant jurisdiction, state, record owner, book value (in the case of all owned real property) thereof and lessor, lessee, expiration date and annual rental cost thereof) of all real property leased during such fiscal year and a description of such other changes in the information included in such Schedules as may be necessary for such Schedules to be accurate and complete in all material respects; (ii) a report supplementing Schedule II.B(1), (2) and (3) of the Perfection Certificate, setting forth (A) a list of registration numbers for all patents, trademarks, service marks, trade names and copyrights awarded to any Loan Party during such fiscal year by the United States Patent and Trademark Office or United States Copyright Office, as applicable, and (B) a list of all patent applications, trademark applications, service mark applications, trade name applications and copyright applications submitted by any Loan Party thereof during such fiscal year to the United States Patent and Trademark Office or United States Copyright Office, as applicable, and the status of each such application; and (iii) a report supplementing Schedule 5.13 containing a description of all changes in the information included in such Schedules as may be necessary for such Schedule to be accurate and complete in all material respects, each such report to be signed by a Responsible Officer of the Borrower and to be in a form reasonably satisfactory to the Administrative Agent; and

(f) promptly, such additional information regarding the business, financial, legal or corporate affairs of any Loan Party or any Subsidiary thereof, or compliance with the terms of the Loan Documents, as the Administrative Agent or any Lender may from time to time reasonably request.

Documents required to be delivered pursuant to Section 6.01(a) or (b) or Section 6.02(b) (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date (i) on which the Borrower posts such documents, or provides a link thereto on the Borrower's website on the Internet at the website address listed on Schedule 10.02; or (ii) on which such documents are posted on the Borrower's behalf on an Internet or intranet website, if any, to which each Lender and the Administrative Agent have access (whether a commercial, third-party website or whether sponsored by the Administrative Agent); provided that: (i) the Borrower shall deliver paper copies of such documents to the Administrative Agent or any Lender upon its request to the Borrower to deliver such paper copies until a written request to cease delivering paper copies is given by the Administrative Agent or such Lender and (ii) the Borrower shall notify the Administrative Agent (by telecopier or electronic mail) of the posting of any such ~~documents~~ document. The Administrative Agent shall have no obligation to request the delivery of or to maintain paper copies of the documents referred to above, and in any event shall have no responsibility to monitor compliance by the Borrower with any such request by a Lender for delivery, and each Lender shall be solely responsible for requesting delivery to it or maintaining its copies of such documents.

The Borrower hereby acknowledges that (a) the Administrative Agent and/or the Arrangers will make available to the Lenders materials and/or information provided by or on behalf of the Borrower hereunder (collectively, "Borrower Materials") by posting the Borrower Materials on IntraLinks, Syndtrak, ClearPar, or another similar electronic system (the "Platform") and (b) certain of the Lenders (each, a "Public Lender") may have personnel who do not wish to receive material non-public information with respect to the Borrower or its Affiliates, or the respective securities of any of the foregoing, and who may be engaged in investment and other market-related activities with respect to such Persons' securities. The Borrower hereby agrees that, if requested by the Administrative Agent, it will use commercially reasonable efforts to identify that portion of the Borrower Materials that may be distributed to the Public Lenders and that (w) all such Borrower Materials shall be clearly and conspicuously marked "PUBLIC"

which, at a minimum, shall mean that the word “PUBLIC” shall appear prominently on the first page thereof; (x) by marking Borrower Materials “PUBLIC,” the Borrower shall be deemed to have authorized the Administrative Agent, the Arrangers, and the Lenders to treat such Borrower Materials as not containing any material non-public information (although it may be sensitive and proprietary) with respect to the Borrower or its securities for purposes of United States Federal and state securities laws (provided, however, that to the extent such Borrower Materials constitute Information, they shall be treated as set forth in Section 10.07); (y) all Borrower Materials marked “PUBLIC” are permitted to be made available through a portion of the Platform designated “Public Side Information;” and (z) the Administrative Agent and the Arrangers shall be entitled to treat any Borrower Materials that are not marked “PUBLIC” as being suitable only for posting on a portion of the Platform not designated “Public Side Information.” Notwithstanding the foregoing, the Borrower shall be under no obligation to mark any Borrower Materials “PUBLIC.”

6.03. Notices. Promptly upon a Responsible Officer of the Borrower becoming aware thereof, notify the Administrative Agent:

(a) of the occurrence of any Default;

(b) of any matter that has resulted in a Material Adverse Effect, including (i) breach or non-performance of, or any default under, a Contractual Obligation of the Borrower or any Subsidiary; (ii) any dispute, litigation, investigation, proceeding or suspension between the Borrower or any Subsidiary and any Governmental Authority; or (iii) the commencement of, or any material development in, any litigation or proceeding affecting the Borrower or any Subsidiary, including pursuant to any applicable Environmental Laws;

(c) of any litigation or governmental investigation or proceeding pending against the Borrower or any of its Subsidiaries (x) which, either individually or in the aggregate, has had, or could reasonably be expected to have, a Material Adverse Effect or (y) that purports to affect the legality, validity or enforceability of any Loan Document; and

(d) of any action, claim, investigation or proceeding against or of any noncompliance by any Loan Party or any of its Subsidiaries with any Environmental Law or Environmental Permit or of any Environmental Liability that could (i) reasonably be expected to have a Material Adverse Effect or (ii) cause any property described in the Mortgages to be subject to any material restrictions on ownership, occupancy, use or transferability under any Environmental Law.

Each notice pursuant to Section 6.03 shall be accompanied by a statement of a Responsible Officer of the Borrower setting forth details of the occurrence referred to therein and stating what action the Borrower has taken and proposes to take with respect thereto; provided that, without limiting the other provisions of this Agreement, the Borrower shall not be required to describe its litigation strategy in connection with any of the foregoing. Each notice pursuant to Section 6.03(a) shall describe with particularity any and all provisions of this Agreement and any other Loan Document that have been breached.

6.04. Payment of Obligations. (a) Pay and discharge as the same shall become due and payable, (i) all material Tax liabilities, assessments and governmental charges or levies upon it or its properties or assets, unless the same are being contested in good faith by appropriate proceedings diligently conducted (which proceedings have the effect of preventing the forfeiture or sale of the property or assets subject to any such Lien) and adequate reserves in accordance with GAAP are being maintained by the Borrower or such Subsidiary; (ii) all lawful claims which, if unpaid, would by law become a Lien upon its property; and (iii) all Indebtedness, as and when due and payable, but subject to any subordination provisions contained in any instrument or agreement evidencing such Indebtedness, except, in the case of clauses (ii) and (iii), where the failure to do so, either individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect; and (b) timely file all material tax returns required to be filed.

6.05. Preservation of Existence, Etc. (a) Preserve, renew and maintain in full force and effect its legal existence and good standing under the Laws of the jurisdiction of its organization except in a transaction permitted by Section 7.04 or 7.05; provided, however, that the Borrower and its Subsidiaries may consummate any other merger or consolidation permitted under Section 7.04; (b) take all reasonable action to maintain all rights, privileges, permits, licenses and franchises necessary or desirable in the normal conduct of its business, except to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect; and (c) maintain, preserve, renew and protect all of its IP Rights, except to the extent that failure to do so, either individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

6.06. Maintenance of Properties. (a) Maintain, preserve and protect all of its material properties and equipment necessary in the operation of its business in good working order and condition, ordinary wear and tear and casualty and condemnation events excepted; and (b) make all necessary repairs thereto and renewals and replacements thereof necessary for the operation of its business except, in any case, where the failure to do so could not reasonably be expected to have a Material Adverse Effect.

6.07. Maintenance of Insurance. (a) Maintain with financially sound and reputable insurance companies not Affiliates of the Borrower, insurance with respect to its properties and business against loss or damage of the kinds customarily insured against by Persons engaged in the same or similar business, of such types and in such amounts as are customarily carried under similar circumstances by such other Persons and all such insurance shall name the Administrative Agent as mortgagee (in the case of real property insurance) or additional insured on behalf of the Secured Parties (in the case of liability insurance) or loss payee (in the case of property insurance), as applicable.

(b) If any portion of any Mortgaged Property is at any time located in an area identified by the Federal Emergency Management Agency (or any successor agency) as a Special Flood Hazard Area with respect to which flood insurance has been made available under the National Flood Insurance Act of 1968 (as now or hereafter in effect or successor act thereto), then the Borrower shall, or shall cause each Loan Party to (i) maintain, or cause to be maintained, with a financially sound and reputable insurer, flood insurance in an amount and otherwise sufficient to comply with all applicable rules and regulations promulgated pursuant to the Flood Insurance Laws and (ii) deliver to the Administrative Agent evidence of such compliance in form and substance reasonably acceptable to the Administrative Agent.

6.08. Compliance with Laws. Comply in all material respects with the requirements of all Laws and all orders, writs, injunctions and decrees applicable to it or to its business or property, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted; or (b) the failure to comply therewith could not reasonably be expected to have a Material Adverse Effect.

6.09. Books and Records. Maintain proper books of record and account, in which full, true and correct entries in conformity with GAAP consistently applied shall be made of all financial transactions and matters involving the assets and business of the Borrower or such Subsidiary, as the case may be.

6.10. Inspection Rights. Permit representatives and independent contractors of the Administrative Agent and each Lender to visit and inspect any of its properties, to examine its corporate, financial and operating records, and make copies thereof or abstracts therefrom, and to discuss its affairs, finances and accounts with its directors, officers, and independent public accountants (subject to such accountants' customary policies and procedures), all at the expense of the Borrower and at such reasonable times during normal business hours and as often as may be reasonably desired, upon reasonable advance notice to the Borrower; provided, however, that excluding any such visits and inspections during the continuation of an Event of Default, only the Administrative Agent on behalf of the Lenders may exercise rights of the Administrative Agent and the Lenders under this Section 6.10 and the Administrative Agent shall not exercise such rights more often than two (2) times during any calendar year absent the existence of an Event of Default and only one (1) such time shall be at the Borrower's expense; provided, further, that when an Event of Default exists, the Administrative Agent or any Lender (or any of their respective representatives or independent contractors) may do any of the foregoing at the expense of the Borrower at any time during normal business hours

and upon reasonable advance notice. The Administrative Agent and the Lenders shall give the Borrower the opportunity to participate in any discussions with the Borrower's independent public accountants. Notwithstanding anything to the contrary in this Section 6.10, none of the Borrower nor any of its Subsidiaries will be required to disclose, permit the inspection, examination or making copies or abstracts of, or discussion of, any document, information or other matter that (a) constitutes non-financial trade secrets or non-financial proprietary information, (b) in respect of which disclosure to the Administrative Agent or any Lender (or their respective representatives or contractors) is prohibited by Law or (c) is subject to attorney-client or similar privilege or constitutes attorney work product.

6.11. Use of Proceeds. Use the proceeds of the Credit Extensions for general corporate purposes not in contravention of any Loan Document.

6.12. Covenant to Guarantee Obligations and Give Security.

(a) The Borrower shall, at the Borrower's expense, (x) upon the formation or acquisition of any new direct or indirect Domestic, Wholly-Owned Subsidiary (~~other than~~that would not on a Pro Forma Basis after giving effect to such formation or acquisition on the date of such formation or acquisition constitute an Immaterial Subsidiary) by any Loan Party or (y) at the request of the Administrative Agent (other than in the case of clause (ii) below), following the acquisition by any Loan Party of any property of a type required to be subject to a security interest pursuant to any Collateral Document, that in the reasonable judgment of the Administrative Agent, shall not already be subject to a perfected security interest (with the priority provided for in the Intercreditor Agreement) in favor of the Administrative Agent for the benefit of the Secured Parties, to the extent required by the Collateral Documents and not otherwise constituting Excluded Assets:

(i) in the case of clause (x) above, within 30 days after such formation or acquisition (or such later date as may be agreed by the Administrative Agent), cause such Subsidiary, and cause each direct and indirect parent of such Subsidiary (if it has not already done so) to duly execute and deliver to the Administrative Agent a guaranty or guaranty supplement, in form and substance reasonably satisfactory to the Administrative Agent, guaranteeing the other Loan Parties' obligations under the Loan Documents,

(ii) in the case of each of clauses (x) and (y) above, within 60 days after such formation or acquisition (or such later date as may be agreed by the Administrative Agent), cause (1) such Subsidiary and each direct and indirect parent of such Subsidiary (if it has not already done so) or (2) such Loan Party, as applicable, to duly execute and deliver to the Administrative Agent deeds of trust, trust deeds, deeds to secure debt and mortgages in respect of any Real Property owned in fee simple with a value in excess of \$5,000,000 ("Material Real Property"), in form and substance reasonably satisfactory to the Administrative Agent (together with the fixture filings and assignments of leases and rents referred to therein, as the same may be amended, the "Mortgages"), securing payment of all the Obligations of such Subsidiary, such parent or such Loan Party, as the case may be, under the Loan Documents and constituting Liens on all such Real Property, together with:

(A) evidence that counterparts of the Mortgages have been duly executed, acknowledged and delivered and are in form suitable for filing or recording in all filing or recording offices that the Administrative Agent may deem necessary or reasonably desirable in order to create a valid first and subsisting Lien on the property described therein in favor of the Administrative Agent for the benefit of the Secured Parties and that all filing, documentary, stamp, intangible and recording taxes and other fees in connection therewith have been paid,

(B) fully paid American Land Title Association Lender's Extended Coverage title insurance policies (the "Mortgage Policies"), with endorsements and in amounts reasonably acceptable to the Administrative Agent, issued, coinsured and reinsured by title insurers reasonably acceptable to the Administrative Agent, insuring the Mortgages to be valid first and subsisting Liens on the property described therein, free and clear of all defects, Liens (including, but not limited to, mechanics' and materialmen's Liens), and encumbrances, excepting only Permitted Encumbrances, and providing for such other affirmative insurance and such coinsurance and direct access reinsurance as the Administrative Agent may deem necessary or reasonably desirable,

(C) (i) American Land Title Association/American Congress on Surveying and Mapping form surveys, for which all necessary fees (where applicable) have been paid, and dated no more than 30 days (or such other date as may be agreed by the Administrative Agent) before the acquisition of such Subsidiary or the Material Real Property, certified to the Administrative Agent and the issuer of the Mortgage Policies in a manner reasonably satisfactory to the Administrative Agent by a land surveyor duly registered and licensed in the States in which the property described in such surveys is located and reasonably acceptable to the Administrative Agent, showing all buildings and other improvements, any off-site improvements, the location of any easements, parking spaces, rights of way, building set-back lines and other dimensional regulations and the absence of encroachments, either by such improvements or on to such property, and other defects, other than encroachments and other defects reasonably acceptable to the Administrative Agent,

(D) evidence of the insurance required by the terms of the Mortgages as the Administrative Agent may reasonably request,

(E) a completed "Life-of-Loan" Federal Emergency Management Agency Standard Flood Hazard Determination with respect to each Mortgaged Property (together with a notice about special flood hazard area status and flood disaster assistance duly executed by the Borrower and each Loan Party relating thereto);

(F) such customary opinions of local counsel for the Loan Parties in the State in which the Mortgaged Property is located as the Administrative Agent may reasonably request;

(G) evidence that all other action that the Administrative Agent may deem necessary or reasonably desirable in order to create valid first and subsisting Liens on the property described in the Mortgages has been taken; and

(H) if available, environmental assessments.

(iii) in the case of each of clauses (x) and (y) above, within 30 days after such formation or acquisition (or such later date as may be agreed by the Administrative Agent), cause (1) such Subsidiary and each direct and indirect parent of such Subsidiary (if it has not already done so) or (2) such Loan Party, as applicable, to duly execute and deliver to the Administrative Agent Security Agreement Supplements, security agreements covering any IP Rights held by such Subsidiary and other security and pledge agreements, as specified by and in form and substance reasonably satisfactory to the Administrative Agent (including delivery of all certificates, if any, representing the Equity Interests in and of such Subsidiary described in clause (x) above, and other instruments of the type specified in Section 4.01(a)(iii)), securing payment of all the Obligations of such Subsidiary, such parent or such Loan Party, as the case may be, under the Loan Documents and constituting Liens on all such personal properties that do otherwise constitute Excluded Assets, in each case, to the extent required by the applicable Collateral Documents,

(iv) in the case of each of clauses (x) and (y) above, within 30 days (or with respect to any of the following actions in respect of any Real Property, 60 days) after such formation or acquisition (or such later date as may be agreed by the Administrative Agent), cause (1) such Subsidiary and each direct and indirect parent of such Subsidiary (if it has not already done so) or (2) such Loan Party, as applicable, to take whatever action (including, but not limited to, the recording of mortgages, the filing of Uniform Commercial Code financing statements, the giving of notices and the endorsement of notices on title documents) may be necessary or advisable in the reasonable opinion of the Administrative Agent to vest in the Administrative Agent (or in any representative of the Administrative Agent designated by it) valid and subsisting Liens on the properties purported to be subject to the deeds of trust, trust deeds, deeds to secure debt, mortgages, Security Agreement Supplements, security agreements covering any IP Rights held by such Subsidiary and security and pledge agreements delivered pursuant to this Section 6.12, enforceable against all third parties in accordance with their terms, in each case, to the extent required by the applicable Collateral Documents, and

(v) in the case of each of clauses (x) and (y) above, within 60 days after such formation or acquisition (or such later date as may be agreed by the Administrative Agent), deliver to the Administrative Agent, upon the request of the Administrative Agent in its sole discretion, a signed copy of a favorable opinion, addressed to the Administrative Agent and the other Secured Parties, of counsel for the Loan Parties acceptable to the Administrative Agent as to the matters contained in clauses (i), (ii), (iii) and (iv) above, and as to such other matters as the Administrative Agent may reasonably request.

(b) Within 60 days following the [Original Closing Date](#) (as such date may be extended from time to time by the Administrative Agent in its sole discretion), the Borrower ~~shall~~[was required to \(and did\)](#) enter into and deliver to the Administrative Agent all Foreign Pledge Agreements [in existence on the Closing Date](#) and other customary related security documents evidencing the pledge of 66% of the total voting power of all outstanding Voting Stock and 100% of the Equity Interests not constituting Voting Stock of the Subsidiaries referenced in the definition of Foreign Pledge Agreement, together with opinions of counsel (including local counsel) to the Borrower in each applicable jurisdiction with respect to such Foreign Pledge Agreements and such other security documents in form and substance reasonably satisfactory to the Administrative Agent.

(c) (i) Notwithstanding anything to the contrary set forth in this Agreement, within 30 days following the Closing Date (as such date may be extended from time to time by the Administrative Agent in its sole discretion), the Borrower shall provide endorsements to each policy of insurance as required under Section 6.07 of this Agreement which name the Collateral Agent, on behalf of the Secured Parties, as (A) an additional insured (in the case of liability insurance) and/or (B) loss payee (in the case of property insurance) and (ii) notwithstanding anything to the contrary set forth in this Agreement, the Pledge Agreement or any of the other Loan Documents, within 15 days following the Closing Date (as such date may be extended from time to time by the Administrative Agent in its sole discretion) deliver the share certificate(s) no. C-3 representing 199 Shares of ATI International Investments, Inc., a private company providing telecommunications services as “the ALTA group,” endorsed in blank by an endorsement in the name of the Borrower.

(d) Upon the request of the Administrative Agent following the occurrence and during the continuance of an Event of Default, the Borrower shall, at the Borrower’s expense:

(i) within 10 days after such request, furnish to the Administrative Agent a description of the real and personal properties of the Loan Parties and their respective Subsidiaries in detail satisfactory to the Administrative Agent,

(ii) within 15 days after such request, duly execute and deliver, and cause each Loan Party (if it has not already done so) to duly execute and deliver, to the Administrative Agent deeds of trust, trust deeds, deeds to secure debt, mortgages, leasehold mortgages, leasehold deeds of trust, Security Agreement Supplements, security agreements covering any IP Rights held by such Subsidiary and other security and pledge agreements, as specified by and in form and substance satisfactory to the Administrative Agent (including delivery of all certificates, if any, representing the Equity Interests in and of such Subsidiary, and other instruments of the type specified in Section 6.12(a)(ii)), securing payment of all the Obligations of the applicable Loan Party under the Loan Documents and constituting Liens on all such properties, in each case, to the extent required pursuant to the applicable Collateral Documents,

(iii) within 30 days after such request, take, and cause each Loan Party to take, whatever action (including the recording of mortgages, the filing of Uniform Commercial Code financing statements, the giving of notices and the endorsement of notices on title documents) may be necessary or advisable in the opinion of the Administrative Agent to vest in the Administrative Agent (or in any representative of the Administrative Agent designated by it) valid and subsisting Liens on the properties purported to be subject to the deeds of trust, trust deeds, deeds to secure debt, mortgages, leasehold mortgages, leasehold deeds of trust, Security Agreement Supplements, security agreements covering any IP Rights held by such Subsidiary and security and pledge agreements delivered pursuant to this Section 6.12, enforceable against all third parties in accordance with their terms, in each case, to the extent required pursuant to the applicable Collateral Documents,

(iv) within 60 days after such request, deliver to the Administrative Agent, upon the request of the Administrative Agent in its sole discretion, a signed copy of a favorable opinion, addressed to the Administrative Agent and the other Secured Parties, of counsel for the Loan Parties acceptable to the Administrative Agent as to the matters contained in clauses (ii) and (iii) above, and as to such other matters as the Administrative Agent may reasonably request, and

(v) as promptly as practicable after such request, deliver, upon the request of the Administrative Agent in its sole discretion, to the Administrative Agent with respect to each parcel of Material Real Property owned or held by the Borrower and its Subsidiaries, Mortgage Policies, surveys and engineering, soils and other reports, and environmental assessment reports, each in scope, form and substance satisfactory to the Administrative Agent, provided, however, that to the extent that any Loan Party or any of its Subsidiaries shall have otherwise received any of the foregoing items with respect to such real property, such items shall, promptly after the receipt thereof, be delivered to the Administrative Agent.

(e) [Reserved]

(f) If, as of the last day of any fiscal quarter of the Borrower, the aggregate consolidated assets of all Immaterial Subsidiaries exceeds 5.0% of Consolidated Total Assets (as set forth in the most recent consolidated balance sheet of the Borrower and its Subsidiaries delivered to the Lenders pursuant to this Agreement and computed in accordance with GAAP) then, within 45 days after the end of any such fiscal quarter (or, if such fiscal quarter is the fourth fiscal quarter of the Borrower, within 90 days thereafter) (as either such date may be extended by the Administrative Agent in its sole discretion)), the Borrower shall cause one or more Immaterial Subsidiaries to take the actions specified in Section 6.12(a) on the same basis that any newly formed or acquired Domestic, Wholly-Owned Subsidiary of the Borrower would have to take; provided, however, such actions shall only be required to the extent that, after giving effect to such actions, the aggregate consolidated assets of all Immaterial Subsidiaries do not exceed 5.0% of Consolidated Total Assets.

(g) If, at the time of the delivery of the financial statements pursuant to Section 6.01(a) or (b), any Guarantor is an Immaterial Subsidiary, then (i) upon the written request by the Borrower to the Administrative Agent (which written request shall be delivered to the Administrative Agent within 15 days after the delivery of such financial statements and shall demonstrate, in reasonable detail, that any such Guarantor is an Immaterial Subsidiary), (ii) so long as the Borrower is not required to add any Immaterial Subsidiaries as Guarantors pursuant to Section 6.12(f), (iii) such Guarantor is not an obligor or guarantor of (or is concurrently released as an obligor or guarantor of) any Permitted Additional Indebtedness and ABL Obligations and (iv) so long as no Default or Event of Default then exists or would result therefrom, such Guarantor may be released from its obligations under the Guaranty and applicable Collateral Documents to which it is a party in accordance with the terms thereof.

6.13. Compliance with Environmental Laws. Comply, and cause all lessees and other Persons operating or occupying its properties to comply with all applicable Environmental Laws and Environmental Permits; obtain and renew all Environmental Permits necessary for its operations and properties; and conduct any investigation, study, sampling and testing, and undertake any cleanup, response or other corrective action necessary to address all Hazardous Materials at, on, under or emanating from any of properties owned, leased or operated by it in accordance with the requirements of all Environmental Laws, except, in any case, where the failure to do so, either individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect; provided, however, that neither the Borrower nor any of its Subsidiaries shall be required to undertake any such cleanup, removal, remedial or other action to the extent that its obligation to do so is being contested in good faith and by proper proceedings and appropriate reserves are being maintained with respect to such circumstances in accordance with GAAP.

6.14. Further Assurances. Promptly upon request by the Administrative Agent, or any Lender through the Administrative Agent, (a) correct any mutually identified material defect or error that may be discovered in any Loan Document or in the execution, acknowledgment, filing or recordation thereof, and (b) do, execute, acknowledge, deliver, record, re-record, file, re-file, register and re-register any and all such further acts, deeds, certificates, assurances and other instruments as the Administrative Agent may reasonably require from time to time in order to



(i) the fullest extent permitted by applicable law, subject any Loan Party's or any of its Subsidiaries' properties, assets, rights or interests to the Liens now or hereafter intended to be covered by any of the Collateral Documents, (ii) perfect and maintain the validity, effectiveness and priority of any of the Collateral Documents and any of the Liens intended to be created thereunder and (iii) assure, convey, grant, assign, transfer, preserve, protect and confirm more effectively unto the Secured Parties the rights granted or now or hereafter intended to be granted to the Secured Parties under any Loan Document or under any other instrument executed in connection with any Loan Document to which any Loan Party or any of its Subsidiaries is or is to be a party, and cause each of its Subsidiaries to do so. Notwithstanding anything to the contrary set forth in the Loan Documents, (x) no action shall be required to be taken by any of the Loan Parties after the Closing Date to create, perfect or maintain any Lien on the Collateral under the laws of any jurisdiction other than the United States (other than as required by any Foreign Pledge Agreement) and (y) the Loan Parties shall not be obligated to otherwise undertake collateral perfection and/or protection actions not otherwise required under the other sections of this Agreement or any of the other Loan Documents except if resulting from a change in law to maintain the Secured Parties' Liens required under the Collateral Documents.

6.15. Information Regarding Collateral. Not effect any change (i) in any Loan Party's legal name, (ii) in the location of any Loan Party's chief executive office, (iii) in any Loan Party's identity or organizational form, (iv) in any Loan Party's Federal Taxpayer Identification Number or organizational identification number, if any, or (v) in any Loan Party's jurisdiction of organization (in each case, including by merging with or into any other entity, reorganizing, dissolving, liquidating, reorganizing or organizing in any other jurisdiction), until (A) it shall have given the Administrative Agent not less than 5 Business Days' prior written notice (in the form of certificate signed by a Responsible Officer), or such lesser notice period agreed to by the Administrative Agent, of its intention so to do, clearly describing such change and providing such other information in connection therewith as the Administrative Agent may reasonably request and (B) it shall have taken all action reasonably satisfactory to the Administrative Agent to maintain the perfection and priority of the security interest of the Administrative Agent for the benefit of the Secured Parties in the Collateral, if applicable. Each Loan Party agrees to promptly provide the Administrative Agent with certified Organization Documents reflecting any of the changes described in the preceding sentence.

6.16. Anti-Corruption Laws and Sanctions. Conduct its businesses in compliance in all material respects with applicable anti-corruption laws and Sanctions and maintain policies and procedures designed to promote and achieve compliance with all applicable anti-corruption laws and Sanctions.

6.17. Maintenance of Ratings. In the case of the Borrower, use commercially reasonable efforts to (i) cause the Term Facility to be continuously rated by S&P and Moody's and (ii) maintain a corporate rating from S&P and a corporate family rating from Moody's (but, in each case, not to maintain a specific rating).

## ARTICLE VII NEGATIVE COVENANTS

Until the Payment in Full of the Obligations, the Borrower shall not, nor shall it permit any Subsidiary to, directly or indirectly:

7.01. Liens. Create, incur, assume or suffer to exist any Lien upon any of its property, assets or revenues, whether now owned or hereafter acquired, or sign or file or suffer to exist under the Uniform Commercial Code of any jurisdiction a financing statement that names the Borrower or any of its Subsidiaries as debtor, or assign any accounts or other right to receive income, other than the following:

(a) Liens pursuant to any Loan Document and Liens pursuant to any ABL Credit Document;

(b) Liens existing on the date hereof and listed on Schedule 5.08(b) and any renewals, replacements, refinancings or extensions thereof, provided that (i) the property covered thereby is not changed, (ii) the amount secured or benefited thereby is not increased except as contemplated by Section 7.02(d), and (iii) any renewal, replacement, refinancing or extension of the obligations secured or benefited thereby is permitted by Section 7.02(d);

(c) Inchoate Liens for taxes, assessments or governmental charges or levies not yet delinquent or Liens for taxes, assessments or governmental charges or levies being contested in good faith and by appropriate proceedings diligently conducted (which proceedings have the effect of preventing the forfeiture or sale of the property or assets subject to any such Lien), if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(d) Forewarders', bailee's, carriers', warehousemen's, mechanics', materialmen's, repairmen's or other like Liens arising in the ordinary course of business and (i) which do not in the aggregate materially detract from the value of the Borrower's or such Subsidiary's property or assets or materially impair the use thereof in the operation of the business of the Borrower or such Subsidiary or (ii) which are being contested in good faith and by appropriate proceedings diligently conducted (which proceedings have the effect of preventing the forfeiture or sale of the property or assets subject to any such Lien), if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(e) Liens incurred in the ordinary course of business in connection with workers' compensation, unemployment insurance and other social security legislation, other than any Lien imposed by ERISA;

(f) Liens incurred on deposits to secure the performance of bids, tenders, contracts and leases (other than Indebtedness), statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

(g) (x) easements, rights-of-way, restrictions, encroachments and other similar encumbrances affecting real property which do not in any case materially interfere with the ordinary conduct of the business of the applicable Person and (y) if applicable, any Permitted Encumbrances;

(h) Liens securing judgments for the payment of money not constituting an Event of Default under Section 8.01(h);

(i)

(i) Liens upon assets of the Borrower or any of its Subsidiaries subject to Capitalized Leases (including the financing of such related installation, maintenance or software licensing charges) and any renewals, replacements, refinancings or extensions thereof for the same or a lesser amount (plus the sum of (1) accrued and unpaid interest and fees thereon and (2) customary fees and expenses relating to such renewal, replacement, refinancing or extension), to the extent such Capitalized Leases or renewals, replacements, refinancings or extensions thereof are permitted by Section 7.02(i); provided that (i) such Liens only serve to secure the payment of Indebtedness arising under such Capitalized Leases or renewal, replacement, refinancing or extension thereof and (ii) the Lien encumbering the asset giving rise to the Capitalized Leases or renewal, replacement, refinancing or extension thereof does not encumber any other asset of the Borrower or any of its Subsidiaries;

(ii) purchase money Liens placed upon assets of the Borrower or any of its Subsidiaries and placed at the time of the acquisition thereof by the Borrower or such Subsidiary or within 180 days thereafter to secure Indebtedness incurred to pay all or a portion of the purchase price thereof or to secure Indebtedness incurred solely for the purpose of financing the acquisition of any such asset or extensions, renewals, refinancings or replacements of any of the foregoing for the same or a lesser amount (plus the sum of (1) accrued and unpaid interest and fees thereon and (2) customary fees and expenses relating to such renewal, replacement, refinancing or extension); provided that (i) the Indebtedness secured by such Liens is permitted by Section 7.02(i) and (ii) in all events, the Lien encumbering such assets so acquired does not encumber any other asset of the Borrower or any of its Subsidiaries; and

(iii) Liens upon assets of the Borrower or any of its Subsidiaries subject to the Ottawa Capitalized Lease, and any renewals, replacements, refinancings or extensions thereof for the same or a lesser amount (plus the sum of (1) accrued and unpaid interest and fees thereon and (2) customary fees and expenses relating to such renewal,

replacement, refinancing or extension), to the extent such Ottawa Capitalized Lease or renewals, replacements, refinancings or extensions thereof are permitted by [Section 7.02\(q\)](#); provided that (i) such Liens only serve to secure the payment of Indebtedness arising under such Ottawa Capitalized Lease or renewal, replacement, refinancing or extension thereof and (ii) the Liens encumbering the assets giving rise to the Ottawa Capitalized Lease or renewal, replacement, refinancing or extension thereof do not encumber any other asset of the Borrower or any of its Subsidiaries.

(j) Liens arising from precautionary UCC financing statement filings (or other foreign equivalent filings) regarding operating leases entered into in the ordinary course of business;

(k) statutory and common law landlords' liens under leases to which the Borrower or any of its Subsidiaries is a party;

(l) Liens on property or assets acquired pursuant to a Permitted Acquisition, or on property or assets of a Subsidiary of the Borrower in existence at the time such Subsidiary is acquired pursuant to a Permitted Acquisition and any renewals, replacements, refinancings or extensions thereof for the same or a lesser amount (plus the sum of (1) accrued and unpaid interest and fees thereon and (2) customary fees and expenses relating to such renewal, replacement, refinancing or extension); provided that (i) any Indebtedness and any renewals, replacements, refinancings or extensions thereof that is secured by such Liens is permitted to exist under [Section 7.02\(j\)](#), and (ii) such Liens are not incurred in connection with, or in contemplation or anticipation of, such Permitted Acquisition (other any renewals, replacements, refinancings or extensions of Indebtedness permitted by [Section 7.02\(j\)](#)) and do not attach to any other asset of the Borrower or any of its Subsidiaries;

(m) Liens on accounts receivable [or lease receivables](#) sold in the ordinary course of business in accordance with [Section 7.05\(h\)\(ii\)](#) arising in connection with such sale; provided that any such Liens extend solely to the accounts receivable [or lease receivables](#) so sold and do not encumber any additional assets or properties of the Borrower or any of its Subsidiaries;

(n) (i) licenses, sublicenses, leases or subleases granted by the Borrower or any of its Subsidiaries to other Persons in the ordinary course of business and not materially interfering with the conduct of the business of the Borrower or any of its Subsidiaries and (ii) any interest or title of a lessor, sublessor or licensor under any lease or license agreement not prohibited by this Agreement to which the Borrower or any of its Subsidiaries is a party;

(o) Liens arising out of any conditional sale, title retention, consignment or other similar arrangements for the sale of goods entered into by the Borrower or any of its Subsidiaries in the ordinary course of business to the extent such Liens do not attach to any assets other than the goods subject to such arrangements;

(p) Liens (i) incurred in the ordinary course of business in connection with the purchase or shipping of goods or assets (or the related assets and proceeds thereof), which Liens are in favor of the seller, broker or shipper of such goods or assets and only attach to such goods or assets, and (ii) in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(q) bankers' Liens, rights of setoff and other similar Liens existing solely with respect to cash and Cash Equivalents [and Other Financial Investments](#) on deposit in one or more accounts maintained by the Borrower or any of its Subsidiaries, in each case granted in the ordinary course of business in favor of the bank or banks with which such accounts are maintained, securing amounts owing to such bank or banks with respect to cash management and operating account arrangements;

(r) Liens granted in the ordinary course of business on insurance policies, proceeds thereof and the unearned portion of insurance premiums with respect thereto securing the financing of the unpaid cost of the insurance policies to the extent the financing is permitted under [Section 7.02](#);

(s) Liens on earnest money deposits made in connection with any agreement in respect of an anticipated Permitted Acquisition or other Investment permitted by Sections 7.03(u) and (w);

(t) Liens on Collateral securing Permitted First Priority Refinancing Debt, Permitted Junior Priority Refinancing Debt, or Permitted Additional Secured Indebtedness so long as the Intercreditor Agreement or an Other Intercreditor Agreement is in full force with respect thereto and such Liens are *pari passu* with or junior to the Liens of the Administrative Agent on the Collateral;

(u) Liens on cash and Cash Equivalents to secure (x) the Borrower's or its respective Subsidiary's reimbursement obligations under letters of credit, performance bonds, surety bonds and bid bonds permitted under Section 7.02(m) so long as the aggregate amount of such cash and Cash Equivalents pledged to secure such Indebtedness does not exceed at any time ~~105~~110% of the aggregate outstanding amount of such Indebtedness (or, in the case of undrawn letters of credit, the aggregate undrawn face amount thereof) or (y) indemnification obligations relating to dispositions permitted by Section 7.05;

(v) licensing and cross-licensing arrangements entered into by the Borrower and its Subsidiaries for purposes of enforcing, defending or settling claims with respect to the IP Rights of the Borrower and its Subsidiaries which do not materially interfere with the ordinary conduct of the business of the Borrower or any of its Subsidiaries;

(w) additional Liens of the Borrower or any of its Subsidiaries not otherwise permitted by this Section 7.01 that (i) do not materially impair the use of such assets in the operation of the business of the Borrower or such Subsidiary and (ii) do not secure outstanding obligations in excess of \$10,000,000 in the aggregate for all such Liens at any time; and

(x) ~~from and after the consummation of the Cyan Acquisition, (i) Liens on the Pledged Collateral (as defined in the Cyan Pledge and Escrow Agreement as in effect on the Second Amendment Effective Date and thereafter as amended, restated, supplemented or otherwise modified from time to time so long as such amendment, restatement, supplement or modification is not adverse to the interests of the Lenders in any material respect) to secure the obligations of Cyan and the Borrower under the Cyan Convertible Notes Documents, the amount of which shall not exceed \$12,033,333.33 plus any investment earnings and accrued interest on such Pledged Collateral; and (ii) to the extent constituting a Lien, (A) to the extent that the repurchase or redemption thereof is permitted by this Agreement, cash deposited with the trustee or any paying agent under the Cyan Convertible Notes Documents, or held in trust by the Borrower, to satisfy the obligation of the Borrower to repurchase or redeem all or a portion of the Cyan Convertible Notes in accordance with the terms of the Cyan Convertible Notes Documents following the consummation of the Cyan Acquisition, and (B) to the extent that the prepayment, repurchase or redemption thereof is permitted by this Agreement, cash deposited with the trustee or any paying agent under the applicable Indebtedness, or held in trust by the Borrower, in connection with the prepayment, repurchase or redemption of such Indebtedness.~~

In connection with the granting of Liens of the type described in clauses (b), (i), (j), (l), (m), (u) and (x) of this Section 7.01 by the Borrower or any of its Subsidiaries, the Administrative Agent shall be authorized to take any actions deemed appropriate by it in connection therewith (including, without limitation, by executing appropriate lien releases or lien subordination agreements in favor of the holder or holders of such Liens, in either case solely with respect to the item or items of equipment or other assets subject to such Liens).

7.02. Indebtedness. Create, incur, assume or suffer to exist any Indebtedness, except:

(a) obligations (contingent or otherwise) existing or arising under any Swap Contract, provided that such obligations are (or were) entered into by such Person in the ordinary course of business for the purpose of directly mitigating risks associated with fluctuations in interest rates, foreign exchange rates or commodity prices;

(b) Indebtedness constituting Intercompany Loans to the extent permitted by Sections 7.03(d), 7.03(u) or 7.03(w);

(c) (i) Indebtedness under the Loan Documents and (ii) ABL Obligations subject to the Intercreditor Agreement; provided, that the ABL Obligations consisting of principal of loans or the undrawn or unreimbursed amount of any letters of credit shall not exceed an aggregate amount equal to the sum of (x) \$250,000,000 plus (y) an amount (the “Additional ABL Capacity”) equal, at the time the commitments for such Additional ABL Capacity under the ABL Credit Agreement become effective, to the excess of the ABL Formula over \$250,000,000, provided further that on the date that such commitments for such Additional ABL Capacity become effective, the Borrower shall be in compliance, on a Pro Forma Basis, with a Total Secured Net Leverage Ratio of 2.50:1.00, calculated assuming that all commitments for Additional ABL Capacity under the ABL Credit Agreement were fully drawn at such time;

(d) Indebtedness outstanding on the date hereof and, except for Intercompany Indebtedness among the Borrower and its Subsidiaries, listed on Schedule 7.02 and any refinancings, refundings, renewals, replacements or extensions thereof; provided that the amount of such Indebtedness is not increased at the time of such refinancing, refunding, renewal, replacement or extension except by an amount equal to a reasonable premium or other reasonable amount paid, and fees and expenses reasonably incurred, in connection with such refinancing, refunding, renewal, replacement or extension and by an amount equal to any accrued and unpaid interest and fees thereon and existing commitments unutilized thereunder and the direct or any contingent obligor with respect thereto is not changed, as a result of or in connection with such refinancing, refunding, renewal or extension;

(e) Indebtedness consisting of unsecured guaranties by (i) a Loan Party of the Indebtedness and lease and other contractual obligations of its Wholly-Owned Subsidiaries in the ordinary course of business and on a basis consistent with past practice, (ii) the Loan Parties of each other's Indebtedness and lease and other contractual obligations (other than obligations in respect of Permitted Convertible Notes ~~or the Cyan Convertible Notes~~) and (iii) Subsidiaries of the Borrower that are not Loan Parties of each other's Indebtedness and lease and other contractual obligations, in each case to the extent that the guaranteed Indebtedness or lease or other contractual arrangement is otherwise permitted under this Agreement;

(f) Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds in the ordinary course of business, so long as such Indebtedness is extinguished within ten Business Days of the incurrence thereof;

(g) Indebtedness of the Borrower and its Subsidiaries with respect to performance bonds, surety bonds, appeal bonds, guarantees or customs bonds required in the ordinary course of business or in connection with the enforcement of rights or claims of the Borrower or any of its Subsidiaries or in connection with judgments that do not result in a Default or an Event of Default;

(h) Indebtedness owed to any Person providing property, casualty, liability or other insurance to the Borrower or any of its Subsidiaries, so long as the amount of such Indebtedness is not in excess of the amount of the unpaid cost of, and shall be incurred only to defer the cost of such insurance for the period in which such Indebtedness is incurred and such Indebtedness is outstanding only for a period not exceeding twelve months;

(i) Indebtedness in respect of Capitalized Leases (including the financing of such related installation, maintenance or software licensing charges), obligations in respect of any Synthetic Lease and purchase money obligations for fixed or capital assets within the limitations set forth in Section 7.01(i) and any extension, renewal, replacement or refinancing thereof as permitted by Section 7.01(i); provided, however, that the aggregate amount of all such Indebtedness at any one time outstanding shall not exceed \$50,000,000;

(j) Indebtedness of a Subsidiary of the Borrower acquired pursuant to a Permitted Acquisition (or Indebtedness assumed at the time of a Permitted Acquisition of an asset securing such Indebtedness); provided that (i) such Indebtedness was not incurred in connection with, or in anticipation or contemplation of, such Permitted Acquisition, (ii) such Indebtedness does not constitute debt for borrowed money, it being understood and agreed that Capitalized Leases, purchase money Indebtedness and mortgage financing in respect of any Real Property shall not

constitute debt for borrowed money for purposes of this subclause (ii) and (iii) the aggregate principal amount of all Indebtedness permitted by this clause (j) shall not exceed \$10,000,000 at any one time outstanding;

(k) Indebtedness of the Borrower or any of its Subsidiaries which may be deemed to exist in connection with agreements providing for indemnification, severance arrangements, purchase price adjustments, earnouts, stay bonuses and similar obligations in connection with the acquisition or disposition of assets in accordance with the requirements of this Agreement, so long as any such obligations are those of the Person making the respective acquisition or sale, and are not guaranteed by any other Person except as permitted by Section 7.02(e);

(l) Indebtedness of the Borrower under (x) the Existing Convertible Notes (as reduced by any repayments or prepayments of principal thereof after the Closing Date, including as a result of any conversion of such Existing Convertible Notes into Company Common Stock in accordance with the terms thereof) and (y) any renewal or extension of any Existing Convertible Notes or any new issuance of unsecured senior convertible notes so long as (i) the aggregate Net Cash Proceeds (if any) from all such issuances in excess of \$300,000,000 are applied within ~~six~~eighteen months thereafter to repay in full any then outstanding Existing Convertible Notes, (ii) no such Indebtedness shall have any maturity or mandatory redemption, prepayment, amortization, sinking fund or similar obligation (other than pursuant to a customary change of control offer and acceleration provisions following the occurrence of an event of default thereunder) prior to the date which is ~~six months~~91 days after the Latest Maturity Date in effect at the time of the incurrence or issuance of such Indebtedness, (iii) except with respect to no more than \$300,000,000 in aggregate principal amount of such Indebtedness, the aggregate principal amount of such Indebtedness does not exceed the aggregate principal amount of the Existing Convertible Notes to be renewed, extended or repaid (plus the sum of (A) accrued and unpaid interest thereon and (B) customary fees and expenses relating to such renewal, extension or issuance), (iv) the terms of such Indebtedness (other than pricing, other economic terms and maturity) are either (x) substantially similar to the Existing Convertible Notes (as reasonably determined by the Borrower in good faith) or (y) otherwise reflect market terms at the time of incurrence of such Indebtedness (as reasonably determined by the Borrower in good faith), and (v) prior to any such renewal, extension or issuance, the Borrower shall have delivered to the Administrative Agent a certificate of a Responsible Officer of the Borrower certifying as to compliance with the requirements of the preceding clauses (iv);

(m) Indebtedness of the Borrower or any of its Subsidiaries for reimbursement obligations relating to letters of credit, performance bonds, surety bonds and bid bonds so long as the sum of the aggregate available amount of all such letters of credit (and any unreimbursed drawings in respect thereof) and the then outstanding amount of performance bonds, surety bonds and bid bonds does not at any time exceed \$100,000,000;

(n) Indebtedness of the Borrower (which Indebtedness may be (A) (a) unsecured or (b) to the extent permitted below in this clause (n), (1) in the case of senior secured notes, secured by a Lien on the Collateral that is *pari passu* with or junior to the Lien that secures the Obligations or (2) in the case of term loans, secured by a Lien on the Collateral that is junior to the Lien that secures the Obligations and (B) guaranteed (other than in respect of Additional Convertible Notes) on a like basis by any or all of the other Loan Parties), so long as (i) no Default or Event of Default then exists or would result therefrom, (ii) such Indebtedness does not mature earlier than ~~six months~~91 days after the Latest Maturity Date in effect at the time of incurrence of such Indebtedness (other than an earlier maturity date for customary bridge financings which, subject to customary conditions, would either be automatically converted into or required to be exchanged for permanent financing which does not provide for a maturity date earlier than ~~six months~~91 days after such Latest Maturity Date), (iii) the weighted average life to maturity of any such Indebtedness shall be no shorter than the weighted average life to maturity of the Term Loans then outstanding, (iv)(x) if such Indebtedness is secured by a Lien on the Collateral that is *pari passu* with the Lien securing the Term Loans, it may share ratably or less than ratably in any mandatory prepayments of the type required under Section 2.03(b)(i) or (b)(iii), as provided in the Intercreditor Agreement or the Other Intercreditor Agreement, as applicable, (y) if such Indebtedness consists of term loans that are secured by a Lien on the Collateral that is junior to the Lien securing the Term Loans, it may provide for mandatory prepayments events subject to the prior payment in full of the Term Loans and Permitted First Lien Refinancing Debt as provided in the Intercreditor Agreement or the Other Intercreditor Agreement, as applicable, and (z) such Indebtedness shall otherwise have no mandatory redemption, prepayment, amortization, sinking fund or similar obligations prior to the Latest Maturity Date (other

than (A) pursuant to customary asset sale (or casualty or condemnation event) and change of control offers and, in the case of any customary bridge financing, prepayments of such bridge financing from the issuance of equity or other Indebtedness permitted hereunder and (B) amortization that is not in contravention of clause (iii) above), (v) the terms and conditions of such Indebtedness (excluding maturity and economic terms such as interest rate and redemption premiums, but without limiting the applicability of the requirements in clauses (ii) and (iii) above) are customary for financings of such type and are, taken as a whole, not more restrictive than the terms of this Agreement (as reasonably determined by the Borrower) unless the Administrative Agent and the Borrower shall amend the provisions of this Agreement to provide for such more restrictive term to apply to the Loans hereunder (which amendment may be effected by the Administrative Agent and the Borrower without the consent of any other Lender), (vi) to the extent such Indebtedness is Subordinated Indebtedness, the terms of such Indebtedness provide for customary payment subordination to the Obligations as reasonably determined by the Administrative Agent in good faith, (vii) if such Indebtedness is secured (it being understood that, in no event, shall any Additional Convertible Notes be permitted to be secured), (x) it shall not be secured by any assets or property other than Collateral securing the Obligations (including any assets or property of the Loan Parties that are not covered by the Security Documents on the Closing Date but which will secure the Obligations from and after the issuance of such Indebtedness as contemplated by Section 6.12), (y) at the time of the entering into of any such Indebtedness, it shall either be governed by the Intercreditor Agreement pursuant to a joinder to the Intercreditor Agreement in accordance with the terms thereof or an Other Intercreditor Agreement shall have been entered into and shall be in full force and effect, and the Loan Parties shall have complied with their obligations under Section 6.12, and (z) the Intercreditor Agreement or the Other Intercreditor Agreement, as applicable, shall provide, inter alia, that the Administrative Agent, for the benefit of the Secured Parties, shall retain a Lien on the Collateral that is *pari passu* with or senior to the Lien securing such Indebtedness, (viii) the Borrower shall be in compliance, on a Pro Forma Basis, with (x) if such Indebtedness is unsecured, an Interest Coverage Ratio of at least 2.00:1.00, and (y) if such Indebtedness is secured, a Total Secured Net Leverage Ratio of less than 2.50:1.00, in each case for the respective Calculation Period and (ix) prior to the incurrence or issuance of such Indebtedness, the Borrower shall have delivered to the Administrative Agent a certificate of a Responsible Officer of the Borrower certifying as to compliance with the requirements of preceding clauses (i) through (viii) and containing the calculations (in reasonable detail) required by preceding clause (viii) (all unsecured Indebtedness incurred or issued under this clause (n) is referred to as "Permitted Additional Unsecured Indebtedness") and all secured Indebtedness incurred or issued under this clause (n) is referred to as "Permitted Additional Secured Indebtedness");

(o) (i) Permitted First-Priority Refinancing Debt, (ii) Permitted Junior Priority Refinancing Debt and (iii) Permitted Unsecured Refinancing Debt;

(p) so long as no Default or Event of Default then exists or would result therefrom, additional unsecured Indebtedness incurred by the Borrower and its Subsidiaries in an aggregate principal amount not to exceed ~~\$15,000,000~~ 25,000,000 at any time outstanding; and

(q) Indebtedness of the ~~Company~~ Borrower and its Subsidiaries evidenced by the Ottawa Capitalized Lease, and any extension, renewal, replacement or refinancing thereof as permitted by Section 7.01(i)(iii); provided, however, that in no event shall the sum of the aggregate principal amount of all such Indebtedness permitted by this clause (p) exceed Cdn.\$100,000,000 at any time outstanding; ~~and~~.

~~(r) upon the consummation of the Cyan Acquisition, Indebtedness of Cyan and the Borrower under the Cyan Convertible Notes Documents (including any Guarantee by the Borrower thereunder).~~

7.03. Investments. Make or hold any Investments, except:

(a) the Borrower and its Subsidiaries may acquire and hold cash and Cash Equivalents;

(b) the Borrower and its Subsidiaries may acquire and hold obligations of their officers, directors and employees in connection with such officers', directors' and employees' acquisition of shares of the Common Stock

of the Borrower (so long as no cash is actually advanced by the Borrower or any of its Subsidiaries in connection with the acquisition of such obligations);

(c) advances to officers, directors and employees of the Borrower and Subsidiaries in an aggregate amount not to exceed ~~\$2,000,000~~ \$3,000,000 at any time outstanding, for travel, entertainment, relocation and analogous ordinary business purposes;

(d) (i) any Loan Party may make intercompany loans and advances to any other Loan Party, (ii) any Subsidiary of the Borrower which is not a Loan Party may make intercompany loans and advances (x) to any Loan Party or (y) to any other Subsidiary of the Borrower which is not a Loan Party and (iii) any Loan Party may make intercompany loans and advances to any Subsidiary of the Borrower in the ordinary course of business (such intercompany loans and advances referred to in preceding clauses (i), (ii) and (iii), together with any intercompany loans and advances made between or among the Borrower and its Subsidiaries in reliance on clause (g), (u) or (w) of this Section 7.03, collectively, the “Intercompany Loans”); provided that (A) to the extent evidenced by a promissory note in an amount greater than or equal to ~~\$3,000,000~~ \$5,000,000, each such promissory note owned or held by a Loan Party shall be delivered to the Administrative Agent pursuant to the applicable Security Document, (B) any Intercompany Loans made to any Loan Party or other Subsidiary of the Borrower pursuant to this clause (d) shall cease to be permitted by this clause (d) if such Loan Party or other Subsidiary of the Borrower ceases to constitute a Loan Party or a Subsidiary of the Borrower, as the case may be, unless such Intercompany Loan is otherwise permitted by this clause (d) or another clause of this Section 7.03 and (C) any Intercompany Loans made to any Loan Party by any Subsidiary of the Borrower that is not a Loan Party shall be subordinated pursuant to the Intercompany Subordination Agreement;

(e) Investments consisting of extensions of credit in the nature of accounts receivable, lease receivables or notes receivable arising from the grant of trade credit in the ordinary course of business, and Investments received (i) in satisfaction or partial satisfaction thereof from financially troubled account debtors to the extent reasonably necessary in order to prevent or limit loss and (ii) in connection with the bankruptcy or reorganization of suppliers and customers and in good faith settlement of delinquent obligations of, and other disputes with, customers and suppliers arising in the ordinary course of business;

(f) Guarantees permitted by Section 7.02;

(g) Investments existing on the ~~date hereof~~ 2017 Refinancing Amendment Effective Date<sup>1</sup> and set forth on Schedule 7.03 and any extension or renewal thereof; provided that the amount of any such Investment is not increased at the time of such extension or renewal except in case of Investments in the form of Indebtedness, by an amount equal to accrued interests, fees and premiums;

(h) the Borrower and its Subsidiaries may enter Swap Contracts to the extent permitted by Section 7.02(a);

(i) the Loan Parties may make cash equity investments in their respective Subsidiaries that are also Loan Parties, (ii) any Subsidiary of the Borrower that is not a Loan Party may make cash equity investments in other Subsidiaries of the Borrower that are not Loan Parties and (iv) any Loan Party may make cash equity investments in any Subsidiary of the Borrower in the ordinary course of business;

(j) the Borrower and its Subsidiaries may own the Equity Interests of their respective Subsidiaries created or acquired in accordance with the terms of this Agreement (so long as all amounts invested in such Subsidiaries are independently justified under another provision of this Section 7.03);

(k) Contingent Obligations permitted by Section 7.02, to the extent constituting Investments;

(l) Permitted Acquisitions shall be permitted in accordance with the requirements of the definition thereof and any customary cash earned money deposits made in connection therewith;



- (m) the Borrower and its Subsidiaries may receive and hold promissory notes and other non-cash consideration received in connection with any asset sale permitted by Sections 7.05(f) ~~and 7.05~~, (j), (o), ~~(q) or (r)~~;
- (n) to the extent constituting Investments, transactions permitted by Section 7.04 and Section 7.06;
- (o) the Borrower and its Subsidiaries may make advances in the form of a prepayment of expenses to tax or customs authorities, vendors, suppliers and trade creditors, so long as such expenses were incurred in the ordinary course of business of the Borrower or such Subsidiary;
- (p) Investments in negotiable instruments deposited or to be deposited for collection in the ordinary course of business;
- (q) deposits of cash made in the ordinary course of business to secure the performance of operating leases or the Ottawa Capitalized Lease and any renewals, replacements, refinancings or extensions thereof;
- (r) Investments held by a Person acquired in a Permitted Acquisition to the extent that such Investments were not made in contemplation of or in connection with such Permitted Acquisition and were in existence on the date of such Permitted Acquisition;
- (s) to extent constituting an Investment, (w) cash deposits to secure obligations described in Section 7.01(x), (x) escrow deposits to secure indemnification obligations in connection with a transaction permitted by Section 7.05, (y) cash collateral to secure letters of credit and other obligations described in (and to the extent permitted by) Sections 7.01(e), (f), (p) and (u), and (z) any joint and several liability between the Borrower or a Subsidiary thereof and another seller pursuant to co-contracting arrangements with customers in the ordinary course of business;
- (t) so long as no Default or Event of Default then exists or would result therefrom, the Borrower may make additional Investments in the form of Call Spread Options at the time of the issuance of any Additional Convertible Notes so long as the purchase price for such Call Spread Option is netted out of the cash proceeds of the issuance of such Additional Convertible Notes;
- (u) so long as no Default or Event of Default then exists or would result therefrom, the Borrower and its Subsidiaries may make additional Investments not otherwise permitted by this Section 7.03 in an aggregate amount not to exceed \$50,000,000 (determined without regard to any write-downs or write-offs thereof), net of cash payments of principal in the case of loans and cash equity returns (whether as a dividend or redemption) in the case of equity investments;
- (v) Capitalized Expenditures by the Borrower and its Subsidiaries shall be permitted (other than Capitalized Expenditures constituting a Permitted Acquisition unless permitted under Section 7.03(l)); ~~and~~
- (w) so long as no Event of Default then exists or would result therefrom, Investments in an aggregate amount, not to exceed Available Retained Excess Cash Flow~~;~~;
- (x) the Borrower and its Subsidiaries shall be permitted to make earnest money deposits permitted by Section 7.01(s); and
- (y) Investments in trust or similar arrangements in connection with deferred compensation plans.

7.04. Fundamental Changes. Merge, dissolve, liquidate, consolidate with or into another Person, or Dispose of (whether in one transaction or in a series of transactions) all or substantially all of its assets (whether now owned or hereafter acquired) to or in favor of any Person except:

- (a) (x) any Domestic Subsidiary of the Borrower may be merged, consolidated or liquidated with or into a Loan Party (so long as (i) in the case of any such merger, consolidation or liquidation involving the Borrower, the

Borrower is the surviving Person and (ii) in the case of any such other merger, consolidation or liquidation, a Loan Party is the surviving Person), (y) any Domestic Subsidiary of the Borrower that is not a Loan Party may be merged, consolidated or liquidated with or into any other Domestic Subsidiary of the Borrower that is not a Loan Party, and (z) any Foreign Subsidiary of the Borrower may be merged, amalgamated, consolidated or liquidated with or into (i) any other Foreign Subsidiary of the Borrower (in each case so long as any security interests granted to the Administrative Agent for the benefit of the Secured Parties in the assets (and Equity Interests) of any such Person subject to any such transaction shall remain in full force and effect and perfected and enforceable (to at least the same extent as in effect immediately prior to such merger, amalgamation, consolidation or liquidation) and all actions required to maintain said perfected status have been taken or (ii) any Loan Party (so long as such Loan Party is the surviving Person);

- (b) Any non-operating Subsidiary of the Borrower with no material assets and no material liabilities may wind up, liquidate or dissolve;
- (c) Dispositions may be made to the extent permitted by Section 7.05; and
- (d) (i) Any merger or consolidation of an Acquired Entity or Business in accordance with the terms of the definition thereof pursuant to a Permitted Acquisition, and (ii) Investments may be made to the extent permitted by Section 7.03.

7.05. Dispositions. Make any Disposition, except:

- (a) Dispositions of obsolete, expired or worn out property, whether now owned or hereafter acquired, in the ordinary course of business;
- (b) Dispositions of inventory in the ordinary course of business;
- (c) Dispositions of equipment or real property to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) the proceeds of such Disposition are reasonably promptly applied to the purchase price of such replacement property;
- (d) Dispositions of property by any Subsidiary to the Borrower or to a wholly-owned Subsidiary; provided that if the transferor of such property is a Guarantor, the transferee thereof must either be the Borrower or a Guarantor;
- (e) Dispositions permitted by Section 7.03;
- (f) the Borrower and its Subsidiaries may sell assets (other than the capital stock or other Equity Interests of any Wholly-Owned Subsidiary, unless all of the capital stock or other Equity Interests of such Wholly-Owned Subsidiary are sold in accordance with this clause (f)), so long as (i) no Default or Event of Default then exists or would result therefrom, (ii) each such sale is in an arm's-length transaction and the Borrower or the respective Subsidiary receives at least Fair Market Value, (iii) the consideration received by the Borrower or such Subsidiary consists of at least 75% cash or Cash Equivalents and is paid at the time of the closing of such sale, (iv) the Net Sale Proceeds therefrom are applied as (and to the extent) required by Section 2.03(b) and (v) the aggregate amount of the cash and non-cash proceeds received from all assets sold pursuant to this clause (f) shall not exceed ~~\$15,000,000~~ \$25,000,000 in any fiscal year of the Borrower (for this purpose, in each case, using the Fair Market Value of property other than cash);
- (g) the Borrower and its Subsidiaries may lease (as lessee) or license (as licensee) real or personal property (so long as any such lease or license does not create a Capitalized Lease except to the extent permitted by Section 7.02(i) or (q));
- (h) the Borrower and its Subsidiaries may sell or discount, in each case without recourse (other than customary indemnities in respect of third party liens and claims and customary reductions in purchase price for

claims against the Borrower or a Subsidiary for failure to comply with the terms of the contract under which the accounts receivable or lease receivables arose) and in the ordinary course of business, (i) accounts receivable or lease receivables arising in the ordinary course of business, but only in connection with the compromise or collection thereof and not as part of any financing transaction, (ii) accounts receivable or lease receivables arising in the ordinary course of business so long as such sale or discount is not part of any financing transaction (it being understood, for the avoidance of doubt, that any sale or discount of such ~~account~~accounts receivable or lease receivables without any repurchase obligation shall not constitute a financing transaction) and (iii) letters of credit from customers in order to collect payments in respect of an account receivable or lease receivable earlier than otherwise due in the ordinary course of business and not as part of any financing transaction;

(i) the Borrower and its Subsidiaries may grant licenses, sublicenses, leases or subleases to other Persons in the ordinary course of business and which do not materially interfere with the conduct of the business of the Borrower or any of its Subsidiaries, in each case so long as no such grant otherwise affects in any material respect the Administrative Agent's security interest in the asset or property subject thereto (other than in respect of any Liens permitted hereunder and related thereto);

(j) (w) the Borrower may transfer assets to a Guarantor, (x) the Guarantors may transfer assets between or among one another or to the Borrower, (y) any Subsidiary of the Borrower that is not a Loan Party may transfer assets between or among one another or to a Loan Party and (z) the Loan Parties may (I) transfer spares, equipment and inventory to be used for internal research and development, customer demonstrations, homologation and other general business purposes to any Subsidiary of the Borrower in the ordinary course of business and ~~on a basis consistent with past practice and~~ (II) assign purchase orders and customer contracts in the ordinary course of business to comply with applicable law or otherwise in such Loan Party's reasonable business judgment to address legal, trade, regulatory or tax considerations in the ordinary course of business, in each clause (other than with respect to preceding clause (z) unless such assets are transferred to another Loan Party) so long as any security interests granted to the Administrative Agent for the benefit of the Secured Parties pursuant to the Security Documents in the assets so transferred shall remain in full force and effect and perfected (to at least the same extent as in effect immediately prior to such transfer) and all actions required to maintain said perfected status have been taken;

(k) the Borrower and its Subsidiaries may (i) use or transfer cash ~~or~~ in a manner not prohibited by the terms of the Credit Documents, and (ii) (a) liquidate or otherwise dispose of Cash Equivalents, (b) liquidate, unwind or otherwise dispose of Call Spread Options in respect of the 2017 Convertible Notes, and (c) liquidate or otherwise dispose of Other Financial Investments, in each case in this sub-clause (ii), for cash at Fair Market Value in a manner not prohibited by the terms of the Loan Documents;

(l) Dividends may be paid to the extent permitted by Section 7.06;

(m) the Borrower and its Subsidiaries may cancel ~~or~~, abandon or otherwise dispose of IP Rights which are, in the reasonable business judgment of the Borrower or such Subsidiary, no longer used or useful in, the business of the Borrower or such Subsidiary;

(n) the Borrower and its Subsidiaries may dispose of property and assets to the extent such property and assets were the subject of a casualty or condemnation proceedings upon the occurrence of the related Recovery Event;

(o) the Borrower and its Subsidiaries may sell property or assets in transactions not otherwise permitted by this Section 7.05; provided that (x) the Net Sale Proceeds received from all assets or property sold pursuant to this clause (po) shall not exceed ~~\$5,000,000~~25,000,000 in any fiscal year of the Borrower and (y) the Net Sale Proceeds therefrom are applied as (and to the extent) required by Section 2.03(b);

(p) the Borrower and its Subsidiaries may grant Liens permitted hereunder; ~~and~~

(q) Dispositions of property by Cyan (or the Borrower as successor by merger to Cyan) or any Subsidiary of Cyan to the Borrower or any Subsidiary of the Borrower; provided that the property which is the subject of any such Disposition is limited to property of Cyan and its Subsidiaries held immediately prior to the Cyan Acquisition;

(r) [the Borrower and its Subsidiaries may convey, sell, lease or otherwise dispose of property or assets between or among themselves having a value not in excess of \\$25,000,000 in the aggregate; and](#)

(s) [the Borrower and its Subsidiaries shall be permitted to make earnest money deposits permitted by Section 7.01\(s\).](#)

To the extent the Required Lenders waive the provisions of this Section 7.05 with respect to the sale of any Collateral, or any Collateral is sold as permitted by this Section 7.05 (other than to the Borrower or a Subsidiary thereof), such Collateral shall be sold free and clear of the Liens created by the Security Documents, and the Administrative Agent shall be authorized to take any actions deemed appropriate in order to effect and/or evidence the foregoing.

7.06. Dividends. Declare or make, directly or indirectly, any Dividend, or incur any obligation (contingent or otherwise) to do so, except that:

(a) each Subsidiary may pay Dividends to the Borrower, any Subsidiaries of the Borrower that are Guarantors and any other Person that owns a direct Equity Interest in such Subsidiary, ratably according to their respective holdings of the type of Equity Interest in respect of which such Dividend is being made, or, in the case of the Borrower or any of its Subsidiaries which owns the Equity Interest in the Subsidiary paying such Dividends, at least its proportionate share thereof;

(b) the Borrower and each Subsidiary may declare and make dividend payments or other distributions payable solely in the common stock or other common Equity Interests of such Person;

(c) the Borrower and each Subsidiary may purchase, redeem or otherwise acquire its common Equity Interests with the proceeds received from the substantially concurrent issue of new common Equity Interests;

(d) the Borrower may redeem, repurchase or otherwise acquire for value outstanding shares of Company Common Stock (or options, warrants or other rights to acquire such Company Common Stock) following the death, disability, retirement or termination of employment of officers, directors or employees of the Borrower or any of its Subsidiaries, provided that (x) the aggregate amount of all such redemptions and repurchases pursuant to this Section 7.06(d) shall not exceed ~~\$2,500,000~~ \$5,000,000 in any fiscal year of the Borrower (less the amount of any such redemption or repurchase effected by the forgiveness of Indebtedness owed to the Borrower by such officer, director or employee) and (y) at the time of any such redemption or repurchase permitted to be made pursuant to this Section 7.06(d), no Default or Event of Default shall then exist or result therefrom;

(e) the Borrower may pay regularly scheduled Dividends on its Qualified Preferred Stock pursuant to the terms thereof solely through the issuance of additional shares of such Qualified Preferred Stock (but not in cash), provided that in lieu of issuing additional shares of such Qualified Preferred Stock as Dividends, the Borrower may increase the liquidation preference of the shares of Qualified Preferred Stock in respect of which such Dividends have accrued;

(f) the Borrower may acquire shares of its Equity Interests in connection with the exercise of stock options or warrants to the extent such Equity Interests represent a portion of the exercise price of those stock options or warrants by way of cashless exercise;

(g) the Borrower may make Dividends consisting of the issuance of equity rights convertible into Qualified Preferred Stock in connection with certain “anti-takeover” and “poison pill” arrangements approved by the Board of Directors of the Borrower;

(h) the Borrower may make Dividends to directors, officers and employees of the Borrower and its Subsidiaries in connection with any incentive plans approved by the Board of Directors of the Borrower consisting of (i) shares of Company Common Stock (or options, warrants and other equity instruments in respect thereof), (ii) cash incentive bonuses, and (iii) stock appreciation rights or performance units, including any cash payments in connection therewith;

(i) upon any conversion of any Permitted Convertible Notes at maturity into shares of Company Common Stock, the Borrower may make Dividends consisting of the exercise of the applicable Call Spread Option relating to such Permitted Convertible Notes;

(j) so long as no Default or Event of Default then exists or would result therefrom, Dividends in an amount measured at the time of any such Dividend not to exceed Available Retained Excess Cash Flow at such time; and

(k) so long as no Default or Event of Default then exists or would result therefrom, Dividends in an aggregate amount during the term of this Agreement not to exceed, when taken together with the aggregate amount of prepayments, repayments, redemptions, repurchases or acquisitions of Indebtedness pursuant to Section 7.14(b), \$50,000,000.

7.07. Change in Nature of Business. Engage directly or indirectly in any business other than the businesses engaged in by the Borrower and its Subsidiaries as of the Closing Date and reasonable extensions thereof and businesses ancillary or complimentary thereto.

7.08. Transactions with Affiliates. Enter into any transaction of any kind with any Affiliate of the Borrower, whether or not in the ordinary course of business, other than on fair and reasonable terms substantially as favorable to the Borrower or such Subsidiary as would reasonably be obtainable by the Borrower or such Subsidiary at the time in a comparable arm's length transaction with a Person other than an Affiliate; provided that the foregoing restriction shall not apply to transactions between or among the Loan Parties and the following:

(a) Dividends may be paid to the extent provided in Section 7.06;

(b) loans may be made and other transactions may be entered into among the Borrower and its Subsidiaries to the extent permitted by Sections 7.02, 7.03, 7.04, 7.05 and 7.16;

(c) customary fees, indemnities and reimbursements may be paid to non-officer directors of the Borrower and its Subsidiaries;

(d) the Borrower may issue Company Common Stock and Qualified Preferred Stock;

(e) the Borrower and its Subsidiaries may enter into, and may make payments under, employment agreements, change of control severance agreements, employee benefits plans, stock option plans, indemnification provisions and other similar compensatory arrangements (including for the reimbursement of expenses) with officers, employees and directors of the Borrower and its Subsidiaries in the ordinary course of business; and

(f) the Borrower and its Subsidiaries may pay and/or charge management fees, service fees, licensing fees and similar fees to one another in the ordinary course of business ~~on a basis substantially consistent with past practice~~ (or, in the case of pricing, as otherwise determined by the Borrower and its Subsidiaries in their respective reasonable business judgment).

7.09. Burdensome Agreements. Enter into or permit to exist any Contractual Obligation (other than this Agreement or any other Loan Document) that causes or suffers to exist or become effective any encumbrance or restriction on the ability of any Subsidiary to (a) pay dividends or make any other distributions on its capital stock or any other Equity Interest or participation in its profits owned by the Borrower or any of its Subsidiaries, or pay any Indebtedness

owed to the Borrower or any of its Subsidiaries, (b) make loans or advances to the Borrower or any of its Subsidiaries or (c) transfer any of its properties or assets to the Borrower or any of its Subsidiaries, except for such encumbrances or restrictions existing under or by reason of (i) applicable law, (ii) the ABL Credit Agreement and the other ABL Credit Documents, (iii) the Permitted Convertible Notes Indenture and the other Permitted Convertible Notes Documents, and ~~the Cyan Indenture (as in effect on the Second Amendment Effective Date assuming for purposes of this clause (iii) the application of Section 4.14 of the Cyan Indenture has occurred as a result of a Fundamental Change (as such term is defined in the Cyan Indenture) described in clause (a) or (b) of the definition thereof and thereafter as amended, restated, supplemented or otherwise modified from time to time so long as such amendment, restatement, supplement or modification is not adverse to the interests of the Lenders in any material respect) and the other Cyan Convertible Notes Documents (as in effect on the Second Amendment Effective Date assuming for purposes of this clause (iii) the application of Section 4.14 of the Cyan Indenture has occurred as a result of a Fundamental Change (as such term is defined in the Cyan Indenture) described in clause (a) or (b) of the definition thereof and thereafter as amended, restated, supplemented or otherwise modified from time to time so long as such amendment, restatement, supplement or modification is not adverse to the interests of the Lenders in any material respect)~~ any agreement governing a Permitted Convertible Notes Restructuring, (iv) the Permitted Additional Indebtedness Documents and any agreements evidencing Permitted First Priority Refinancing Debt, Permitted Junior Priority Refinancing Debt or Permitted Unsecured Refinancing Debt, (v) customary provisions restricting subletting or assignment of any lease governing any leasehold interest of the Borrower or any of its Subsidiaries, (vi) customary provisions restricting assignment of any licensing agreement (in which the Borrower or any of its Subsidiaries is the licensee) or any other contract entered into by the Borrower or any of its Subsidiaries in the ordinary course of business, (vii) restrictions on the transfer of any asset pending the close of the sale of such asset, (viii) restrictions on the transfer of any asset subject to a Lien permitted by Section 7.01(b), (i), (j), (l), (n), (o), (u), (v) or (w) or (x), (ix) any agreement or instrument governing Indebtedness (A) permitted pursuant to Section 7.02(d) (other than Intercompany Debt), provided that, any restrictions contained in any agreement governing any renewal, extension, replacement or refinancing of such Indebtedness are not more restrictive in any material respect than the restrictions contained in such Indebtedness to be renewed, extended, replaced or refinanced, (B) incurred pursuant to Section 7.02(i) or 7.02(q), provided that any such restriction contained therein relates only to the assets financed thereby, (C) incurred pursuant to Section 7.02(p), which restriction is only applicable to the transfers of assets (other than cash) of the Person that has incurred the subject Indebtedness or (D) incurred pursuant to Section 7.02(j), which encumbrance or restriction, in the case of this clause (D), is not applicable to any Person or the properties or assets of any Person, other than the Person or the properties or assets of the Person acquired pursuant to the respective Permitted Acquisition and so long as the respective encumbrances or restrictions were not created (or made more restrictive) in connection with or in anticipation of the respective Permitted Acquisition, (x) restrictions applicable to any joint venture that is a Non-Wholly-Owned Subsidiary of the Borrower as a result of an Investment pursuant to Section 7.03; provided that the restrictions applicable to such joint venture are not made more burdensome, from the perspective of the Borrower and its Subsidiaries, than those as in effect immediately before giving effect to the consummation of the respective Investment (but solely to the extent any are in effect at such time), (xi) any agreement with Export Development Canada entered into by the Borrower or any of its Subsidiaries in connection with Export Development Canada's provision of credit support for letters of credit issued for the account of the Borrower or any of its Subsidiaries; provided, that the terms of such agreements shall be on terms consistent with, and, in any event, shall be no more restrictive than, those in existence on the Closing Date, (xii) encumbrances or restrictions on cash or other deposits or net worth imposed by customers under agreements entered into in the ordinary course of business and (xiii) in the case of clause (c) above, the restrictions contained in the Ottawa Capitalized Lease as in effect on the original date thereof and any renewals, replacements, refinancings or extensions thereof, so long as such restrictions are not broader than those contained in the Ottawa Capitalized Lease as in effect on the original date thereof.

7.10. Use of Proceeds. Use the proceeds of any Credit Extension, whether directly or indirectly, and whether immediately, incidentally or ultimately, to purchase or carry margin stock (within the meaning of Regulation U of the FRB) or to extend credit to others for the purpose of purchasing or carrying margin stock or to refund indebtedness originally incurred for such purpose.

7.11. Sanctions. Use the proceeds of any Credit Extension, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other individual or entity, to fund any activities of or business with any individual or entity, or in any Designated Jurisdiction, that, at the time of such funding, is the subject of Sanctions except to the extent licensed or otherwise authorized under the laws of the United States, or in any other manner that will result in a violation of Sanctions by any individual or entity (including any individual or entity participating in the transaction, whether as Lender, Arrangers, Administrative Agent or otherwise).

7.12. [Reserved.]

7.13. Accounting Changes. Make any change in (a) accounting policies or reporting practices, except as required by GAAP or with the consent of the Administrative Agent (which consent will not be unreasonably withheld, conditioned or delayed), or (b) fiscal year; provided that the Borrower may, upon written notice to the Administrative Agent, change its fiscal year to any other fiscal year reasonably acceptable to the Administrative Agent, in which case, the Borrower and the Administrative Agent will, and are hereby authorized by the Lenders to, make any adjustments to this Agreement that are necessary to reflect such change in fiscal year.

7.14. Prepayments, Etc. of Indebtedness. Make (or give any notice in respect of) any voluntary or optional payment or prepayment on or voluntary redemption, repurchase or acquisition for value of (including, in each case without limitation, by way of depositing with the trustee with respect thereto or any other Person money or securities before due for the purpose of paying when due), any Permitted Convertible Note; ~~any Cyan Convertible Notes~~ (including, without limitation, any election to settle any such Permitted Convertible Note in cash upon conversion of such Permitted Convertible Note prior to maturity thereof and the payment of such cash to effect settlement), Permitted Additional Indebtedness or Junior Refinancing Debt; provided, however:

(a) the Borrower may make any payment or prepayment on, or redemption or acquisition for value of, any Permitted ~~Convertible Notes or any Cyan~~ Convertible Notes through the exercise of any call option in respect thereof that is settled in Company Common Stock or, in respect of any fractional shares to be issued, in cash,

(b) so long as no Default or Event of Default then exists or would result therefrom, the Borrower may make any payment or prepayment on, or redemption or acquisition for value of, any Permitted Convertible Notes, other Permitted Additional Indebtedness or Junior Refinancing Debt in an aggregate amount during the term of this Agreement not to exceed, when taken together with all Dividends paid pursuant to Section 7.06(k), \$50,000,000;

(c) so long as no Default or Event of Default then exists or would result therefrom, the Borrower may make any payment or prepayment on, or redemption or acquisition for value of, ~~(x)~~ any 2015 Convertible Notes or 2017 Convertible Notes in an aggregate amount since the Original Closing Date not to exceed the Net Cash Proceeds of the 2014 Term Loans and 2016 Term Loans and (y) any 2018 Convertible Notes;

(d) the Borrower may make additional payments or prepayments on, or redemptions or acquisitions for value of, ~~any Cyan Convertible Notes (only with respect to subclause (x) below)~~, any Permitted Convertible Notes, Permitted Additional Indebtedness or Junior Refinancing Debt (x) to the extent made with Company Common Stock or Qualified Preferred Stock (whether pursuant to any conversion thereof or otherwise) or (y) so long as no Default or Event of Default then exists or would result therefrom, to the extent made with the proceeds from (1) the substantially concurrent incurrence or issuance of any Additional Convertible Notes, Permitted Additional Indebtedness or Junior Refinancing Debt or (2) an incurrence or issuance of Indebtedness pursuant to Section 7.02(l);

(e) so long as no Default or Event of Default shall then exist or result therefrom, repayments, redemptions, repurchases and acquisitions for value in an amount measured at the time of any such repayment, redemption, repurchase or acquisition not to exceed Available Retained Excess Cash Flow at such time; and

(f) so long as no Default or Event of Default then exists or would result therefrom, the Borrower may use the proceeds of any borrowing under the ABL Credit Agreement to make any payment or prepayment on, or

redemption or acquisition for value of, any Permitted Convertible Notes ~~or any Cyan Convertible Notes~~ in an amount not to exceed \$50,000,000; ~~and~~.

~~(g) from and after the consummation of the Cyan Acquisition and so long as no Default or Event of Default then exists or would result therefrom, Cyan or the Borrower may make any payment or prepayment on, or redemption, repurchase or acquisition for value of, any Cyan Convertible Notes in accordance with the terms of the Cyan Convertible Notes Documents.~~

- In addition to the foregoing, the Borrower will not, and will not permit any of the other Loan Parties to, repay or prepay any Intercompany Loan owed by any such Loan Party to a Subsidiary of the Borrower that is not a Loan Party at any time that an Event of Default exists and is continuing.

#### 7.15. Amendment, Etc. of Indebtedness and Organizational Documents.

(a) ~~(i)~~ Amend, modify, change or waive any term or provision of any Permitted Convertible Notes Document in a manner which is either adverse to the interests of the Lenders in any material respect or would be in a form that would not otherwise be permitted to be entered into or incurred at such time in accordance with Section 7.02(l)(y) or Section 7.02(n) ~~or (ii) amend, modify, change or waive any term or provision of any Cyan; provided that the Borrower may amend the provisions of any Permitted~~ Convertible Notes Document ~~in a manner which is adverse to the interests of the Lenders in any material respect (it being understood that any supplemental indenture described in the definition of Cyan governing the method of settlement of any Permitted Convertible Note to permit under such Permitted~~ Documents ~~shall be deemed to not be adverse to the interests of the Lenders in any material respect)~~ Document settlement of such Permitted Convertible Note in cash, stock, or a combination thereof at the Borrower's election;

(b) Amend, modify, change or waive any term or provision of any Permitted Additional Indebtedness Document to the extent that the Permitted Additional Indebtedness Document in the amended, modified or changed form would not be able to be entered into or incurred at such time in accordance with Sections 7.01(t) and 7.02(n) (provided that any such amendment, modification, change or waiver with respect to any such Indebtedness permitted pursuant to Section 7.02(n) that does not increase the aggregate principal amount of such Indebtedness and does not modify the scheduled maturity or weighted average life to maturity of such Indebtedness shall not be subject to compliance with the provisions of either Section 7.02(n)(ii), (iii) or (viii) at the time of such amendment, modification, change or waiver) or, in the case of any Permitted Additional Secured Indebtedness Document, also to the extent not permitted at such time in accordance with the terms of the Intercreditor Agreement;

(c) Other than any Permitted ~~Convertible Notes Document and other than any Cyan~~ Convertible Notes Document (the amendment, modification or waiver of which shall be governed by clause (a) of this Section 7.15), amend, modify or change its certificate or articles of incorporation (including, without limitation, by the filing or modification of any certificate or articles of designation), certificate of formation, limited liability company agreement or by-laws (or the equivalent) or any other Organizational Documents, as applicable, or any agreement entered into by it with respect to its capital stock or other Equity Interests, or enter into any new agreement with respect to its capital stock or other Equity Interests, unless such amendment, modification, change or other action contemplated by this clause (c) could not reasonably be expected to be adverse to the interests of the Lenders in any material respect (it being understood that any of the foregoing that provides for reasonable and customary "anti-takeover" and "poison pill" arrangements approved by the Board of Directors of the Borrower shall in no event be considered adverse to the interests of the Lenders in any respect so long as such arrangements do not require the Borrower or any of its Subsidiaries to take any action that would otherwise be in violation of this Agreement or any other Loan Document); and

(d) Amend, modify or change in any manner any term or condition of the ABL Credit Documents except to the extent permitted by the Intercreditor Agreement.



7.16. Anti-Corruption Laws. Use the proceeds of any Credit Extension for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity in violation of the FCPA, the UK Bribery Act 2010, or any other applicable anti-corruption laws in other jurisdictions.

ARTICLE VIII  
EVENTS OF DEFAULT AND REMEDIES

8.01. Events of Default. Any of the following shall constitute an Event of Default:

(a) Non-Payment. The Borrower or any other Loan Party fails to (i) pay when and as required to be paid herein, any amount of principal of any Loan or (ii) pay within five days after the same becomes due, any interest on any Loan or any fee due hereunder, or (iii) pay within five days after the same becomes due, any other amount payable hereunder or under any other Loan Document; or

(b) Specific Covenants. The Borrower fails to perform or observe any term, covenant or agreement contained in any of Section 6.03(a), 6.05(a) (solely in the case of the Borrower), 6.10, 6.12 or Article VII (other than with respect to tax Liens in the ordinary course of business not meeting the requirements of Section 7.01(c)); or

(c) Other Defaults. Any Loan Party fails to perform or observe any other covenant or agreement (not specified in Section 8.01(a) or (b) above) contained in any Loan Document on its part to be performed or observed and such failure continues for (i) five days, in the case of Section 6.01 or (ii) 30 days after the earlier of receipt of notice to such Loan Party or the knowledge of such Loan Party, in the case of any other covenant or agreement not specified in Section 8.01(a) or (b) above; or

(d) Representations and Warranties. Any representation, warranty, certification or statement of fact made or deemed made by or on behalf of the Borrower or any other Loan Party herein, in any other Loan Document, or in any document delivered in connection herewith or therewith shall be incorrect or misleading in any material respect when made or deemed made; or

(e) Cross-Default. (i) Any Loan Party or any Subsidiary thereof (A) fails to make any payment beyond the applicable grace period, if any, (whether by scheduled maturity, required prepayment, acceleration, demand, or otherwise) in respect of any Indebtedness (other than Indebtedness hereunder and Indebtedness under Swap Contracts) having an aggregate principal amount (including amounts owing to all creditors under any combined or syndicated credit arrangement) of more than the Threshold Amount, or (B) fails to observe or perform any other agreement or condition relating to any such Indebtedness or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event occurs (it being understood and agreed that such event does not include the occurrence of any customary mandatory prepayment event for asset sales or asset recovery events but only if such Indebtedness is secured by such assets), the effect of which default or other event is to cause, or to permit the holder or holders of such Indebtedness (or a trustee or agent on behalf of such holder or holders) to cause, with the giving of notice if required, such Indebtedness to be demanded or to become due or to be repurchased, prepaid, defeased or redeemed (automatically or otherwise), or an offer to repurchase, prepay, defease or redeem such Indebtedness to be made, prior to its stated maturity; or (ii) there occurs under any Swap Contract an Early Termination Date (as defined in such Swap Contract) resulting from (A) any event of default under such Swap Contract as to which a Loan Party or any Subsidiary thereof is the Defaulting Party (as defined in such Swap Contract) or (B) any Termination Event (as so defined) under such Swap Contract as to which a Loan Party or any Subsidiary thereof is an Affected Party (as so defined) and, in either event, the Swap Termination Value owed by such Loan Party or such Subsidiary as a result thereof is greater than the Threshold Amount; provided, however, that the Borrower's failure to perform or observe any financial maintenance covenant in the ABL Credit Agreement shall not constitute an Event of Default unless and until the lenders under the ABL Credit Agreement have actually declared the ABL Obligations to be immediately due and payable in accordance with the terms thereof ; or

(f) Insolvency Proceedings, Etc. Any Loan Party or any Material Subsidiary thereof institutes or consents to the institution of any proceeding under any Debtor Relief Law, or makes an assignment for the benefit of creditors; or applies for or consents to the appointment of any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer for it or for all or any material part of its property; or any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer is appointed without the application or consent of such Person and the appointment continues undischarged or unstayed for 60 calendar days; or any proceeding under any Debtor Relief Law relating to any such Person or to all or any material part of its property is instituted without the consent of such Person and continues undismissed or unstayed for 60 calendar days, or an order for relief is entered in any such proceeding; or

(g) Inability to Pay Debts; Attachment. (i) Any Loan Party or any Material Subsidiary thereof becomes unable or admits in writing its inability or fails generally to pay its debts as they become due, or (ii) any writ or warrant of attachment or execution or similar process is issued or levied against all or any material part of the property of any such Person and is not released, vacated or fully bonded within 30 days after its issue or levy; or

(h) Judgments. There is entered against any Loan Party or any Subsidiary thereof (i) one or more final judgments or orders for the payment of money in an aggregate amount (as to all such judgments and orders) exceeding the Threshold Amount (to the extent not covered by independent third-party insurance as to which the insurer has been notified of the potential claim and does not dispute coverage), or (ii) any one or more non-monetary final judgments that have, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect and, in either case, and such judgment or order shall for a period of 60 consecutive days not be satisfied, vacated, discharged or stayed or bonded pending an appeal; or

(i) ERISA. (i) An ERISA Event occurs with respect to a Pension Plan or Multiemployer Plan which has resulted or could reasonably be expected to result in liability of the Borrower to the Pension Plan, Multiemployer Plan or the PBGC in an aggregate amount in excess of the Threshold Amount, or (ii) the Borrower or any ERISA Affiliate fails to pay when due, after the expiration of any applicable grace period, any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan in an aggregate amount in excess of the Threshold Amount; or

(j) Invalidity of Loan Documents. Any material provision of any Loan Document, at any time after its execution and delivery and for any reason other than as expressly permitted hereunder or thereunder ceases to be in full force and effect against any Loan Party party to such Loan Document (or, in the case of the Intercreditor Agreement, against any party thereto); or any Loan Party or any other Person contests in any manner the validity or enforceability of any provision of any Loan Document; or any Loan Party denies that it has any or further liability or obligation under any provision of any Loan Document (other than as a result of Payment in Full), or purports to unilaterally revoke, terminate or rescind any provision of any Loan Document; or

(k) Change of Control. There occurs any Change of Control; or

(l) Collateral Documents. Any Collateral Document after delivery thereof pursuant to Section 4.01 or 6.12 shall for any reason (other than pursuant to the terms thereof including as a result of a transaction not prohibited under this Agreement) cease to create a valid and perfected Lien, with the priority required by the Collateral Documents and provided in the Intercreditor Agreement (subject to Liens permitted by Section 7.01), on any material portion of the Collateral purported to be covered thereby, except to the extent that any such perfection or priority is not required pursuant to the requirements of the applicable Collateral Document; provided that, notwithstanding the foregoing, any failure to maintain such perfection that results directly from the failure of the Administrative Agent to (i) maintain possession of certificates actually delivered to it representing securities or negotiable instruments pledged under the Collateral Documents or (ii) file UCC continuation statements (which, in either case, does not arise from a breach by a Loan Party of its obligations under the Loan Documents) shall not constitute a Default under this clause (l); or

(m) Subordination. (i) The subordination provisions of the documents evidencing or governing any Subordinated Indebtedness (the “Subordination Provisions”) shall, in whole or in part, terminate, cease to be effective or cease to be legally valid, binding and enforceable against any holder of the applicable subordinated Indebtedness; or (ii) the Borrower or any other Loan Party shall, directly or indirectly, disavow or contest in any manner (A) the effectiveness, validity or enforceability of any of the Subordination Provisions, (B) that the Subordination Provisions exist for the benefit of the Administrative Agent and the Lenders or (C) that all payments of principal of or premium and interest on the applicable subordinated Indebtedness, or realized from the liquidation of any property of any Loan Party, shall be subject to any of the Subordination Provisions.

8.02. Remedies upon Event of Default. If any Event of Default occurs and is continuing, the Administrative Agent shall, at the request of, or may, with the consent of, the Required Lenders, take any or all of the following actions:

- (a) declare the commitment of each Lender to make Loans to be terminated, whereupon such commitments and obligation shall be terminated;
- (b) declare the unpaid principal amount of all outstanding Loans, all interest accrued and unpaid thereon, and all other amounts owing or payable hereunder or under any other Loan Document to be immediately due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived by the Borrower;
- (c) [reserved]; and
- (d) exercise on behalf of itself and the Lenders all rights and remedies available to it and the Lenders under the Loan Documents;

provided, however, that upon the occurrence of an actual or deemed entry of an order for relief with respect to the Borrower under the Bankruptcy Code of the United States, the obligation of each Lender to make Loans shall automatically terminate, the unpaid principal amount of all outstanding Loans and all interest and other amounts as aforesaid shall automatically become due and payable, in each case without further act of the Administrative Agent or any Lender.

8.03. Application of Funds. After the exercise of remedies provided for in Section 8.02 (or after the Loans have automatically become immediately due and payable), any amounts received on account of the Obligations shall, subject to the provisions of Section 2.15, be applied by the Administrative Agent in the following order:

First, to payment of that portion of the Obligations constituting fees, indemnities, expenses and other amounts (including fees, charges and disbursements of counsel to the Administrative Agent and amounts payable under Article III) payable to the Administrative Agent in its capacity as such;

Second, to payment of that portion of the Obligations constituting fees, indemnities and other amounts (other than principal and interest) payable to the Lenders (including fees, charges and disbursements of counsel to the respective Lenders arising under the Loan Documents and amounts payable under Article III, ratably among them in proportion to the respective amounts described in this clause Second payable to them;

Third, to payment of that portion of the Obligations constituting accrued and unpaid interest on the Loans and other Obligations arising under the Loan Documents, ratably among the Lenders in proportion to the respective amounts described in this clause Third payable to them;

Fourth, to payment of that portion of the Obligations constituting unpaid principal of the Loans, ratably among the Lenders in proportion to the respective amounts described in this clause Fourth held by them; and

Last, the balance, if any, after all of the Obligations have been indefeasibly paid in full, to the Borrower or as otherwise required by Law.

ARTICLE IX  
ADMINISTRATIVE AGENT

9.01. Appointment and Authority. (a) Each of the Lenders hereby irrevocably appoints Bank of America to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. Except as provided in Sections 9.06 and 9.10, the provisions of this Article are solely for the benefit of the Administrative Agent and the Lenders, and the Borrower shall not have rights as a third party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

(b) The Administrative Agent shall also act as the “collateral agent” under the Loan Documents, and each of the Lenders hereby irrevocably appoints and authorizes the Administrative Agent to act as the agent of such Lender for purposes of acquiring, holding and enforcing any and all Liens on Collateral granted by any of the Loan Parties to secure any of the Obligations, together with such powers and discretion as are reasonably incidental thereto. In this connection, the Administrative Agent, as “collateral agent” and any co-agents, sub-agents and attorneys-in-fact appointed by the Administrative Agent pursuant to Section 9.05 for purposes of holding or enforcing any Lien on the Collateral (or any portion thereof) granted under the Collateral Documents, or for exercising any rights and remedies thereunder at the direction of the Administrative Agent, shall be entitled to the benefits of all provisions of this Article IX and Article X (including Section 10.04(c), as though such co-agents, sub-agents and attorneys-in-fact were the “collateral agent” under the Loan Documents) as if set forth in full herein with respect thereto.

9.02. Rights as a Lender. The Person serving as the Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent and the term “Lender” or “Lenders” shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of business with the Borrower or any Subsidiary or other Affiliate thereof as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

9.03. Exculpatory Provisions. The Administrative Agent shall not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

(a) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(b) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents), provided that the Administrative Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law; and

(c) shall not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(d) The Administrative Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 10.01 and 8.02) or (ii) in the absence of its own gross negligence or willful misconduct, as determined by a court of competent jurisdiction by a final and nonappealable judgment. The Administrative Agent shall be deemed not to have knowledge of any Default unless and until notice describing such Default is given to the Administrative Agent by the Borrower or a Lender.

(e) The Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document, or the creation, perfection or priority of any Lien purported to be created by the Collateral Documents, (v) the value or the sufficiency of any Collateral, or (vi) the satisfaction of any condition set forth in Article IV or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

9.04. Reliance by Administrative Agent. The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of a Loan that by its terms must be fulfilled to the satisfaction of a Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender unless the Administrative Agent shall have received notice to the contrary from such Lender prior to the making of such Loan. The Administrative Agent may consult with legal counsel (who may be counsel for the Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

9.05. Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Article shall apply to any such sub-agent and to the Related Parties of the Administrative Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the credit facilities provided for herein as well as activities as Administrative Agent. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

9.06. Resignation of Administrative Agent. (a) The Administrative Agent may at any time give notice of its resignation to the Lenders and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right, with the consent of the Borrower unless an Event of Default has occurred and is continuing under Section 8.01(a), (f) or (g) (such consent not to be unreasonably withheld or delayed), to appoint a successor, which shall be a bank with an office in the United States, or an Affiliate of any such bank with an office in the United States. If no such successor shall have been so appointed and shall have accepted such appointment within 30 days

after the retiring Administrative Agent gives notice of its resignation, (or such earlier day as shall be agreed by the Required Lenders) (the “Resignation Effective Date”), then the retiring Administrative Agent may (but shall not be obligated to) on behalf of the Lenders, appoint a successor Administrative Agent meeting the qualifications set forth above. Whether or not a successor has been appointed, such resignation shall become effective in accordance with such notice on the Resignation Effective Date.

(b) If the Person serving as Administrative Agent is a Defaulting Lender pursuant to clause (d) of the definition thereof, the Required Lenders may, to the extent permitted by applicable law, by notice in writing to the Borrower and such Person remove such Person as Administrative Agent and, with the consent of the Borrower unless an Event of Default has occurred and is continuing under Section 8.01(a), (f) or (g) (such consent not to be unreasonably withheld or delayed), appoint a successor. If no such successor shall have been so appointed and shall have accepted such appointment within 30 days (or such earlier day as shall be agreed by the Required Lenders) (the “Removal Effective Date”), then such removal shall nonetheless become effective in accordance with such notice on the Removal Effective Date.

(c) With effect from the Resignation Effective Date or the Removal Effective Date (as applicable) (1) the retiring or removed Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Administrative Agent on behalf of the Lenders under any of the Loan Documents, the retiring or removed Administrative Agent shall continue to hold such collateral security until such time as a successor Administrative Agent is appointed) and (2) except for any indemnity payments or other amounts then owed to the retiring or removed Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent shall instead be made by or to each Lender directly, until such time, if any, as the Required Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor’s appointment as Administrative Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or removed) Administrative Agent (other than as provided in Section 3.01(g) and other than any rights to indemnity payments or other amounts owed to the retiring or removed Administrative Agent as of the Resignation Effective Date or the Removal Effective Date, as applicable), and the retiring or removed Administrative Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents (if not already discharged therefrom as provided above in this Section). The fees payable by the Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Administrative Agent’s resignation or removal hereunder and under the other Loan Documents, the provisions of this Article shall continue in effect for the benefit of such retiring or removed Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring or removed Administrative Agent was acting as Administrative Agent.

9.07. Non-Reliance on Administrative Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

9.08. No Other Duties, Etc. Anything herein to the contrary notwithstanding, none of the Bookrunners, Arrangers, syndication agents or documentation agents listed on the cover page hereof shall have any powers, duties or responsibilities under this Agreement or any of the other Loan Documents, except in its capacity, as applicable, as the Administrative Agent or a Lender hereunder.

9.09. Administrative Agent May File Proofs of Claim; Credit Bidding. In case of the pendency of any proceeding under any Debtor Relief Law or any other judicial proceeding relative to any Loan Party, the Administrative Agent

(irrespective of whether the principal of any Loan shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent shall have made any demand on the Borrower) shall be entitled and empowered, by intervention in such proceeding or otherwise

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and the Administrative Agent and their respective agents and counsel and all other amounts due the Lenders and the Administrative Agent under Sections 2.07 and 10.04) allowed in such judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make such payments to the Administrative Agent and, if the Administrative Agent shall consent to the making of such payments directly to the Lenders, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under Sections 2.07 and 10.04.

Nothing contained herein shall be deemed to authorize the Administrative Agent to authorize or consent to or accept or adopt on behalf of any Lender any plan of reorganization, arrangement, adjustment or composition affecting the Obligations or the rights of any Lender to authorize the Administrative Agent to vote in respect of the claim of any Lender or in any such proceeding.

The Secured Parties hereby irrevocably authorize the Administrative Agent, at the direction of the Required Lenders, to credit bid all or any portion of the Obligations (including accepting some or all of the Collateral in satisfaction of some or all of the Secured Obligations pursuant to a deed in lieu of foreclosure or otherwise) and in such manner purchase (either directly or through one or more acquisition vehicles) all or any portion of the Collateral (a) at any sale thereof conducted under the provisions of the Bankruptcy Code of the United States, including under Sections 363, 1123 or 1129 of the Bankruptcy Code of the United States, or any similar Laws in any other jurisdictions to which a Loan Party is subject, (b) at any other sale or foreclosure or acceptance of collateral in lieu of debt conducted by (or with the consent or at the direction of) the Administrative Agent (whether by judicial action or otherwise) in accordance with any applicable Law. In connection with any such credit bid and purchase, the Obligations owed to the Secured Parties shall be entitled to be, and shall be, credit bid on a ratable basis (with Obligations with respect to contingent or unliquidated claims receiving contingent interests in the acquired assets on a ratable basis that would vest upon the liquidation of such claims in an amount proportional to the liquidated portion of the contingent claim amount used in allocating the contingent interests) in the asset or assets so purchased (or in the Equity Interests or debt instruments of the acquisition vehicle or vehicles that are used to consummate such purchase). In connection with any such bid (i) the Administrative Agent shall be authorized to form one or more acquisition vehicles to make a bid, (ii) to adopt documents providing for the governance of the acquisition vehicle or vehicles (provided that any actions by the Administrative Agent with respect to such acquisition vehicle or vehicles, including any disposition of the assets or Equity Interests thereof shall be governed, directly or indirectly, by the vote of the Required Lenders, irrespective of the termination of this Agreement and without giving effect to the limitations on actions by the Required Lenders contained in clauses (a) through (j) of Section 10.01 of this Agreement, (iii) the Administrative Agent shall be authorized to assign the relevant Obligations to any such acquisition vehicle *pro rata* by the Lenders, as a result of which each of the Lenders shall be deemed to have received a *pro rata* portion of any Equity Interests and/or debt instruments issued by such an acquisition vehicle on account of the assignment of the Obligations to be credit bid, all without the need for any Secured Party or acquisition vehicle to take any further action and (iv) to the extent that Obligations that are assigned to an acquisition vehicle are not used to acquire Collateral for any reason (as a result of another bid being higher or better, because the amount of Obligations assigned to the acquisition vehicle exceeds the amount of debt credit bid by the acquisition vehicle or otherwise), such Obligations shall automatically be reassigned to the Lenders *pro rata* and the Equity Interests and/or debt

instruments issued by any acquisition vehicle on account of the Obligations that had been assigned to the acquisition vehicle shall automatically be cancelled, without the need for any Secured Party or any acquisition vehicle to take any further action.

9.10. Collateral and Guaranty Matters. Without limiting the provision of Section 9.09, the of the Lenders irrevocably authorize the Administrative Agent, and the Administrative Agent hereby agrees,

(a) that any Lien on any property granted to or held by the Administrative Agent under any Loan Document shall be automatically released (i) upon Payment in Full, (ii) that is sold or otherwise disposed of or to be sold or otherwise disposed of as part of or in connection with any sale or other disposition permitted hereunder or under any other Loan Document to a Person that is not a Loan Party, (iii) that constitutes Excluded Assets, or (iv) as otherwise may be expressly provided in the relevant Collateral Documents, the last sentence of each of Sections 7.01 and 7.05 or in the Intercreditor Agreement or Other Intercreditor Agreement or (v) if approved, authorized or ratified in writing in accordance with Section 10.01;

(b) to automatically release any Guarantor (and the pledge of any equity interests in such Guarantor) from its obligations under the Guaranty if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Loan Documents; and

(c) to subordinate any Lien on any property granted to or held by the Administrative Agent under any Loan Document to the holder of any Lien on such property that is permitted by Section 7.01(i) and Section 7.01(x).

Upon request by the Administrative Agent at any time, the Required Lenders will confirm in writing the Administrative Agent's authority to release or subordinate its interest in particular types or items of property, or to release any Guarantor from its obligations under the Guaranty pursuant to this Section 9.10. In each case as specified in this Section 9.10, the Administrative Agent will, at the Borrower's expense, execute and deliver to the applicable Loan Party such documents as such Loan Party may reasonably request to evidence the release of such item of Collateral from the assignment and security interest granted under the Collateral Documents, to return any Collateral, which is the subject of such release and in the possession of the Administrative Agent or its agent, to the Borrower, or to subordinate its interest in such item, or to release such Guarantor from its obligations under the Guaranty, in each case in accordance with the terms of the Loan Documents and this Section 9.10.

In the case of any such Disposition of any property constituting Collateral in a transaction permitted pursuant to Section 7.05, the Liens created by any of the Collateral Documents on such property shall be automatically released without need for further action by any Person.

The Administrative Agent shall not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Administrative Agent's Lien thereon, or any certificate prepared by any Loan Party in connection therewith, nor shall the Administrative Agent be responsible or liable to the Lenders for any failure to monitor or maintain any portion of the Collateral.

## ARTICLE X MISCELLANEOUS

10.01. Amendments, Etc. No amendment or waiver of any provision of this Agreement or any other Loan Document, and no consent to any departure by the Borrower or any other Loan Party therefrom, shall be effective unless in writing signed by the Required Lenders (or the Administrative Agent with the consent of the Required Lenders) and the Borrower or the applicable Loan Party, as the case may be, and acknowledged by the Administrative Agent, and each such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given; provided, however, that no such amendment, waiver or consent shall:



- (a) waive any condition set forth in Section 4.01 (other than Section 4.01(b)(i) or (c)), or, in the case of the initial Credit Extension, Section 4.02, without the written consent of each Lender;
- (b) without limiting the generality of clause (a) above, waive any condition set forth in Section 4.02 as to any Credit Extension under the Term Facility without the written consent of the Required Lenders;
- (c) extend or increase the Commitment of any Lender (or reinstate any Commitment terminated pursuant to Section 8.02) without the written consent of such Lender (it being understood that a waiver of any condition precedent set forth in Section 4.02 or of any Default or Event of Default, or the waiver (or amendment to the terms) of any mandatory prepayment shall, in any case, not constitute such an extension or increase);
- (d) postpone any date fixed by this Agreement or any other Loan Document for any payment (excluding mandatory prepayments) of principal, interest, fees or other amounts due to the Lenders (or any of them) hereunder or under such other Loan Document without the written consent of each Lender entitled to such payment (it being understood that the waiver (or amendment to the terms) of any mandatory prepayment of the Loans or any obligation of a Borrower to pay interest at the Default Rate shall not constitute such a postponement of any date scheduled for the payment of principal or interest and it further being understood that any change to the definition of “Total Secured Net Leverage Ratio” or the component definitions thereof shall not constitute a postponement of such scheduled payment);
- (e) reduce the principal of, or the rate of interest specified herein on, any Loan, or (subject to clause (ii) of the second proviso to this Section 10.01) any fees or other amounts payable hereunder or under any other Loan Document without the written consent of each Lender entitled to such amount; provided, however, that only the consent of the Required Lenders shall be necessary to amend the definition of “Default Rate” or to waive any obligation of the Borrower to pay interest at the Default Rate (it being understood that the waiver of (or amendment to the terms of) any mandatory prepayment of the Loans shall not constitute such a reduction);
- (f) change (i) Section 8.03 or (ii) the order of application of any reduction in the Commitments or any prepayment of Loans among the Facilities from the application thereof set forth in the applicable provisions of Section 2.03(b) or 2.04, respectively, in any manner that materially and adversely affects the ~~(x)~~ Lenders under the 2014 Term Facility without the written consent of the Required ~~2014 Term~~ Lenders; ~~or (y) the Lenders under the 2016 Term Facility without the written consent of the Required 2016 Term Lenders.~~
- (g) ~~(x)~~ change any provision of this Section 10.01 or the definition of “Required Lenders” or any other provision hereof specifying the number or percentage of Lenders required to amend, waive or otherwise modify any rights hereunder or make any determination or grant any consent hereunder without the written consent of each Lender; ~~(y) change the definition of “Required 2014 Term Lenders” without the written consent of each 2014 Term Lender or (z) change the definition of “Required 2016 Term Lenders” without the written consent of each 2016 Term Loan Lender;~~
- (h) other than in connection with a transaction permitted under Section 7.04 or 7.05 or otherwise as provided in Section 9.10, release all or substantially all of the Collateral in any transaction or series of related transactions, without the written consent of each Lender;
- (i) release all or substantially all of the value of the Guaranty, without the written consent of each Lender, except to the extent the release of any Subsidiary from the Guaranty is permitted pursuant to Section 6.12(f) or 9.10 (in which case such release may be made by the Administrative Agent acting alone); or
- (j) impose any greater restriction on the ability of any Lender under the Facility to assign any of its rights or obligations hereunder without the written consent of the Required Lenders;

and provided, further, that (i) no amendment, waiver or consent shall, unless in writing and signed by the Administrative Agent in addition to the Lenders required above, affect the rights or duties of the Administrative

Agent under this Agreement or any other Loan Document; and (ii) the Fee Letter may be amended, or rights or privileges thereunder waived, in a writing executed only by the parties thereto. Notwithstanding anything to the contrary herein, no Defaulting Lender shall have any right to approve or disapprove any amendment, waiver or consent hereunder (and any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender may be effected with the consent of the applicable Lenders other than Defaulting Lenders), except that (x) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender and (y) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that by its terms affects any Defaulting Lender disproportionately adversely relative to other affected Lenders shall require the consent of such Defaulting Lender.

Notwithstanding anything to the contrary in this Agreement or any other Loan Document, the Administrative Agent and the Borrower shall be permitted to amend any provision of the Loan Documents (and such amendment shall become effective without any further action or consent of any other party to any Loan Document) (x) if the Administrative Agent and the Borrower shall have jointly identified an obvious error or any error or omission of a technical or immaterial nature in any such provision and (y) in connection with the incurrence of any Incremental Term Loans, Credit Agreement Refinancing Indebtedness or Permitted Additional Indebtedness, to provide for the Loans hereunder to have the benefit of any more restrictive terms of such additional Indebtedness, to the extent contemplated hereby.

Notwithstanding any provision herein to the contrary, this Agreement may be amended with the written consent of the Required Lenders, the Administrative Agent and the Borrower (i) to add one or more additional term loan facilities to this Agreement and to permit the extensions of credit and all related obligations and liabilities arising in connection therewith from time to time outstanding to share ratably (or on a basis subordinated to the existing facilities hereunder) in the benefits of this Agreement and the other Loan Documents with the obligations and liabilities from time to time outstanding in respect of the existing facilities hereunder, and (ii) in connection with the foregoing, to permit, as deemed appropriate by the Administrative Agent and approved by the Required Lenders, the Lenders providing such additional credit facilities to participate in any required vote or action required to be approved by the Required Lenders or by any other number, percentage or class of Lenders hereunder.

If any Lender does not consent to a proposed amendment, waiver, consent or release with respect to any Loan Document that requires the consent of each Lender and that has been approved by the Required Lenders, the Borrower may replace such Non-Consenting Lender in accordance with Section 10.13; provided that such amendment, waiver, consent or release can be effected as a result of the assignment contemplated by such Section (together with all other such assignments required by the Borrower to be made pursuant to this paragraph).

10.02. Notices; Effectiveness; Electronic Communications. (a) Notices Generally. Except in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in subsection (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by facsimile or electronic mail as follows, and all notices and other communications expressly permitted hereunder to be given by telephone shall be made to the applicable telephone number, as follows:

- (i) if to the Borrower or the Administrative Agent to the address, facsimile number, electronic mail address or telephone number specified for such Person on Schedule 10.02; and
- (ii) if to any other Lender, to the address, facsimile number, electronic mail address or telephone number specified in its Administrative Questionnaire (including, as appropriate, notices delivered solely to the Person designated by a Lender on its Administrative Questionnaire then in effect for the delivery of notices that may contain material non-public information relating to the Borrower).

Notices and other communications sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices and other communications sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next Business Day for the recipient). Notices

and other communications delivered through electronic communications to the extent provided in subsection (b) below shall be effective as provided in such subsection (b).

(b) Electronic Communications. Notices and other communications to the Lenders hereunder may be delivered or furnished by electronic communication (including e-mail, FpML messaging, and Internet or intranet websites) pursuant to procedures approved by the Administrative Agent, provided that the foregoing shall not apply to notices to any Lender pursuant to Article II if such Lender has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication. The Administrative Agent or the Borrower may each, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it, provided that approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient at its e-mail address as described in the foregoing clause (i) of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii), if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice, email or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient.

(c) The Platform. THE PLATFORM IS PROVIDED "AS IS" AND "AS AVAILABLE." THE AGENT PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE BORROWER MATERIALS OR THE ADEQUACY OF THE PLATFORM, AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS IN OR OMISSIONS FROM THE BORROWER MATERIALS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY ANY AGENT PARTY IN CONNECTION WITH THE BORROWER MATERIALS OR THE PLATFORM. In no event shall the Administrative Agent or any of its Related Parties (collectively, the "Agent Parties") have any liability to the Borrower, any Lender or any other Person for losses, claims, damages, liabilities or expenses of any kind (whether in tort, contract or otherwise) arising out of the Borrower's, any Loan Party's or the Administrative Agent's transmission of Borrower Materials or notices through the Platform, except to the extent that such losses, claims, damages, liabilities or expenses are determined by a court of competent jurisdiction in a final and nonappealable judgment to have resulted from the gross negligence, bad faith or willful misconduct of such Agent Party (or its representatives) or breach in bad faith of such Agent Party's obligations under this Agreement or any other Loan Document.

(d) Change of Address, Etc. Each of the Borrower and the Administrative Agent may change its address, facsimile or telephone number for notices and other communications hereunder by notice to the other parties hereto. Each other Lender may change its address, facsimile or telephone number for notices and other communications hereunder by notice to the Borrower and the Administrative Agent. In addition, each Lender agrees to notify the Administrative Agent from time to time to ensure that the Administrative Agent has on record (i) an effective address, contact name, telephone number, facsimile number and electronic mail address to which notices and other communications may be sent and (ii) accurate wire instructions for such Lender. Furthermore, each Public Lender agrees to cause at least one individual at or on behalf of such Public Lender to at all times have selected the "Private Side Information" or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender's compliance procedures and applicable Law, including United States Federal and state securities Laws, to make reference to Borrower Materials that are not made available through the "Public Side Information" portion of the Platform and that may contain material non-public information with respect to the Borrower or its securities for purposes of United States Federal or state securities laws.

(e) Reliance by Administrative Agent and Lenders. The Administrative Agent and the Lenders shall be entitled to rely and act upon any notices (including telephonic notices and Committed Loan Notices) purportedly given by or on behalf of the Borrower even if (i) such notices were not made in a manner specified herein, were incomplete or were not preceded or followed by any other form of notice specified herein, or (ii) the terms thereof, as understood by the recipient, varied from any confirmation thereof. The Borrower shall indemnify the Administrative Agent, each Lender and the Related Parties of each of them from all losses, costs, expenses and liabilities resulting from the reliance by such Person on each notice purportedly given by or on behalf of the Borrower. All telephonic notices to and other telephonic communications with the Administrative Agent may be recorded by the Administrative Agent, and each of the parties hereto hereby consents to such recording.

10.03. No Waiver; Cumulative Remedies; Enforcement. No failure by any Lender or the Administrative Agent to exercise, and no delay by any such Person in exercising, any right, remedy, power or privilege hereunder or under any other Loan Document shall operate as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided, and provided under each other Loan Document, are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

Notwithstanding anything to the contrary contained herein or in any other Loan Document, the authority to enforce rights and remedies hereunder and under the other Loan Documents against the Loan Parties or any of them shall be vested exclusively in, and all actions and proceedings at law in connection with such enforcement shall be instituted and maintained exclusively by, the Administrative Agent in accordance with Section 8.02 for the benefit of all the Lenders; provided, however, that the foregoing shall not prohibit (a) the Administrative Agent from exercising on its own behalf the rights and remedies that inure to its benefit (solely in its capacity as Administrative Agent) hereunder and under the other Loan Documents, (b) [Reserved], (c) any Lender from exercising setoff rights in accordance with Section 10.08 (subject to the terms of Section 2.11), or (d) any Lender from filing proofs of claim or appearing and filing pleadings on its own behalf during the pendency of a proceeding relative to any Loan Party under any Debtor Relief Law; and provided, further, that if at any time there is no Person acting as Administrative Agent hereunder and under the other Loan Documents, then (i) the Required Lenders shall have the rights otherwise ascribed to the Administrative Agent pursuant to Section 8.02 and (ii) in addition to the matters set forth in clauses (b), (c) and (d) of the preceding proviso and subject to Section 2.11, any Lender may, with the consent of the Required Lenders, enforce any rights and remedies available to it and as authorized by the Required Lenders.

10.04. Expenses; Indemnity; Damage Waiver. (a) Costs and Expenses. The Borrower shall pay (i) all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent and its Affiliates (including the reasonable fees, charges and disbursements of counsel for the Administrative Agent), in connection with the syndication of the credit facilities provided for herein, the preparation, negotiation, execution, delivery and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated) and (ii) all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent or any Lender (including the fees, charges and disbursements of (x) one counsel to the Administrative Agent (plus one local counsel in each applicable jurisdiction and one specialty counsel in each applicable specialty), (y) one counsel to the Lenders (plus one local counsel in each applicable jurisdiction and one specialty counsel in each applicable specialty) and (z) in the case of an actual conflict of interest, one additional counsel for each group of similarly situated affected persons, taken as a whole), in connection with the enforcement or protection of its rights (A) in connection with this Agreement and the other Loan Documents, including its rights under this Section, or (B) in connection with Loans made hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans.

(b) Indemnification by the Borrower. The Borrower shall indemnify the Administrative Agent (and any sub-agent thereof) and each Lender, and each Related Party of any of the foregoing Persons (each such Person being called an “Indemnitee”) against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities, settlement costs and expenses (including, without limitation, the reasonable and documented out-of-pocket

fees, disbursements and other charges of counsel, limited to one counsel for the Indemnitees taken as a whole, one local counsel in each applicable jurisdiction, one specialty counsel in each applicable specialty and, solely in the case of an actual conflict of interest, one additional counsel in each relevant jurisdiction for each group of similarly situated affected Indemnitees, taken as a whole), incurred by any Indemnitee or asserted or awarded against any Indemnitee by any Person (including the Borrower or any other Loan Party) other than such Indemnitee and its Related Parties arising out of, in connection with, as a result of, or by reason of (including, without limitation, in connection with any investigation, litigation or proceeding or preparation of a defense in connection therewith) (i) the execution or delivery of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the performance by the parties hereto of their respective obligations hereunder or thereunder or the consummation of the transactions contemplated hereby or thereby, or, in the case of the Administrative Agent (and any sub-agent thereof) and its Related Parties only, the administration of this Agreement and the other Loan Documents (including in respect of any matters addressed in Section 3.01), (ii) any actual or alleged presence or Release of Hazardous Materials at, on, under or emanating from any property owned, leased or operated by any Loan Party or any of its Subsidiaries, or any Environmental Liability related in any way to any Loan Party or any of its Subsidiaries, or (iii) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by the Borrower or any other Loan Party or any of the Borrower's or such Loan Party's directors, shareholders or creditors, and regardless of whether any Indemnitee is a party thereto, IN ALL CASES, WHETHER OR NOT CAUSED BY OR ARISING, IN WHOLE OR IN PART, OUT OF THE COMPARATIVE, CONTRIBUTORY OR SOLE NEGLIGENCE OF THE INDEMNITEE; provided that the indemnification provided for in this Section 10.04(b) shall not apply to the extent that such claim, damage, loss, liability or expense (x) is found in a final, nonappealable judgment by a court of competent jurisdiction to have resulted from such Indemnitee's gross negligence, bad faith or willful misconduct, (y) is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from a material breach in bad faith of such Indemnitee's obligations under this Agreement or (z) arises out of disputes solely between and among Indemnitees (other than any dispute involving an Indemnitee acting in its capacity or fulfilling its role as Administrative Agent, Arranger, agent or similar role) that do not arise out of or in connection with any act or omission of a Loan Party or any of their Affiliates. Without limiting the provisions of Section 3.01(c), this Section 10.04(b) shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(c) Reimbursement by Lenders. To the extent that the Borrower for any reason fails to indefeasibly pay any amount required under subsection (a) or (b) of this Section to be paid by it to the Administrative Agent (or any sub-agent thereof) or any Related Party thereof each Lender severally agrees to pay to the Administrative Agent (or any such sub-agent) or such Related Party, as the case may be, such Lender's *pro rata* share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought based on each Lender's Commitment at such time) of such unpaid amount (including any such unpaid amount in respect of a claim asserted by such Lender), such payment to be made severally among them based on such Lenders' Applicable Percentage (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought), provided, further that, the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent (or any such sub-agent) or against any Related Party thereof acting for the Administrative Agent (or any such sub-agent) in connection with such capacity. The obligations of the Lenders under this subsection (c) are subject to the provisions of Section 2.10(d).

(d) Waiver of Consequential Damages, Etc. To the fullest extent permitted by applicable law, the Borrower shall not assert, and hereby waives, and acknowledges that no other Person shall have, any claim against any Indemnitee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or the use of the proceeds thereof. No Indemnitee referred to in subsection (b) above shall be liable for any damages arising from the use by others of any information or other materials distributed to such party by such Indemnitee through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby, other than for damages resulting from

the gross negligence, bad faith or willful misconduct of such Indemnitee as determined by a final and nonappealable judgment of a court of competent jurisdiction.

(e) Payments. All amounts due under this Section shall be payable not later than 30 days after receipt of a reasonably detailed invoice therefor.

(f) Survival. The agreements in this Section and the indemnity provision of Section 10.02(e) shall survive the resignation of the Administrative Agent, the replacement of any Lender, the termination of the Aggregate Commitments and the repayment, satisfaction or discharge of all the other Obligations.

10.05. Payments Set Aside. To the extent that any payment by or on behalf of the Borrower is made to the Administrative Agent or any Lender, or the Administrative Agent or any Lender exercises its right of setoff, and such payment or the proceeds of such setoff or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by the Administrative Agent or such Lender in its discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Law or otherwise, then (a) to the extent of such recovery, the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such setoff had not occurred, and (b) each Lender severally agrees to pay to the Administrative Agent upon demand its applicable share (without duplication) of any amount so recovered from or repaid by the Administrative Agent, plus interest thereon from the date of such demand to the date such payment is made at a rate per annum equal to the Federal Funds Rate from time to time in effect. The obligations of the Lenders under clause (b) of the preceding sentence shall survive the payment in full of the Obligations and the termination of this Agreement.

10.06. Successors and Assigns. (a) Successors and Assigns Generally. The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that the Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of Section 10.06(b) or (ii) by way of participation in accordance with the provisions of Section 10.06(d) (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in subsection (d) of this Section and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) Assignments by Lenders. Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment(s) and the Loans at the time owing to it); provided that any such assignment shall be subject to the following conditions:

(i) Minimum Amounts.

(A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and/or the Loans at the time owing to it or contemporaneous assignments to related Approved Funds that equal at least the amount specified in paragraph (b)(i)(B) of this Section in the aggregate or in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned; and

(B) in any case not described in subsection (b)(i)(A) of this Section, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding thereunder) or, if the applicable Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment, determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent or, if "Trade Date" is specified in the Assignment and Assumption, as of the Trade Date, shall not be less than \$1,000,000 unless each of the Administrative Agent and, so long as no Event

of Default under Sections 8.01(a), (f) or (g) has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed); provided that concurrent assignments to members of an Assignee Group and concurrent assignments from members of an Assignee Group to a single Eligible Assignee (or to an Eligible Assignee and members of its Assignee Group) will be treated as a single assignment for purposes of determining whether such minimum amount has been met.

(ii) Proportionate Amounts. Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement with respect to the Loans or the Commitment assigned, except that this clause (ii) shall not prohibit any Lender from assigning all or a portion of its rights and obligations among the term loan facilities provided pursuant to the last paragraph of Section 10.01 on a non-*pro rata* basis;

(iii) Required Consents. No consent shall be required for any assignment except to the extent required by subsection (b)(i)(B) of this Section and, in addition:

(A) the consent of the Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (1) an Event of Default under Section 8.01(a), (f) or (g) has occurred and is continuing at the time of such assignment or (2) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund; provided that the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within five (5) Business Days after having received notice thereof;

(B) the consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed) shall be required if such assignment is to a Person that is not a Lender, an Affiliate of such Lender or an Approved Fund with respect to such Lender; and

(iv) Assignment and Assumption. The parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption, together with a processing and recordation fee in the amount of \$3,500; provided, however, that the Administrative Agent may, in its sole discretion, elect to waive such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire.

(v) No Assignment to Certain Persons. No such assignment shall be made (A) to the Borrower or any of the Borrower's Affiliates or Subsidiaries except to the Borrower in accordance with Annex I or Section 10.06(f), (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B), or (C) to a natural Person.

(vi) Certain Additional Payments. In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable *pro rata* share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (x) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent or any Lender hereunder (and interest accrued thereon) and (y) acquire (and fund as appropriate) its full *pro rata* share of all Loans in accordance with its Applicable Percentage. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable Law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

(vii) Subject to acceptance and recording thereof by the Administrative Agent pursuant to subsection (c) of this Section, from and after the effective date specified in each Assignment and Assumption, the

assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) but shall continue to be entitled to the benefits of Sections 3.01, 3.04, 3.05 and 10.04 with respect to facts and circumstances occurring prior to the effective date of such assignment; provided, that except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender. Upon request, the Borrower (at its expense) shall execute and deliver a Note to the assignee Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this subsection shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with subsection (d) of this Section.

(c) Register. The Administrative Agent, acting solely for this purpose as an agent of the Borrower (and such agency being solely for tax purposes), shall maintain at the Administrative Agent's Office a copy of each Assignment and Assumption delivered to it (or the equivalent thereof in electronic form) and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(d) Participations. Any Lender may at any time, without the consent of, or notice to, the Borrower or the Administrative Agent, sell participations to any Person (other than a natural Person, a Defaulting Lender or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "Participant") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Commitment and/or the Loans owing to it); provided that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) the Borrower, the Administrative Agent and the Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 10.04(c) without regard to the existence of any participation.

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that, to the extent the consent of such Lender to such amendment, waiver or other modification under this Agreement is required by the first proviso to Section 10.01, such Lender will not, without the consent of the Participant, agree to such amendment, waiver or other modification. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 3.01, 3.04 and 3.05 to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to subsection (b) of this Section (it being understood that the documentation required under Section 3.01(e) shall be delivered to the Lender who sells the participation) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section; provided that such Participant (A) agrees to be subject to the provisions of Sections 3.06 and 10.13 as if it were an assignee under paragraph (b) of this Section and (B) shall not be entitled to receive any greater payment under Sections 3.01 or 3.04, with respect to any participation, than the Lender from whom it acquired the applicable participation would have been entitled to receive. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 3.06 and Section 10.13 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 10.08 as though it were a Lender; provided that such Participant agrees to be subject to Section 2.11 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as an agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and .stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register");



provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(e) Certain Pledges. Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement (including under its Note, if any) to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

(f) Notwithstanding anything to the contrary contained herein, any Lender may assign all or a portion of its Loans to the Borrower in accordance with this Section 10.06(f); provided that:

(i) such assignment is made (A) in accordance with the procedures described in Annex I or (B) pursuant to an open market purchase on a non-*pro rata* basis;

(ii) no Default or Event of Default has occurred or is continuing at the time of such assignment or would result therefrom;

(iii) any Loans assigned to the Borrower shall be automatically and permanently cancelled immediately upon the effectiveness of such assignment and will thereafter no longer be outstanding for any purpose hereunder; and

(iv) each Lender participating in any prepayment described in this Section 10.06 (f) acknowledges and agrees that in connection therewith, (A) the Borrower then may have, and later may come into possession of, information regarding the Borrower and its Affiliates not known to such Lender and that may be material to a decision by such Lender to participate in such prepayment (including material non-public information with respect to the Borrower or its securities for purposes of United States Federal or state securities laws) ("Excluded Information"), (B) such Lender has independently and, without reliance on the Borrower, any of its Subsidiaries, the Administrative Agent or any of their respective Affiliates, has made its own analysis and determination to participate in such prepayment notwithstanding such Lender's lack of knowledge of the Excluded Information, (C) none of the Borrower or any of its Affiliates shall be required to make any representation that it is not in possession of Excluded Information and the assigning Lender shall deliver to the Administrative Agent and the Borrower a customary "big boy" disclaimer letter, and (D) none of the Borrower, its Subsidiaries, the Administrative Agent or any of their respective Affiliates shall have any liability to such Lender, and such Lender hereby waives and releases, to the extent permitted by law, any claims such Lender may have against the Borrower, its Subsidiaries, the Administrative Agent and their respective Affiliates, under applicable laws or otherwise, with respect to the nondisclosure of the Excluded Information.

10.07. Treatment of Certain Information; Confidentiality. Each of the Administrative Agent and the Lenders agrees to maintain the confidentiality of, and not disclose to any Person, the Information (as defined below), except that Information may be disclosed (a) to its Affiliates and to its Related Parties who need to know such Information in connection with the transactions contemplated hereby (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and are subject to customary confidentiality obligations of professional practice or agree to treat the Information as confidential), (b) to the extent required or requested by any regulatory authority purporting to have jurisdiction over such Person or its Related Parties (including any self-regulatory authority, such as the National Association of Insurance Commissioners), in which case such Person shall use commercially reasonable efforts to, except with respect to any audit or examination conducted by

bank accountants or any governmental regulatory authority exercising examination or regulatory authority, promptly notify the Borrower, to the extent practicable and lawfully permitted to do so, (c) to the extent required by applicable laws or regulations or by any subpoena or similar legal process, in which case such Person shall use commercially reasonable efforts to, except with respect to any audit or examination conducted by bank accountants or any governmental regulatory authority exercising examination or regulatory authority, promptly notify the Borrower, to the extent practicable and lawfully permitted to do so, (d) to any other party hereto, (e) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an agreement containing provisions substantially the same as those of this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights and obligations under this Agreement or any Eligible Assignee invited to be a Lender pursuant to Section 2.13 or (ii) any actual or prospective party (or its Related Parties) to any swap, derivative or other transaction under which payments are to be made by reference to the Borrower and its obligations, this Agreement or payments hereunder, (g) on a confidential basis to the CUSIP Service Bureau or any similar agency in connection with the issuance and monitoring of CUSIP numbers of other market identifiers with respect to the credit facilities provided hereunder, (h) with the consent of the Borrower or (i) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section or (ii) becomes available to the Administrative Agent, any Lender or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower that is not, to such Person's knowledge, in breach of contractual or fiduciary confidentiality obligations owing to the Borrower or any of its Subsidiaries.

For purposes of this Section, "Information" means all information received from the Borrower or any Subsidiary relating to the Borrower or any Subsidiary or any of their respective businesses, other than any such information that is available to the Administrative Agent, any Lender on a nonconfidential basis prior to disclosure by the Borrower or any Subsidiary.

Each of the Administrative Agent and the Lenders acknowledges that (a) the Information may include material non-public information concerning the Borrower or a Subsidiary, as the case may be, (b) it has developed compliance procedures regarding the use of material non-public information and (c) it will handle such material non-public information in accordance with applicable Law, including United States Federal and state securities Laws.

10.08. Right of Setoff. If an Event of Default shall have occurred and be continuing, each Lender and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender or any such Affiliate to or for the credit or the account of the Borrower against any and all of the obligations of the Borrower now or hereafter existing under this Agreement or any other Loan Document to such Lender, irrespective of whether or not such Lender shall have made any demand under this Agreement or any other Loan Document and although such obligations of the Borrower may be contingent or unmatured or are owed to a branch or office or Affiliate of such Lender different from the branch, office or Affiliate holding such deposit or obligated on such indebtedness; provided, that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.15 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent and the Lenders, and (y) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender and their respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender or their respective Affiliates may have. Each Lender agrees to notify the Borrower and the Administrative Agent promptly after any such setoff and application, provided that the failure to give such notice shall not affect the validity of such setoff and application.

10.09. Interest Rate Limitation. Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable Law (the "Maximum Rate"). If the Administrative Agent or any Lender shall receive

interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans or, if it exceeds such unpaid principal, refunded to the Borrower. In determining whether the interest contracted for, charged, or received by the Administrative Agent or a Lender exceeds the Maximum Rate, such Person may, to the extent permitted by applicable Law, (a) characterize any payment that is not principal as an expense, fee, or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, and (c) amortize, prorate, allocate, and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Obligations hereunder.

10.10. Counterparts; Integration; Effectiveness. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement and the other Loan Documents and any separate letter agreements with respect to fees payable to the Administrative Agent, constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as provided in Section 4.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto. Delivery of an executed counterpart of a signature page of this Agreement by facsimile or other electronic imaging means (e.g. "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Agreement.

10.11. Survival of Representations and Warranties. All representations and warranties made hereunder and in any other Loan Document or other document delivered pursuant hereto or thereto or in connection herewith or therewith shall survive the execution and delivery hereof and thereof. Such representations and warranties have been or will be relied upon by the Administrative Agent and each Lender, regardless of any investigation made by the Administrative Agent or any Lender or on their behalf and notwithstanding that the Administrative Agent or any Lender may have had notice or knowledge of any Default at the time of any Credit Extension, and shall continue in full force and effect as long as any Loan or any other Obligation hereunder shall remain unpaid or unsatisfied.

10.12. Severability. If any provision of this Agreement or the other Loan Documents is held to be illegal, invalid or unenforceable, (a) the legality, validity and enforceability of the remaining provisions of this Agreement and the other Loan Documents shall not be affected or impaired thereby and (b) the parties shall endeavor in good faith negotiations to replace the illegal, invalid or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the illegal, invalid or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. Without limiting the foregoing provisions of this Section 10.12, if and to the extent that the enforceability of any provisions in this Agreement relating to Defaulting Lenders shall be limited by Debtor Relief Laws, as determined in good faith by the Administrative Agent, then such provisions shall be deemed to be in effect only to the extent not so limited.

10.13. Replacement of Lenders. If the Borrower is entitled to replace a Lender pursuant to the provisions of Section 3.06, or if any Lender is a Defaulting Lender or a Non-Consenting Lender or if any other circumstance exists hereunder that gives the Borrower the right to replace a Lender as a party hereto, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 10.06), all of its interests, rights (other than its existing rights to payments pursuant to Sections 3.01 and 3.04) and obligations under this Agreement and the related Loan Documents to an Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment), provided that:

- (a) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 10.06(b);
- (b) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan

Documents (including any amounts under Section 3.05) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(c) in the case of any such assignment resulting from a claim for compensation under Section 3.04 or payments required to be made pursuant to Section 3.01, such assignment will result in a reduction in such compensation or payments thereafter;

(d) such assignment does not conflict with applicable Laws; and

(e) in the case of an assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

In connection with any such replacement, if any such Lender does not execute and deliver to the Administrative Agent a duly executed Assignment and Assumption reflecting such replacement within five Business Days of the date on which the assignee Lender executes and delivers such Assignment and Assumption to such Lender, then such Lender shall be deemed to have executed and delivered such Assignment and Assumption without any action on the part of the Lender.

10.14. Governing Law; Jurisdiction; Etc. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT (EXCEPT, AS TO ANY OTHER LOAN DOCUMENT, AS EXPRESSLY SET FORTH THEREIN) AND THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

(a) SUBMISSION TO JURISDICTION. THE BORROWER IRREVOCABLY AND UNCONDITIONALLY AGREES THAT IT WILL NOT COMMENCE ANY ACTION, LITIGATION OR PROCEEDING OF ANY KIND OR DESCRIPTION, WHETHER IN LAW OR EQUITY, WHETHER IN CONTRACT OR IN TORT OR OTHERWISE, AGAINST THE ADMINISTRATIVE AGENT, ANY LENDER, OR ANY RELATED PARTY THEREOF IN ANY WAY RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS RELATING HERETO OR THERETO, IN ANY FORUM OTHER THAN THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE JURISDICTION OF SUCH COURTS AND AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION, LITIGATION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION, LITIGATION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR IN ANY OTHER LOAN DOCUMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT OR ANY LENDER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AGAINST THE BORROWER OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(b) WAIVER OF VENUE. THE BORROWER IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT IN ANY

COURT REFERRED TO IN PARAGRAPH (B) OF THIS SECTION. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(c) SERVICE OF PROCESS. EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 10.02. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW

10.15. Waiver of Jury Trial. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

10.16. No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document), the Borrower acknowledges and agrees, and acknowledges its Affiliates' understanding, that: (i) (A) the arranging and other services regarding this Agreement provided by the Administrative Agent, the Arrangers, and the Lenders are arm's-length commercial transactions between the Borrower and its Affiliates, on the one hand, and the Administrative Agent, the Arrangers and the Lenders, on the other hand, (B) the Borrower has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (C) the Borrower is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents; (ii) (A) the Administrative Agent, the Arrangers and the Lenders each is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary for the Borrower or any of its Affiliates, or any other Person and (B) neither the Administrative Agent, the Arrangers nor any Lender has any obligation to the Borrower or any of its Affiliates with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; and (iii) the Administrative Agent, the Arrangers, the Lenders, and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower and its Affiliates, and neither the Administrative Agent, the Arrangers nor any Lender has any obligation to disclose any of such interests to the Borrower or its Affiliates. To the fullest extent permitted by law, the Borrower hereby waives and releases any claims that it may have against the Administrative Agent, the Arrangers and the Lenders with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transaction contemplated hereby.

10.17. Electronic Execution of Assignments and Certain Other Documents. The words "execution," "execute", "signed," "signature," and words of like import in or related to any document to be signed in connection with this Agreement and the transactions contemplated hereby (including without limitation Assignment and Assumptions, amendments or other Committed Loan Notices, waivers and consents) shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; provided that notwithstanding anything

contained herein to the contrary the Administrative Agent is under no obligation to agree to accept electronic signatures in any form or in any format unless expressly agreed to by the Administrative Agent pursuant to procedures approved by it.

10.18. USA PATRIOT Act. Each Lender that is subject to the Patriot Act (as hereinafter defined) and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies the Borrower that pursuant to the requirements of the Patriot Act, it is required to obtain, verify and record information that identifies each Loan Party, which information includes the name and address of each Loan Party and other information that will allow such Lender or the Administrative Agent, as applicable, to identify each Loan Party in accordance with the Patriot Act. The Borrower shall, promptly following a request by the Administrative Agent or any Lender, provide all documentation and other information that the Administrative Agent or such Lender requests in order to comply with its ongoing obligations under applicable “know your customer” an anti-money laundering rules and regulations, including the Patriot Act.

10.19. Intercreditor Agreement. Each Lender hereby acknowledges that it has received and reviewed the Intercreditor Agreement and agrees to be bound by the terms thereof. Each Lender (and each Person that becomes a Lender under this Agreement after the date hereof) hereby authorizes and directs the Administrative Agent to enter into the Intercreditor Agreement on behalf of such Lender and agrees that the Administrative Agent may take such actions on its behalf as is contemplated by the terms of the Intercreditor Agreement. In addition, each Lender and the Administrative Agent acknowledge and agree that (a) the rights and remedies of the Administrative Agent and the Lenders hereunder and under the other Loan Documents are subject to the Intercreditor Agreement and (b) in the event of any conflict, the provisions of the Intercreditor Agreement shall control. The Administrative Agent is hereby further authorized to enter into Other Intercreditor Agreements consistent with the terms of this Agreement, and each Lender agrees to be bound by the terms thereof.

*IN WITNESS WHEREOF*, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

CIENA CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

BANK OF AMERICA, N.A., as  
Administrative Agent

By: \_\_\_\_\_  
Name:  
Title:

BANK OF AMERICA, N.A., as a Lender

By: \_\_\_\_\_  
Name:  
Title:

**AMENDMENTS TO SECURITY AGREEMENT**

[Changed pages to Security Agreement follow]



TERM LOAN SECURITY AGREEMENT

among

CIENA CORPORATION,  
EACH OTHER GRANTOR  
FROM TIME TO TIME PARTY HERETO

and

BANK OF AMERICA, N.A.,  
as COLLATERAL AGENT

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Dated as of July 15, 2014

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TERM LOAN SECURITY AGREEMENT, dated as of July 15, 2014, made by each of the undersigned grantors (each, a “Grantor” and, together with any other entity that becomes a grantor hereunder pursuant to Section 8.12 hereof, the “Grantors”) in favor of BANK OF AMERICA, N.A., as collateral agent (in such capacity, together with any successor collateral agent, the “Collateral Agent”), for the benefit of the Secured Parties (as defined below). Certain capitalized terms as used herein are defined in Article VII hereof. Except as otherwise defined herein, all capitalized terms used herein and defined in the Credit Agreement (as defined below) shall be used herein as therein defined.

WITNESSETH:

WHEREAS, Ciena Corporation, a Delaware corporation (the “Company”), each lender from time to time party thereto (collectively, the “Lenders”) and Bank of America, N.A., as administrative agent (in such capacity, together with any successor administrative agent, the “Administrative Agent”) have entered into a Credit Agreement, dated as of July 15, 2014 (as amended, modified, restated and/or supplemented from time to time, the “Credit Agreement”), pursuant to which the Lenders have agreed, on a several basis, to make Loans to the Company upon the terms and subject to the conditions set forth therein;

WHEREAS, pursuant to the Guaranty, each Grantor (other than the Company) has jointly and severally guaranteed to the Secured Parties the payment when due of all Guaranteed Obligations as described (and defined) therein;

WHEREAS, it is a condition precedent to the making of Loans to the Company that each Grantor shall have executed and delivered to the Collateral Agent this Agreement; and

WHEREAS, each Grantor will benefit from the incurrence of Loans by the Company;

NOW, THEREFORE, in consideration of the foregoing and other benefits accruing to each Grantor, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby makes the following representations and warranties to the Collateral Agent for the benefit of the Secured Parties and hereby covenants and agrees with the Collateral Agent for the benefit of the Secured Parties as follows:

ARTICLE I  
SECURITY INTERESTS

1.1. Grant of Security Interests. (a) As security for the prompt and complete payment and performance when due of the Obligations, each Grantor does hereby assign and transfer unto the Collateral Agent, and does hereby pledge and grant to the Collateral Agent, for the benefit of the Secured Parties, a continuing security interest in all of the right, title and interest of such Grantor in, to and under all of the following personal property (and all rights therein) of such Grantor, or in which or to which such Grantor has any rights, in each case whether now existing or hereafter from time to time acquired or arising and regardless of where located:

- (i) each and every Account (and all rights to receive payments, indebtedness and other obligations (whether constituting an Account, Chattel Paper (including Electronic Chattel Paper), Instrument, Document or General Intangible));
- (ii) all cash and Money;
- (iii) the Cash Collateral Account and all monies, securities, Instruments and other investments deposited or required to be deposited in the Cash Collateral Account;

- (iv) all (x) Deposit Accounts, collection accounts, disbursement accounts and lock boxes and all cash, Money, checks, other negotiable instruments, funds and other evidences of payments held therein or credited thereto, (y) Securities Accounts and Security Entitlements and Securities credited thereto, and all cash, Money, checks, marketable securities, Financial Assets and other property held therein or credited thereto, and (z) Commodity Accounts and all cash, Money, marketable securities, Financial Assets and other property held therein or credited thereto;
- (v) all Chattel Paper (including, without limitation, all Tangible Chattel Paper and all Electronic Chattel Paper);
- (vi) all Commercial Tort Claims set forth on Annex E hereto or for which notice is required to be provided pursuant to Section 3.1 below;
- (vii) All Contracts, together with all Contract Rights arising thereunder;
- (viii) all Documents;
- (ix) all Equipment;
- (x) all Fixtures;
- (xi) all Goods;
- (xii) all Instruments;
- (xiii) all Intellectual Property;
- (xiv) all Promissory Notes;
- (xv) all Inventory;
- (xvi) all Investment Property;
- (xvii) all Letter-of-Credit Rights (whether or not the respective letter of credit is evidenced by a writing);
- (xviii) all General Intangibles;
- (xix) all Payment Intangibles (including corporate and other tax refunds);
- (xx) all Permits;
- (xxi) all books and records (including all books, databases, customer lists, and records, whether tangible or electronic, which contain any information relating to any of the foregoing);

(xxii) with respect to each right to payment or performance included in each of the foregoing, any Supporting Obligation that supports such payment or performance and any Lien that secures such right to payment or performance or secures any such Supporting Obligation; and

(xxiii) all substitutions, replacements accessions, Proceeds and products of any and all of the foregoing, including collateral security and guarantees with respect to any of the foregoing and all cash, Money, insurance proceeds, Instruments, Securities, Financial Assets, income, royalties, payments, licensing, damages and Deposit Accounts constituting Proceeds of the foregoing (all of the above, the “Collateral”).

(b) Notwithstanding anything herein to the contrary, in no event shall the security interests and Liens granted under Section 1.1(a) hereof attach to, and the term “Collateral” (and the component terms thereof) shall not include, (i) any property, interest or other rights for so long as the grant of such security interest shall constitute or result in (A) a breach or termination pursuant to the terms of, or a default under, any General Intangible, lease, license, contract, agreement or other document, (B) a breach of any law or regulation which prohibits the creation of a security interest thereunder (other than to the extent that any such term specified in clause (A) or (B) above is rendered ineffective pursuant to Section 9-406, 9 407, 9-408 or 9-409 of the UCC (or any successor provision or provisions) of any relevant jurisdiction or any other then-applicable law (including any applicable bankruptcy laws) or principles of equity) or (C) require the consent of a Governmental Authority to permit the grant of a security interest therein (and such consent has not been obtained); provided, however, that such security interest shall attach immediately at such time as the condition causing such abandonment, invalidation, unenforceability breach or termination shall no longer be effective and to the extent severable, shall attach immediately to any portion of such property or other rights that does not result in any of the consequences specified in clause (A), (B) or (C) above; (ii) the Pledge Agreement Collateral, including any asset of a Grantor excluded from the Pledge Agreement Collateral pursuant to the proviso to Section 3.1 of the Pledge Agreement or the corresponding provision of any other Pledge Agreement, as applicable; (iii) any treasury stock of a Grantor or other Margin Stock, in each case, unless the Secured Parties have made any necessary filings with the FRB in connection therewith and the Grantors have provided the Collateral Agent an executed Form FR U-1; provided however, that each applicable Grantor shall provide to the Secured Parties notice of the existence any Margin Stock (other than treasury stock) that would constitute Collateral absent this proviso at the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement and, thereafter, such Margin Stock shall constitute Collateral to the extent the Secured Parties have made such necessary filings with the FRB in connection therewith and the Grantors have provided the Collateral Agent an executed Form FR U-1; (iv) Deposit Accounts the balance of which consists (x) exclusively of withheld income taxes, employment taxes, or amounts required to be paid over to certain employee benefit plans and (y) segregated deposit accounts constituting and the balance of which consists solely of funds set aside in connection with tax, payroll and trust accounts, and in the event constituting “Excluded Assets” (or such similar term) under the ABL Credit Documents, any other account of the type described in clause (iv) not otherwise constituting a Deposit Account; (v) any Vehicles and other assets subject to certificates of title (other than to the extent such rights can be perfected by the filing of a financing statement under the UCC); and (vi) any United States “intent-to-use” Trademark application prior to the filing of a “Statement of Use” or “Amendment to Allege Use” with respect thereto, to the extent, if any, that, and solely during the period, if any, in which the grant of a security interest therein would impair the validity or enforceability of such application under applicable federal law (other than to the extent such rights can be perfected by the filing of a financing statement under the UCC) (the assets described in preceding clauses (i) through (vi) hereof, collectively, the “Excluded Assets”);

(c) The security interest of the Collateral Agent under this Agreement extends to all Collateral which any Grantor may acquire, or with respect to which any Grantor may obtain rights, at any time during the term of this Agreement.

(d) The Liens hereunder are granted as security only and shall not subject the Administrative Agent or any other Secured Party to, or transfer or in any way affect or modify, any obligation or liability of any Grantor with respect to any of the Collateral or any transaction in connection therewith.

(e) Notwithstanding anything herein to the contrary, the Grantors make no representations or warranties hereunder, and the covenants hereunder shall not apply, in respect of the Excluded Assets.

1.2. For purposes of enabling the Collateral Agent to exercise rights and remedies under this Agreement (but without limiting the other provisions of this Agreement), each Grantor hereby grants to the Collateral Agent and its agents, representatives and designees an irrevocable, nonexclusive, royalty free license, rent-free license and rent-free lease (which will be binding on any successor or assignee of such Grantor) to, after the occurrence and during the continuance of an Event of Default, have access to and use all of such Grantor's (x) Real Property (including the buildings and other improvements thereon), Equipment and fixtures (whether or not considered Real Property) and (y) Intellectual Property (including, without limitation, all Domain Names, Patents, Trademarks, Copyrights, Trade Secrets and object code and access to all media, written or electronic, in which any licensed items may be recorded or stored and to all computer software and programs used for the compilation or printout thereof, as well as an irrevocable, nonexclusive license to grant to any third party a sub-licensable sub-license to use the foregoing rights, but excluding any source code) for which the Collateral Agent hereby agrees to take all commercially reasonable actions in connection with its use of such intellectual property to protect such Grantor's rights and interest in such Intellectual Property (provided that in any event, the Collateral Agent shall not have any liability in connection therewith, other than liability which is the direct result of the Collateral Agent's gross negligence or willful misconduct, as determined by a court of competent jurisdiction in a final and non-appealable decision), for the purpose of (i) arranging for and effecting the sale, distribution or other disposition of Collateral located on any such Real Property, including the manufacture, production, completion, packaging, advertising, distribution and other preparation of such Collateral (including, without limitation, work-in-process, raw materials and complete Inventory) for sale, distribution or other disposition, (ii) selling (by public auction, private sale, going out of business sale or similar sale, whether in bulk, in lots or to customers in the ordinary course of business or otherwise and which sale may include augmented Inventory of the same type sold in any Grantor's business), (iii) storing or otherwise dealing with the Collateral, (iv) collecting all Accounts and copying, using and preserving any and all information relating to the Collateral, and (v) otherwise dealing with the Collateral as part of the exercise of any rights or remedies provided to the Collateral Agent hereunder or under the other Credit Documents, in each case without the interference by any Grantor or any other Subsidiary of the Company and without incurring any liability to any Grantor or any other Subsidiary of the Company, except any liability which is the direct result of the Collateral Agent's gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a final and non-appealable decision). Each Grantor will, and will cause each of its Subsidiaries to, cooperate with the Collateral Agent and its agents, representatives and designees in allowing the Collateral Agent to exercise the foregoing rights. To the extent that any asset of any Grantor in which the Collateral Agent has access or use rights as provided above is to be sold or otherwise disposed of after the occurrence and during the continuance of an Event of Default, such Grantor shall, if requested by the Collateral Agent in writing, cause the buyer to agree in writing to be subject to, and comply with the terms of, this Section 1.2. The Collateral Agent shall have the right to bring an action to enforce its rights under this Section 1.2, including, without limitation, an action seeking possession of the applicable Collateral and/or specific performance of this Section 1.2.

1.3. Power of Attorney. Subject to the Intercreditor Agreement, until this Agreement is terminated in accordance with its terms, each Grantor hereby constitutes and appoints the Collateral Agent its true and lawful attorney, irrevocably, with full power after the occurrence of and during the continuance of an Event of Default (in the name of such Grantor or otherwise) to act, require, demand, receive, compound and give acquittance for any and all moneys and claims for moneys due or to become due to such Grantor under or arising out of the Collateral, to endorse any checks or other instruments or orders in connection therewith and to file any claims or take any action or institute any proceedings which the Collateral Agent may deem to be necessary or advisable to protect the interests of the Secured Parties, which appointment as attorney is coupled with an interest.

## ARTICLE II GENERAL REPRESENTATIONS, WARRANTIES AND COVENANTS

Each Grantor represents, warrants and covenants, which representations, warranties and covenants shall survive execution and delivery of this Agreement, as follows:

2.1. Necessary Perfection Action. The provisions of this Agreement (when executed and delivered by all parties thereto) are effective to create in favor of the Collateral Agent, for the benefit of the Secured Parties, a legal, valid and enforceable security interest in all right, title and interest of the Grantors in all of the Collateral described herein, and when (i) proper UCC financing statements have been filed in the appropriate filing offices against each Grantor, (ii) the recordation of Intellectual Property Security Agreements with the United States Patent and Trademark Office and the United States Copyright Office, as applicable and (iii) the Collateral Agent has obtained “control” (within the meaning of the UCC) of the Controlled Deposit Accounts, the Collateral Agent, for the benefit of the Secured Parties, shall have a perfected security interest in all right, title and interest in all of the Collateral to the extent such security interest can be perfected by (i) filing a UCC financing statement under the UCC, (ii) filing with the United States Patent and Trademark Office and the United States Copyright Office, or, (iii) with respect to the Controlled Deposit Accounts, by the Collateral Agent having “control”, subject to no other Liens other than Permitted Liens.

2.2. No Liens. Such Grantor is, and as to all Collateral acquired by it from time to time after the date hereof such Grantor will be, the owner of all Collateral free from any Lien, security interest, encumbrance or other right, title or interest of any Person (other than Permitted Liens), and such Grantor shall defend the Collateral against all claims and demands of all Persons at any time claiming the same or any interest therein adverse to the Collateral Agent (other than Permitted Liens).

2.3. Other Financing Statements. As of the date hereof, there is no financing statement (or similar statement or instrument of registration under the law of any relevant jurisdiction) covering or purporting to cover any interest of any kind in the Collateral (other than financing statements, similar statements or instruments of registration filed in respect of Permitted Liens), and so long as the Termination Date has not occurred, such Grantor will not execute or authorize to be filed in any public office any financing statement (or similar statement or instrument of registration under the law of any jurisdiction) or statements relating to the Collateral, except financing statements filed or to be filed in respect of and covering the security interests granted hereby by such Grantor or in connection with Permitted Liens.

2.4. Location of Inventory and Equipment. All Inventory and Equipment having a net book value in excess of \$1,000,000 held on the date hereof by each Grantor, other than any such Inventory and Equipment (i) in transit or out for repair, (ii) at customer, resellers, supplier or contract

manufacturer locations, (iii) located outside of the United States or (iv) at locations used solely by such Grantor for purposes of warehousing spare parts, is located at one of the locations shown on Annex F hereto for such Grantor.

2.5. Chief Executive Office, Record Locations. The chief executive office of such Grantor is, on the date of this Agreement, located at the address indicated on Annex A hereto for such Grantor. During the period of the four calendar months preceding the date of this Agreement, the chief executive office of such Grantor has not been located at any address other than that indicated on Annex A in accordance with the immediately preceding sentence, in each case unless each such other address is also indicated on Annex A hereto for such Grantor.

2.6. Legal Names; Type of Organization (and Whether a Registered Organization and/or a Transmitting Utility); Jurisdiction of Organization; Location; Organizational Identification Numbers; Federal Employer Identification Number; Changes Thereto; etc. As of the date hereof, the exact legal name of each Grantor, the type of organization of such Grantor, whether or not such Grantor is a Registered Organization, the jurisdiction of organization of such Grantor, such Grantor's Location, the organizational identification number (if any) of such Grantor, the Federal Employer Identification Number (if any) and whether or not such Grantor is a Transmitting Utility, is listed on Annex B hereto for such Grantor. Such Grantor shall not change its legal name, its type of organization, its status as a Registered Organization (in the case of a Registered Organization), its status as a Transmitting Utility or as a Person which is not a Transmitting Utility, as the case may be, its jurisdiction of organization, its Location, its organizational identification number (if any) or its Federal Employer Identification Number (if any) from that used on Annex B hereto, except that any such changes shall be permitted (so long as not in violation of the applicable requirements of the Loan Documents and so long as same do not involve (x) a Registered Organization ceasing to constitute same or (y) such Grantor changing its jurisdiction of organization or Location from the United States or a State thereof to a jurisdiction of organization or Location, as the case may be, outside the United States or a State thereof) if (i) it shall have given to the Collateral Agent not less than 10 days' prior written notice of each change to the information listed on Annex B (as adjusted for any subsequent changes thereto previously made in accordance with this sentence), together with a supplement to Annex B which shall correct all information contained therein for such Grantor, and (ii) in connection with the respective change or changes, it shall have taken all action reasonably necessary or requested by the Collateral Agent to maintain the security interests of the Collateral Agent in the Collateral intended to be granted hereby at all times fully perfected and in full force and effect. In addition, to the extent that such Grantor does not have an organizational identification number on the date hereof and later obtains one, such Grantor shall promptly thereafter notify the Collateral Agent of such organizational identification number and shall take all actions reasonably requested by the Collateral Agent to the extent necessary to maintain the security interest of the Collateral Agent in the Collateral intended to be granted hereby fully perfected and in full force and effect.

2.7. Trade Names; etc. As of the date hereof, such Grantor does not have or operate in any jurisdiction under, or in the five years preceding the date hereof has not had or has not operated in any jurisdiction under, any trade names, fictitious names or other names except its legal name as specified in Annex B and such other trade or fictitious names as are listed on Annex C hereto for such Grantor.

2.8. Certain Significant Transactions. During the one year period preceding the date of this Agreement, no Person shall have merged or consolidated with or into any Grantor, and no Person shall have liquidated into, or transferred all or substantially all of its assets to, any Grantor, in

each case except as described in Annex D hereto. With respect to any transactions so described in Annex D hereto, the respective Grantor shall have furnished such information with respect to the Person (and the assets of the Person and locations thereof) which merged with or into or consolidated with such Grantor, or was liquidated into or transferred all or substantially all of its assets to such Grantor, and shall have furnished, or caused to be furnished, to the Collateral Agent such UCC lien searches as may have been requested by the Collateral Agent with respect to such Person and its assets, to establish that no security interest (excluding Permitted Liens) continues perfected on the date hereof with respect to any Person described above (or the assets transferred to the respective Grantor by such Person), including without limitation pursuant to Section 9-316(a)(3) of the UCC.

2.9. Recourse. This Agreement is made with full recourse to each Grantor and pursuant to and upon all the warranties, representations, covenants and agreements on the part of such Grantor contained herein and in the other Loan Documents and otherwise in writing in connection herewith or therewith.

### ARTICEL III

#### SPECIAL PROVISIONS CONCERNING ACCOUNTS; CONTRACT RIGHTS; INSTRUMENTS; CHATTEL PAPER AND CERTAIN OTHER COLLATERAL

3.1. [Reserved.]

3.2. [Reserved.]

3.3. Direction to Account Debtors; Contracting Parties; etc. Subject to the Intercreditor Agreement, upon the occurrence and during the continuance of an Event of Default (but without limiting the provisions of the Credit Agreement), if the Collateral Agent so directs any Grantor, such Grantor agrees (x) to cause all payments on account of the Accounts and Contracts to be made directly to the Cash Collateral Account, (y) that the Collateral Agent may, at its option, directly notify the obligors with respect to any Accounts and/or under any Contracts to make payments with respect thereto as provided in the preceding clause (x), and (z) that the Collateral Agent may enforce collection of any such Accounts and Contracts and may adjust, settle or compromise the amount of payment thereof, in the same manner and to the same extent as such Grantor. Subject to the Intercreditor Agreement, without notice to or assent by any Grantor, the Collateral Agent may, upon the occurrence and during the continuance of an Event of Default, apply any or all amounts then in, or thereafter deposited in, the Cash Collateral Account toward the payment of the Obligations in the manner provided in Section 5.4 of this Agreement. The reasonable out-of-pocket costs and expenses of collection (including reasonable out-of-pocket attorneys' fees), whether incurred by a Grantor or the Collateral Agent, shall be borne by the relevant Grantor. The Collateral Agent shall deliver a copy of each notice given to any such obligors referred to in the preceding clause (y) to the relevant Grantor, provided that (x) the failure by the Collateral Agent to so notify such Grantor shall not affect the effectiveness of such notice or the other rights of the Collateral Agent created by this Section 3.3 and (y) no such notice shall be required if an Event of Default of the type described in Section 8.01(f) of the Credit Agreement has occurred and is continuing.

3.4. Modification of Terms; etc. Except (w) in accordance with such Grantor's ordinary course of business, (x) as otherwise in such Grantor's reasonable business judgment, (y) as permitted by the Credit Agreement or (z) as permitted by Section 3.5 hereof, no Grantor shall rescind or cancel any indebtedness evidenced by any Account or under any related Contract, or modify any



term thereof or make any adjustment with respect thereto, or extend or renew the same, or compromise or settle any dispute, claim, suit or legal proceeding relating thereto, or sell any Account or any related Contract, or interest therein, without the prior written consent of (x) prior to the Discharge of the ABL Obligations, the ABL Collateral Agent and (y) thereafter, the Collateral Agent. Except to the extent otherwise permitted by this Agreement or the Credit Agreement, no Grantor will do anything to impair the rights of the Collateral Agent in the Accounts or Contracts.

3.5. Collection. Except as such Grantor otherwise determines in its reasonable business judgment, each Grantor shall endeavor in accordance with reasonable business practices to cause to be collected from the account debtor named in each of its Accounts or obligor under any related Contract, as and when due (including, without limitation, amounts which are delinquent, such amounts to be collected in accordance with generally accepted lawful collection procedures) any and all amounts owing under or on account of such Account or related Contract, and apply promptly upon receipt thereof all such amounts as are so collected to the outstanding balance of such Account or under such related Contract. Except as otherwise directed by the Collateral Agent after the occurrence and during the continuation of an Event of Default, any Grantor may allow in the ordinary course of business as adjustments to amounts owing under its Accounts and related Contracts (i) an extension or renewal of the time or times of payment, or settlement for less than the total unpaid balance, which such Grantor finds appropriate in accordance with its reasonable business judgment, (ii) a refund or credit due as a result of returned or damaged merchandise or improperly performed services or for other reasons which such Grantor finds appropriate in accordance with its reasonable business judgment and (iii) such other adjustments which such Grantor finds appropriate in accordance with its reasonable business judgment.

3.6. Instruments. If any Grantor owns or acquires any Instrument of ~~\$3,000,000~~ 10,000,000 or more constituting Collateral (other than (x) checks and other payment instruments received and collected in the ordinary course of business and (y) any Instrument subject to pledge pursuant to the Pledge Agreement), such Grantor will ~~within 30 days thereafter~~, at the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Collateral Agent in its sole discretion, notify the Collateral Agent thereof, and upon request by the Collateral Agent will promptly deliver such Instrument to the Collateral Agent appropriately endorsed to the order of the Collateral Agent.

3.7. Grantors Remain Liable Under Accounts. Anything herein to the contrary notwithstanding, the Grantors shall remain liable under each of the Accounts to observe and perform all of the conditions and obligations to be observed and performed by them thereunder, all in accordance with the terms of any agreement giving rise to such Accounts. Neither the Collateral Agent nor any other Secured Party shall have any obligation or liability under any Account (or any agreement giving rise thereto) by reason of or arising out of this Agreement or the receipt by the Collateral Agent or any other Secured Party of any payment relating to such Account pursuant hereto, nor shall the Collateral Agent or any other Secured Party be obligated in any manner to perform any of the obligations of any Grantor under or pursuant to any Account (or any agreement giving rise thereto), to make any payment, to make any inquiry as to the nature or the sufficiency of any payment received by them or as to the sufficiency of any performance by any party under any Account (or any agreement giving rise thereto), to present or file any claim, to take any action to enforce any performance or to collect the payment of any amounts which may have been assigned to them or to which they may be entitled at any time or times.

3.8. Grantors Remain Liable Under Contracts. Anything herein to the contrary notwithstanding, the Grantors shall remain liable under each of the Contracts to observe and perform all of the conditions and obligations to be observed and performed by them thereunder, all in accordance with and pursuant to the terms and provisions of each Contract. Neither the Collateral Agent nor any other Secured Party shall have any obligation or liability under any Contract by reason of or arising out of this Agreement or the receipt by the Collateral Agent or any other Secured Party of any payment relating to such Contract pursuant hereto, nor shall the Collateral Agent or any other Secured Party be obligated in any manner to perform any of the obligations of any Grantor under or pursuant to any Contract, to make any payment, to make any inquiry as to the nature or the sufficiency of any performance by any party under any Contract, to present or file any claim, to take any action to enforce any performance or to collect the payment of any amounts which may have been assigned to them or to which they may be entitled at any time or times.

3.9. Letter-of-Credit Rights. At any time any Grantor becomes a beneficiary under a letter of credit with a stated amount of ~~\$3,000,000~~10,000,000 or more in the aggregate, such Grantor shall (x) prior to the Discharge of the ABL Obligations, upon the request of the Collateral Agent and (y) following the Discharge of the ABL Obligations, at the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Collateral Agent in its sole discretion, notify the Collateral Agent thereof and, upon the request of the Collateral Agent following the Discharge of the ABL Obligations, such Grantor shall, pursuant to an agreement in form and substance reasonably satisfactory to the Collateral Agent, use its commercially reasonable efforts to (i) arrange for the issuer and any confirmer of such letter of credit to consent to an assignment to the Collateral Agent of the proceeds of any drawing under such letter of credit or (ii) arrange for the Collateral Agent to become the transferee beneficiary of such letter of credit, with the Collateral Agent agreeing, in each case, that the proceeds of any drawing under the letter of credit are retained by the Collateral Agent and to be applied as provided in this Agreement only after the occurrence and during the continuance of an Event of Default.

3.10. Commercial Tort Claims. Each Commercial Tort Claim in an amount of \$3,000,000 or more of each Grantor in existence on the date of this Agreement is described in Annex E hereto. If any Grantor shall at any time after the date of this Agreement acquire a Commercial Tort Claim in an amount (taking the greater of the aggregate claimed damages thereunder or the reasonably estimated value thereof) of ~~\$3,000,000~~10,000,000 or more, such Grantor shall ~~no later than 30 days thereafter~~, at the time of delivery of the financial statements required to be delivered pursuant to Sections 6.01(a) and (b) of the Credit Agreement, as such date may be extended from time to time by the Collateral Agent in its sole discretion, notify the Collateral Agent thereof in a writing signed by such Grantor and describing the details thereof and shall grant to the Collateral Agent in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement with such writing to be in form and substance reasonably satisfactory to the Collateral Agent.

3.11. Chattel Paper. Subject to the Intercreditor Agreement, upon the request of the Collateral Agent made at any time or from time to time, each Grantor shall promptly furnish to the Collateral Agent a list of all Electronic Chattel Paper constituting Collateral held or owned by such Grantor. Furthermore, if requested by the Collateral Agent following the Discharge of the ABL Obligations, each Grantor shall promptly take all actions which are commercially reasonable so that the Collateral Agent has "control" of all Electronic Chattel Paper, to the extent that the aggregate value or face amount of such Electronic Chattel Paper equals or exceeds ~~\$3,000,000~~10,000,000 in the aggregate, in accordance with the requirements of Section 9-105 of the UCC. Each Grantor will

promptly (and in any event within 10 days) after any request by the Collateral Agent following the Discharge of the ABL Obligations deliver all of its Tangible Chattel Paper to the Collateral Agent, to the extent that the aggregate value or face amount of such Tangible Chattel Paper equals or exceeds ~~\$3,000,000~~ 10,000,000 in the aggregate.

3.12. **Controlled Deposit Accounts.** (a) Within 60 days after the date hereof (or such longer period as may be agreed by the Collateral Agent in its sole discretion), each applicable Grantor agrees to use commercially reasonable efforts to enter into control agreements with the relevant account bank with respect to each Deposit Account that is subject to a control agreement on the date hereof pursuant to the ABL Credit Agreement which control agreements shall (i) name each of the Collateral Agent and Deutsche Bank AG New York Branch as secured parties and (ii) replace the existing control agreement with respect to such Deposit Account.

(b) Following the Discharge of ABL Obligations, each Grantor agrees within 60 days (or such longer period as may be agreed by the Collateral Agent in its sole discretion) to cause account control agreements to be entered into with the relevant account banks so that the Collateral Agent has “control” of any Deposit Account (other than any Excluded Account) with an average daily balance greater than \$1,000,000, to the extent any such Deposit Account is not then subject to a control agreement entered into in accordance with clause (a) of this Section 3.12.

(c) If, prior to the Discharge of the ABL Obligations, any Grantor shall subsequently acquire any Deposit Account that is required to be subject to a control agreement pursuant to the terms of the ABL Credit Agreement, such Grantor shall use commercially reasonable efforts to ensure that such control agreement names each of the Collateral Agent and Deutsche Bank AG New York Branch as secured parties. If, following the Discharge of ABL Obligations, any Grantor shall subsequently acquire any Deposit Account (other than any Excluded Account), with an average daily balance greater than \$1,000,000, such Grantor shall comply with the provisions of clause (b) of this Section 3.12 within 60 days (or such longer period as may be agreed by the Collateral Agent in its sole discretion) of acquiring such Deposit Account.

3.13. **Recordable Intellectual Property.** (a) Annex G hereto sets forth as of the date hereof a complete and accurate list of all Recordable Intellectual Property that each Grantor owns. Each Grantor represents and warrants that as of the date hereof it is the sole owner of all right, title and interest in all Recordable Intellectual Property listed in Annex G hereto, except where the failure to have such sole ownership could not reasonably be expected, either individually or in the aggregate, to have a Material Adverse Effect. Each Grantor represents and warrants that:

(i) no Recordable Intellectual Property listed in Annex G hereto has been canceled nor is any cancellation or opposition action pending, to the knowledge of any Responsible Officer of such Grantor;

(ii) all such Recordable Intellectual Property is valid and subsisting;

(iii) such Grantor is not aware of any pending third-party claim that any of said registrations of Recordable Intellectual Property are invalid or unenforceable; and

(iv) such Grantor has not been advised in writing by counsel or by the relevant Intellectual Property Office, nor is such Grantor otherwise aware of any

reason, that any of said applications of Recordable Intellectual Property will not mature into registrations,

other than, in the case of each of the foregoing clauses (i) – (iv), as would not reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect.

Each Grantor hereby grants to the Collateral Agent an absolute power of attorney to sign, solely upon the occurrence and during the continuance of an Event of Default, any document which may be required by the United States Patent and Trademark Office, any domain name registrar, the United States Copyright Office or any other governmental authority in order to effect an assignment of all right, title and interest in any Intellectual Property constituting Collateral, and record the same.

(b) Each Grantor agrees, within 60 days of the end of each fiscal year, to notify the Collateral Agent in writing of the name and address of, and to furnish such pertinent information that may be available to such Grantor with respect to: (i) any party who such Grantor reasonably believes is infringing, misappropriating, diluting or otherwise violating any of such Grantor's rights in and to any Intellectual Property in any manner that would reasonably be expected to have a Material Adverse Effect, or (ii) any party, to the knowledge of any Responsible Officer of such Grantor, claiming that any Grantor or the conduct of any Grantor's business infringes, misappropriates, dilutes or otherwise violates any Intellectual Property right of any third party in any manner that would reasonably be expected to have a Material Adverse Effect. Each Grantor further agrees to take all necessary action, in accordance with its reasonable business judgment, with respect to any Person infringing, misappropriating, diluting or otherwise violating any Intellectual Property owned by it if failure to do so would reasonably be expected to have a Material Adverse Effect.

(c) Each Grantor agrees to use its Trademarks that are material to the business of the Company and its Subsidiaries, taken as a whole, in interstate commerce during the time in which this Agreement is in effect to the extent required by the laws of the United States or other jurisdictions, as applicable, to maintain its rights in such Trademarks and to take all such other actions as are reasonably necessary to preserve such Trademarks as trademarks or service marks under the laws of the United States or other jurisdictions, as applicable (other than any such Trademarks that are deemed by a Grantor in its reasonable business judgment to no longer be material to the conduct of such Grantor's business).

(d) Each Grantor shall, at its own expense, diligently maintain all registrations and applications for registration included in the Recordable Intellectual Property that are material to the business of the Company and its Subsidiaries, taken as a whole, in accordance with its reasonable business judgment, including but not limited to filing affidavits of use and applications for renewals of registration for all such Recordable Intellectual Property constituting registered Trademarks and timely payment of all post-issuance fees required to maintain in force its rights under each such Recordable Intellectual Property constituting issued Patent or registered Copyright, and shall pay all fees and disbursements in connection therewith and shall not abandon any such registration, filing of affidavit of use or application of renewal prior to the exhaustion of all administrative and judicial remedies without prior written consent of the Collateral Agent, not to be unreasonably withheld (other than with respect to registrations and applications deemed by such Grantor in its reasonable business judgment to be no longer prudent to pursue).

(e) At its own expense, each Grantor, in accordance with its reasonable business judgment, shall diligently prosecute all material applications for (i) United States Patents listed in Annex G hereto and (ii) Copyrights listed in Annex G hereto, in each case for such Grantor and shall not abandon any such application prior to exhaustion of all administrative and judicial remedies (other than applications that are no longer material or are deemed by such Grantor in its reasonable business judgment to no longer be

necessary in the conduct of Grantor's business), absent written consent of the Collateral Agent not to be unreasonably withheld.

(f) In the event that any Grantor, either itself or through any agent, employee, licensee or designee, files an application for or acquires any Recordable Intellectual Property following the date hereof, then the provisions of this Agreement shall automatically apply thereto and any such Intellectual Property shall automatically constitute part of the Collateral and shall be subject to the Collateral Agent's security interest, without further action by any party, and such Grantor shall within 60 days of the end of each fiscal year execute and deliver any and all agreements, instruments, documents and papers, including any applicable Intellectual Property Security Agreement, as necessary to evidence and perfect the Collateral Agent's security interest in such Recordable Intellectual Property provided that such agreements, instruments, documents and papers (the "Writings") are consistent with the terms of and conditions of this Agreement, and each Grantor hereby appoints the Collateral Agent as its attorney-in-fact to execute and file such Writings, solely upon the occurrence and during the continuance of an Event of Default and solely for the foregoing purposes, all acts of such attorney being hereby ratified and confirmed; such power, being coupled with an interest, is irrevocable until this Agreement is terminated.

#### ARTICLE IV

##### PROVISIONS CONCERNING ALL COLLATERAL

4.1. Protection of Collateral Agent's Security. Except as otherwise permitted by the Loan Documents, no Grantor will do anything to impair the rights of the Collateral Agent in the Collateral. Each Grantor will at all times maintain insurance, at such Grantor's own expense to the extent and in the manner provided in the Credit Agreement. Except to the extent otherwise permitted to be retained by such Grantor or applied by such Grantor pursuant to the terms of the Credit Agreement and the Intercreditor Agreement, the Collateral Agent shall, at the time any proceeds of such insurance are distributed to the Secured Parties, apply such proceeds in accordance with Section 5.4 hereof. Each Grantor assumes all liability and responsibility in connection with the Collateral acquired by it and the liability of such Grantor to pay the Obligations shall in no way be affected or diminished by reason of the fact that such Collateral may be lost, destroyed, stolen, damaged or for any reason whatsoever unavailable to such Grantor.

4.2. Additional Information. Each Grantor will, at its own expense, from time to time upon the reasonable request of the Collateral Agent, promptly (and in any event within 10 days after its receipt of the respective request) furnish to the Collateral Agent such information with respect to the Collateral (including the identity of the Collateral or such components thereof as may have been requested by the Collateral Agent, the value and location of such Collateral, etc.) as may be requested by the Collateral Agent. Without limiting the foregoing, each Grantor agrees that it shall promptly (and in any event within 10 days after its receipt of the respective request) furnish to the Collateral Agent such updated Annexes hereto as may from time to time be reasonably requested by the Collateral Agent.

4.3. Financing Statements. Each Grantor agrees to execute and deliver (or cause to be executed and delivered) to the Collateral Agent such financing statements, in form reasonably acceptable to the Collateral Agent, as the Collateral Agent may from time to time reasonably request or as are reasonably necessary or desirable in the opinion of, and at the request of, the Collateral Agent to establish and maintain a valid, enforceable, perfected security interest in the Collateral as provided herein and the other rights and security contemplated hereby. Each Grantor will pay any applicable filing fees, recordation taxes and related expenses relating to its Collateral. Each Grantor hereby

authorizes the Collateral Agent to file any such financing statements without the signature of such Grantor where permitted by law (and such authorization includes describing the Collateral as “all assets” of such Grantor or words of similar effect). Notwithstanding the foregoing, if reasonably requested by any Grantor, the Collateral Agent shall, at Grantor’s expense, make such filings as may be reasonably requested to evidence that the security interests hereunder do not attach to any property that constitutes Excluded Assets.

4.4. Further Actions. The Company shall, and shall cause each other Grantor to, at their own expense, take such other actions as are required by Section 6.12 of the Credit Agreement.

## ARTICLE V

### REMEDIES UPON OCCURRENCE OF AN EVENT OF DEFAULT

5.1. Remedies; Obtaining the Collateral Upon Default. Each Grantor agrees that, subject to the Intercreditor Agreement, if any Event of Default shall have occurred and be continuing, then and in every such case, the Collateral Agent, in addition to any rights now or hereafter existing under applicable law and under the other provisions of this Agreement, shall have all rights as a secured creditor under any UCC, and such additional rights and remedies to which a secured creditor is entitled under the laws in effect in all relevant jurisdictions and may:

(i) personally, or by agents or attorneys, immediately take possession of the Collateral or any part thereof, from such Grantor or any other Person who then has possession of any part thereof with or without notice or process of law, and for that purpose may enter upon such Grantor’s premises where any of the Collateral is located and remove the same and use in connection with such removal any and all services, supplies, aids and other facilities of such Grantor;

(ii) instruct the obligor or obligors on any agreement, instrument or other obligation (including, without limitation, the Accounts and the Contracts) constituting the Collateral to make any payment required by the terms of such agreement, instrument or other obligation directly to the Collateral Agent and may exercise any and all remedies of such Grantor in respect of such Collateral;

(iii) instruct all banks which have entered into a control agreement with the Collateral Agent to transfer all monies, securities and instruments held by such depository bank to the Cash Collateral Account;

(iv) sell, assign or otherwise liquidate any or all of the Collateral or any part thereof in accordance with Section 5.2 hereof, or direct such Grantor to sell, assign or otherwise liquidate any or all of the Collateral or any part thereof, and, in each case, take possession of the proceeds of any such sale or liquidation;

(v) take possession of the Collateral or any part thereof, by directing such Grantor in writing to deliver the same to the Collateral Agent at any reasonable place or places designated by the Collateral Agent, in which event such Grantor shall at its own expense:

(x) forthwith cause the same to be moved to the place or places so designated by the Collateral Agent and there delivered to the Collateral Agent;

(y) store and keep any Collateral so delivered to the Collateral Agent at such place or places pending further action by the Collateral Agent as provided in Section 5.2 hereof; and

(z) while the Collateral shall be so stored and kept, provide such security and maintenance services as shall be reasonably necessary to protect the same and to preserve and maintain it in good condition;

(vi) exercise the rights granted under Section 1.3 hereof;

(vii) apply any monies constituting Collateral or proceeds thereof in accordance with the provisions of Section 5.4;

(viii) license or sublicense, on a royalty free, rent basis, whether on an exclusive or nonexclusive basis, any Intellectual Property included in the Collateral (in the case of Trademarks, subject to reasonable quality control and subject to those exclusive licenses granted by Grantors in effect on the date hereof and those granted by any Grantor hereafter to the extent permitted by the Credit Agreement) for such term and on such conditions and in such manner as the Collateral Agent shall in its sole judgment determine, it being understood that any such license, may be exercised, at the option of the Collateral Agent, only upon the occurrence and during the continuation of an Event of Default; provided, that any such license shall be binding upon the Grantors notwithstanding any subsequent cure of an Event of Default;

(ix) take any other action as specified in clauses (1) through (5), inclusive, of Section 9-607(a) of the UCC;

it being understood that each Grantor's obligation so to deliver the Collateral is of the essence of this Agreement and that, accordingly, upon application to a court of equity having jurisdiction, the Collateral Agent shall be entitled to a decree requiring specific performance by such Grantor of said obligation. By accepting the benefits of this Agreement and each other Collateral Document, the Secured Parties expressly acknowledge and agree that this Agreement and each other Collateral Document may be enforced only by the action of the Collateral Agent acting upon the instructions of the Required Lenders and that no other Secured Party shall have any right individually to seek to enforce or to enforce this Agreement or to realize upon the security to be granted hereby, it being understood and agreed that such rights and remedies may be exercised by the Collateral Agent for the benefit of the Secured Parties upon the terms of this Agreement and the other Collateral Documents.

5.2. Remedies; Disposition of the Collateral. If any Event of Default shall have occurred and be continuing, then, subject to the Intercreditor Agreement, any Collateral repossessed by the Collateral Agent under or pursuant to Section 5.1 hereof and any other Collateral whether or not so repossessed by the Collateral Agent, may be sold, assigned, leased or otherwise disposed of under one or more contracts or as an entirety, and without the necessity of gathering at the place of sale the property to be sold, and in general in such manner, at such time or times, at such place or places and on such terms as the Collateral Agent may, in compliance with any mandatory requirements of applicable law, determine to be commercially reasonable. Any of such Collateral may be sold, leased or otherwise disposed of, in the condition in which the same existed when taken by the Collateral Agent or after any overhaul or repair at the expense of the relevant Grantor which the Collateral Agent shall determine to be commercially reasonable. Any such sale, lease or other disposition may be effected by means of a public disposition or private disposition, effected in accordance with the applicable requirements (in each case if and to the extent applicable) of Sections 9-610 through 9-613 of the UCC and/or such other mandatory requirements of applicable law as may apply to the respective disposition. The Collateral Agent may, without notice or publication, adjourn any public or private disposition or cause the same to be adjourned from time to time by announcement at the time and place fixed for the disposition, and such disposition may be made at any time or place to which the disposition may be so adjourned. To the extent permitted by any such requirement of law, the Collateral Agent may bid for and become the purchaser (and may pay all or any portion of the purchase price by crediting Obligations against the

purchase price) of the Collateral or any item thereof, offered for disposition in accordance with this Section 5.2 without accountability to the relevant Grantor. If, under applicable law, the Collateral Agent shall be permitted to make disposition of the Collateral within a period of time which does not permit the giving of notice to the relevant Grantor as hereinabove specified, the Collateral Agent need give such Grantor only such notice of disposition as shall be required by such applicable law. Each Grantor agrees to do or cause to be done all such other acts and things as may be reasonably necessary to make such disposition or dispositions of all or any portion of the Collateral valid and binding and in compliance with any and all applicable laws, regulations, orders, writs, injunctions, decrees or awards of any and all courts, arbitrators or governmental instrumentalities, domestic or foreign, having jurisdiction over any such sale or sales, all at such Grantor's expense.

5.3. Waiver of Claims. Except as otherwise provided in this Agreement, EACH GRANTOR HEREBY WAIVES, TO THE EXTENT PERMITTED BY APPLICABLE LAW, NOTICE AND JUDICIAL HEARING IN CONNECTION WITH THE COLLATERAL AGENT'S TAKING POSSESSION OR THE COLLATERAL AGENT'S DISPOSITION OF ANY OF THE COLLATERAL, IN EACH CASE AFTER THE OCCURRENCE AND DURING THE CONTINUANCE OF AN EVENT OF DEFAULT, INCLUDING, WITHOUT LIMITATION, ANY AND ALL PRIOR NOTICE AND HEARING FOR ANY PREJUDGMENT REMEDY OR REMEDIES, and each Grantor hereby further waives, to the extent permitted by law:

(i) all damages occasioned by such taking of possession or any such disposition except any damages which are the direct result of the Collateral Agent's gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a final and non-appealable decision);

(ii) all other requirements as to the time, place and terms of sale or other requirements with respect to the enforcement of the Collateral Agent's rights hereunder; and

(iii) all rights of redemption, appraisalment, valuation, stay, extension or moratorium now or hereafter in force under any applicable law in order to prevent or delay the enforcement of this Agreement or the absolute sale of the Collateral or any portion thereof, and each Grantor, for itself and all who may claim under it, insofar as it or they now or hereafter lawfully may, hereby waives the benefit of all such laws.

Any sale of, or the grant of options to purchase, or any other realization upon, any Collateral shall operate to divest all right, title, interest, claim and demand, either at law or in equity, of the relevant Grantor therein and thereto, and shall be a perpetual bar both at law and in equity against such Grantor and against any and all Persons claiming or attempting to claim the Collateral so sold, optioned or realized upon, or any part thereof, from, through and under such Grantor.

5.4. Application of Proceeds. (a) Subject to the Intercreditor Agreement, all moneys collected by the Collateral Agent (or, to the extent the Pledge Agreement or any other Collateral Document requires proceeds of collateral under such other Collateral Document to be applied in accordance with the provisions of this Agreement, the Pledgee, under, and as defined in, the Pledge Agreement or collateral agent under such other Collateral Document) upon any sale or other disposition of the Collateral (or the collateral under the relevant Collateral Document), in connection with the Collateral Agent's exercise of remedies following the occurrence and during the continuance of an Event of Default, together with all other moneys received by the Collateral Agent hereunder or under any other Collateral Document, shall be applied as follows:

(i) first, to the payment of all amounts owing the Collateral Agent and the Administrative Agent in their respective capacities as such in accordance with the terms of the Loan Documents;



(ii) second, to the payment in full of the Obligations owing to the Secured Parties on a pro rata basis in accordance with the respective amounts of the Obligations; and

(ii) third, to the Grantors and/or other Persons entitled thereto.

(b) For purposes of applying payments received in accordance with this Section 5.4, the Collateral Agent shall be entitled to rely upon the Administrative Agent for a determination (which the Administrative Agent agrees (or shall agree) to provide upon request of the Collateral Agent) of the outstanding Obligations owed to the Secured Parties.

(c) It is understood that the Grantors shall remain jointly and severally liable to the extent of any deficiency between the amount of the proceeds of the Collateral and the aggregate amount of the Obligations.

(d) It is understood and agreed by each Grantor and each Secured Party that the Collateral Agent shall have no liability for any determinations made by it in this Section 5.4, in each case except to the extent resulting from the gross negligence or willful misconduct of the Collateral Agent (as determined by a court of competent jurisdiction in a final and non-appealable decision). Each Grantor and each Secured Party also agrees that the Collateral Agent may (but shall not be required to), at any time and in its sole discretion, and with no liability resulting therefrom, petition a court of competent jurisdiction regarding any application of Collateral in accordance with the requirements hereof, and the Collateral Agent shall be entitled to wait for, and may conclusively rely on, any such determination.

5.5. Remedies Cumulative. Each and every right, power and remedy hereby specifically given to the Collateral Agent shall be in addition to every other right, power and remedy specifically given to the Collateral Agent under this Agreement, the other Loan Documents or now or hereafter existing at law, in equity or by statute and each and every right, power and remedy whether specifically herein given or otherwise existing may be exercised from time to time or simultaneously and as often and in such order as may be deemed expedient by the Collateral Agent. All such rights, powers and remedies shall be cumulative and the exercise or the beginning of the exercise of one shall not be deemed a waiver of the right to exercise any other or others. No delay or omission of the Collateral Agent in the exercise of any such right, power or remedy and no renewal or extension of any of the Obligations shall impair any such right, power or remedy or shall be construed to be a waiver of any Default or Event of Default or an acquiescence thereof. No notice to or demand on any Grantor in any case shall entitle it to any other or further notice or demand in similar or other circumstances or constitute a waiver of any of the rights of the Collateral Agent to any other or further action in any circumstances without notice or demand. In the event that the Collateral Agent shall bring any suit to enforce any of its rights hereunder and shall be entitled to judgment, then in such suit the Collateral Agent may recover reasonable expenses, including reasonable attorneys' fees, and the amounts thereof shall be included in such judgment.

5.6. Discontinuance of Proceedings. In case the Collateral Agent shall have instituted any proceeding to enforce any right, power or remedy under this Agreement by foreclosure, sale, entry or otherwise, and such proceeding shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Collateral Agent, then and in every such case the relevant Grantor, the Collateral Agent and each holder of any of the Obligations shall be restored to their former positions and rights hereunder with respect to the Collateral subject to the security interest created under this Agreement, and all rights, remedies and powers of the Collateral Agent shall continue as if no such proceeding had been instituted.

## ARTICLE VI

### INDEMNITY

6.1. Indemnity. (a) The parties hereto agree that the terms of Section 10.04 of the Credit Agreement are incorporated herein by reference, *mutatis mutandis*. If and to the extent that the obligations of any Grantor under this Section 6.1 are unenforceable for any reason, such Grantor hereby agrees to make the maximum contribution to the payment and satisfaction of such obligations which is permissible under applicable law.

6.2. Indemnity Obligations Secured by Collateral; Survival. Any amounts paid by any Indemnitee as to which such Indemnitee has the right to reimbursement hereunder or under the other Loan Documents shall constitute Obligations secured by the Collateral. The indemnity obligations of each Grantor contained in this Article VI shall continue in full force and effect notwithstanding the full payment of all of the other Obligations and notwithstanding the full payment of all the Notes issued, and Loans made, under the Credit Agreement and the payment of all other Obligations and notwithstanding the discharge thereof and the occurrence of the Termination Date.

## ARTICLE VII

### DEFINITIONS

The following terms shall have the meanings herein specified. Such definitions shall be equally applicable to the singular and plural forms of the terms defined.

“ABL Collateral Agent” shall have the meaning provided in the Intercreditor Agreement.

“Account” shall mean any “account” as such term is defined in the UCC, and in any event shall include but shall not be limited to, all rights to payment of any monetary obligation, whether or not earned by performance, (i) for property that has been or is to be sold, leased, licensed, assigned or otherwise disposed of, (ii) for services rendered or to be rendered, (iii) for a policy of insurance issued or to be issued, (iv) for a secondary obligation incurred or to be incurred, (v) for energy provided or to be provided, (vi) for the use or hire of a vessel under a charter or other contract, (vii) arising out of the use of a credit or charge card or information contained on or for use with the card, or (viii) as winnings in a lottery or other game of chance operated or sponsored by a State, governmental unit of a State, or person licensed or authorized to operate the game by a State or governmental unit of a State. Without limiting the foregoing, the term “account” shall include all Health-Care-Insurance Receivables.

“Administrative Agent” shall have the meaning provided in the recitals of this Agreement.

“Agreement” shall mean this Security Agreement, as the same may be amended, modified, restated and/or supplemented from time to time in accordance with its terms.

“Cash Collateral Account” shall mean a non-interest bearing cash collateral account maintained with, and in the sole dominion and control of, the Collateral Agent for the benefit of the Secured Parties.

“Chattel Paper” shall mean “chattel paper” as such term is defined in the UCC. Without limiting the foregoing, the term “Chattel Paper” shall in any event include all Tangible Chattel Paper and all Electronic Chattel Paper.

“Collateral” shall have the meaning provided in Section 1.1(a) of this Agreement.

“Collateral Agent” shall have the meaning provided in the first paragraph of this Agreement.

“Collateral Documents” shall have the meaning provided in the Credit Agreement.

“Commercial Tort Claims” shall mean “commercial tort claims” as such term is defined in the UCC.

“Commodity Account” shall mean all “commodity accounts” as such term is defined in the UCC.

“Company” shall have the meaning provided in the recitals of this Agreement.

“Contract Rights” shall mean all rights of any Grantor under each Contract, including, without limitation, (i) any and all rights to receive and demand payments under any or all Contracts, (ii) any and all rights to receive and compel performance under any or all Contracts and (iii) any and all other rights, interests and claims now existing or in the future arising in connection with any or all Contracts.

“Contracts” shall mean all contracts between any Grantor and one or more additional parties (including, without limitation, any Swap Contracts, licensing agreements and any partnership agreements, joint venture agreements and limited liability company agreements).

“Controlled Deposit Accounts” shall mean Deposit Accounts that are subject to the “control” of the Collateral Agent.

“Copyrights” shall mean all: (a) copyrights (whether statutory or common law, whether registered or unregistered and whether published or unpublished) all mask works (as such term is defined in 17 U.S.C. Section 901, et seq.), and all copyright registrations and applications therefor, including, without limitation, the copyright registrations and applications in the United States Copyright Office listed in Annex G; (b) rights and privileges arising under applicable law with respect to such copyrights; and (c) renewals and extensions thereof and amendments thereto.

“Copyright Security Agreement” shall mean a copyright security agreement, in the form attached hereto as Exhibit B, executed and delivered by a Grantor in favor of the Collateral Agent for the benefit of the Secured Parties.

“Credit Agreement” shall have the meaning provided in the recitals of this Agreement.

“Deposit Accounts” shall mean all “deposit accounts” as such term is defined in the UCC and all other demand, deposit, time, savings, cash management, passbook and similar accounts.

“Discharge of ABL Obligations” shall have the meaning provided in the Intercreditor Agreement.

“Documents” shall mean “documents” as such term is defined in the UCC.

“Domain Names” shall mean all Internet domain names and associated URL addresses in or to which any Grantor now or hereafter has any right, title or interest.

“Electronic Chattel Paper” shall mean “electronic chattel paper” as such term is defined in the UCC.

“Equipment” shall mean any “equipment” as such term is defined in the UCC, and in any event, shall include, but shall not be limited to, all machinery, equipment, furnishings, fixtures and vehicles now or hereafter owned by any Grantor and any and all additions, substitutions and replacements of any of the foregoing and all accessions thereto, wherever located, together with all attachments, components, parts, equipment and accessories installed thereon or affixed thereto.

“Event of Default” shall mean any Event of Default under, and as defined in, the Credit Agreement.

“Excluded Account” shall mean (i) any withholding tax, fiduciary account, employee benefit, trust, payroll or escrow account, (ii) any zero balance Deposit Account provided the amount on deposit therein does not exceed the amount necessary to cover outstanding checks, amounts necessary to maintain minimum deposit requirements and amounts necessary to pay the depository institution’s fees and expenses, (iii) any Deposit Account maintained outside of the United States and (iv) any Deposit Account or Securities Account maintained in connection with pledges of cash or Cash Equivalents permitted under Section 7.01(e), (f), (p), (s) ~~or~~, (u) or (x) of the Credit Agreement.

“Excluded Assets” shall have the meaning provided in Section 1.1(b) of this Agreement.

“Financial Assets” shall mean all present and future “financial assets” as such term is defined in the UCC.

“Fixture” shall mean “fixture” as such term is defined in the UCC.

“General Intangibles” shall mean “general intangibles” as such term is defined in the UCC.

“Goods” shall mean “goods” as such term is defined in the UCC.

“Grantor” shall have the meaning provided in the first paragraph of this Agreement.

“Health-Care-Insurance Receivable” shall mean any “health-care-insurance receivable” as such term is defined in the UCC.

“Instrument” shall mean “instruments” as such term is defined in the UCC.

“Intellectual Property” shall mean (a) all intellectual and similar property of any Grantor of every kind and nature now owned or hereafter acquired by any Grantor, including inventions, designs, Patents, Copyrights, Licenses, Trademarks, Software, Trade Secrets, confidential or proprietary technical and business information, know-how, show-how or other data or information, software and databases and all embodiments or fixations thereof and related documentation, registrations and franchises, and all additions, improvements and accessions to, and books and records describing or used in connection with, any of the foregoing; (b) rights corresponding to any of the foregoing throughout the world, including as provided by international treaties or conventions, and all other rights of any kind whatsoever accruing thereunder or pertaining thereto; (c) income, royalties, damages, claims, and payments now or hereafter due or payable under and with respect to any of the foregoing, including damages and payments for past and future infringements, misappropriations, or other violations thereof; and (d) rights to sue for past, present, and future infringements, misappropriations, or other violations of any of the foregoing, including the right to settle suits involving claims and demands for royalties owing.

“Intellectual Property Security Agreement” shall mean a Copyright Security Agreement, a Patent Security Agreement or a Trademark Security Agreement.

“Inventory” shall mean merchandise, inventory and goods, and all additions, substitutions and replacements thereof and all accessions thereto, wherever located, together with all goods, supplies, incidentals, packaging materials, labels, materials and any other items used or usable in manufacturing, processing, packaging or shipping same, in all stages of production from raw materials through work in process to finished goods, and all products and proceeds of whatever sort and wherever located any portion thereof which may be returned, rejected, reclaimed or repossessed by the Collateral Agent from any Grantor’s customers, and shall specifically include all “inventory” as such term is defined in the UCC.

“Investment Property” shall mean “investment property” as such term is defined in the UCC.

“Lenders” shall have the meaning provided in the recitals of this Agreement.

“Letter-of-Credit Rights” shall mean “letter-of-credit rights” as such term is defined in the UCC.

“Licenses” shall mean any and all licenses, agreements, consents, orders, franchises and similar arrangements in respect of the licensing, development, use or disclosure of any Intellectual Property.

“Location” of any Grantor, shall mean such Grantor’s “location” as determined pursuant to Section 9-307 of the UCC.

“Margin Stock” shall have the meaning provided in Regulation U.

“Money” shall mean all present and future “money” as defined in Article 1 of the UCC.

“Non-Voting Equity Interests” shall mean all Equity Interests of any Person which are not Voting Equity Interests.

“Obligations” shall have the meaning provided in the Credit Agreement.

“Patents” shall mean all (a) industrial designs, letters patent, certificates of inventions, all registrations and recordings thereof, and all applications for letters patent, including registrations, recordings and pending applications in the United States Patent and Trademark Office listed in Annex G, and (b) reissues, continuations, divisions, continuations-in-part, renewals or extensions thereof, and the inventions disclosed or claimed therein, including the right to make, use and/or sell the inventions disclosed or claimed therein and all improvements thereto.

“Patent Security Agreement” shall mean a patent security agreement, in the attached hereto as Exhibit C, executed and delivered by a Grantor in favor of the Collateral Agent for the benefit of the Secured Parties.

“Permits” shall mean, to the extent permitted to be assigned by the terms thereof or by applicable law, all licenses, permits, consent, approval, rights, orders, variances, franchises or authorizations of or from any Governmental Authority or agency.

“Pledge Agreement Collateral” shall mean all “Collateral” as defined in the Pledge Agreement.

“Pledge Agreement” shall mean the Term Loan Pledge Agreement dated of even date herewith by Ciena Corporation, each other Pledgor from time to time party thereto and the Collateral Agent, as pledgee.

“Proceeds” shall mean all “proceeds” as such term is defined in the UCC and, in any event, shall also include, but not be limited to, (i) any and all proceeds of any insurance, indemnity, warranty or guaranty payable to the Collateral Agent or any Grantor from time to time with respect to any of the Collateral, (ii) any and all payments (in any form whatsoever) made or due and payable to any Grantor from time to time in connection with any requisition, confiscation, condemnation, seizure or forfeiture of all or any part of the Collateral by any Governmental Authority (or any person acting under color of Governmental Authority) and (iii) any and all other amounts from time to time paid or payable under or in connection with any of the Collateral.

“Recordable Intellectual Property” shall mean (i) any Patent issued by or applied for issuance with the United States Patent and Trademark Office, (ii) any Trademark registered or applied for registration with the United States Patent and Trademark Office, (iii) any Copyright registered or applied for registration with the United States Copyright Office and (iv) any material License granting to any Grantor any exclusive right to use, copy, reproduce, distribute, prepare derivative works, display or publish any records or other materials pertaining to a Copyright registered with the United States Copyright Office.

“Registered Organization” shall have the meaning provided in the UCC.

“Regulation U” shall mean Regulation U of the Board of Governors of the Federal Reserve System of the United States as from time to time in effect and any successor to all or a portion thereof.

“Securities Accounts” shall mean all present and future “securities accounts” as such term is defined in Article 8 of the UCC, including all monies, “uncertificated securities,” and “securities entitlements” (each as defined in Article 8 of the UCC) contained therein.

“Security” means all present and future “securities” as such term is defined in Article 8 of the UCC.

“Security Agreement Supplement” shall mean a security agreement supplement, in the form attached hereto as Exhibit A, signed and delivered to the Collateral Agent for the purpose of adding a Subsidiary as a party hereto pursuant to Section 8.12 and/or adding additional property to the Collateral.

“Security Entitlements” shall mean all present and future “security entitlements” as such term is defined in Article 8 of the UCC.

“Software” shall mean all computer software, programs and databases (including, without limitation, source code, object code and all related applications and data files), firmware and documentation and materials relating thereto, together with any and all maintenance rights, service rights, programming rights, hosting rights, test rights, improvement rights, renewal rights and indemnification rights and any substitutions, replacements, improvements, error corrections, updates and new versions of any of the foregoing.

“State” shall mean any state of the United States.

“Supporting Obligations” shall mean any “supporting obligation” as such term is defined in the UCC, now or hereafter owned by any Grantor, or in which any Grantor has any rights, and, in any event, shall include, but shall not be limited to all of such Grantor’s rights in any Letter-of-Credit Right or secondary obligation that supports the payment or performance of, and all security for, any Account, Chattel Paper, Document, General Intangible, Instrument or Investment Property.

“Tangible Chattel Paper” shall mean “tangible chattel paper” as such term is defined in the UCC.

“Termination Date” shall have the meaning provided in Section 8.8(a) of this Agreement.

“Trade Secrets” shall mean any confidential and proprietary information, including inventions, formulae, algorithms, production procedures, know-how, methods, techniques, marketing, plans, analyses, proposals, customer lists, supplier lists, specifications, models, personal information, data collections, source code and object code of a Grantor worldwide whether written or not.

“Trademarks” shall mean all: (a) trademarks, service marks, certification marks, domain names and associated URLs, trade names, corporate names, company names, business names, fictitious business names, trade styles, trade dress, logos, slogans, other source or business identifiers, designs and general intangibles of like nature, all registrations and recordings thereof, and all registrations and applications filed in connection therewith, including registrations and registration applications in the United States Patent and Trademark Office that are listed in Annex G, (b) all extensions or renewals of any of the foregoing, (c) goodwill associated therewith or symbolized thereby, (d) other assets, rights and interests that uniquely reflect or embody such goodwill, and (e) rights and privileges arising under applicable law with respect to the use of any of the foregoing.

“Trademark Security Agreement” shall mean a trademark security agreement, in the form attached hereto as Exhibit D, executed and delivered by a Grantor in favor of the Collateral Agent for the benefit of the Secured Parties.

hereof. “Transmitting Utility” shall have the meaning given such term in Section 9-102(a)(80) of the UCC as in effect on the date

“Vehicles” shall mean all cars, trucks and other vehicles covered by a certificate of title law of any state.

“Voting Equity Interests” of any Person shall mean all classes of Equity Interests of such Person entitled to vote in the election of the board of directors of such Person (or such equivalent governing body of such Person).

“UCC” shall mean the Uniform Commercial Code as in effect from time to time in the State of New York; provided that, if perfection or the effect of perfection or non-perfection or the priority of any Lien on any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than New York, “UCC” means the Uniform Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

## ARTICLE VIII

### MISCELLANEOUS

8.1. Notices. Except as otherwise specified herein, all notices, requests, demands or other communications to or upon the respective parties hereto shall be in writing and shall be sent or delivered by mail, telecopy or courier service and all such notices and communications shall, when mailed, telecopied or sent by courier, be effective when deposited in the mails, delivered to the overnight courier, or sent by telecopier, except that notices and communications to the Collateral Agent or any Grantor shall not be effective until received by the Collateral Agent or such Grantor, as the case may be. All notices and other communications shall be in writing and addressed as follows:

(a) if to any Grantor, c/o:

Ciena Corporation  
7035 Ridge Road  
Hanover, Maryland 21076  
Attention: Treasurer’s Office  
Facsimile: (410) 865-8901

with a copy to:

Ciena Corporation  
7035 Ridge Road  
Hanover, Maryland 21076  
Attention: Treasurer’s Office  
Facsimile: (410) 865-8901

(b) if to the Collateral Agent, at:

Bank of America, N.A.  
Agency Management  
900 West Trade Street  
Mail Code: NC1-026-06-03  
Charlotte, NC 28255-0001  
Attention: Priscilla Baker  
Telephone: 980-386-3475  
Facsimile: 704-409-0918  
Electronic Mail: priscilla.l.baker@baml.com

or at such other address or addressed to such other individual as shall have been furnished in writing by any Person described above to the party required to give notice hereunder.

8.2. Waiver; Amendment. Except as provided in Sections 8.8, 8.12 and 8.15 hereof and Section 10.01 of the Credit Agreement, none of the terms and conditions of this Agreement or any other Collateral Document may be changed, waived, modified or varied in any manner whatsoever unless in writing duly signed by each Grantor directly affected thereby (it being understood that the addition or release of any Grantor hereunder or under another Collateral Document shall not constitute a change, waiver, discharge or termination affecting any Grantor other than the Grantor so added or released) and the Collateral Agent (with the written consent of the Required Lenders).

8.3. Obligations Absolute. The obligations of each Grantor hereunder shall remain in full force and effect without regard to, and shall not be impaired by, (a) any bankruptcy, insolvency, reorganization, arrangement, readjustment, composition, liquidation or the like of such Grantor; (b) any exercise or non-exercise, or any waiver of, any right, remedy, power or privilege under or in respect of this Agreement or any other Secured Debt Agreement; or (c) any amendment to or modification of any other Secured Debt Agreement or any security for any of the Obligations (in each case), whether or not such Grantor shall have notice or knowledge of any of the foregoing.

8.4. Successors and Assigns. This Agreement shall create a continuing security interest in the Collateral and shall (i) remain in full force and effect, subject to release and/or termination as set forth in Section 8.8 hereof, (ii) be binding upon each Grantor, its successors and assigns, provided however, that except as otherwise permitted by the Credit Agreement, no Grantor shall assign any of its rights or obligations hereunder without the prior written consent of the Collateral Agent (with the consent of the Required Lenders), and (iii) inure, together with the rights and remedies of the Collateral Agent hereunder, to the benefit of the Collateral Agent, the other Secured Parties and their respective successors, transferees and assigns. All agreements, statements, representations and warranties made by each Grantor herein or in any certificate or other instrument delivered by such Grantor or on its behalf under this Agreement shall be considered to have been relied upon by the Secured Parties and shall survive the execution and delivery of this Agreement and the other Loan Documents regardless of any investigation made by the Secured Parties or on their behalf.

8.5. Headings Descriptive. The headings of the several sections of this Agreement are inserted for convenience only and shall not in any way affect the meaning or construction of any provision of this Agreement.

8.6. GOVERNING LAW; SUBMISSION TO JURISDICTION; VENUE; WAIVER OF JURY TRIAL. (a) THIS AGREEMENT AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE)



BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

(b) EACH GRANTOR IRREVOCABLY AND UNCONDITIONALLY AGREES THAT IT WILL NOT COMMENCE ANY ACTION, LITIGATION OR PROCEEDING OF ANY KIND OR DESCRIPTION, WHETHER IN LAW OR EQUITY, WHETHER IN CONTRACT OR IN TORT OR OTHERWISE, AGAINST THE COLLATERAL AGENT, ANY SECURED PARTY OR ANY RELATED PARTY THEREOF IN ANY WAY RELATING TO THIS AGREEMENT, ANY OTHER COLLATERAL DOCUMENT OR THE TRANSACTIONS RELATING HERETO OR THERETO, IN ANY FORUM OTHER THAN THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE JURISDICTION OF SUCH COURTS AND AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION, LITIGATION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION, LITIGATION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT SHALL AFFECT ANY RIGHT THAT THE COLLATERAL AGENT OR ANY SECURED PARTY MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT AGAINST ANY GRANTOR OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) EACH GRANTOR IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT IN ANY COURT REFERRED TO IN PARAGRAPH (B) OF THIS SECTION. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 8.1. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

(e) EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT

IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

8.7. Grantors' Duties. It is expressly agreed, anything herein contained to the contrary notwithstanding, that each Grantor shall remain liable to perform all of the obligations, if any, assumed by it with respect to the Collateral and the Collateral Agent shall not have any obligations or liabilities with respect to any Collateral by reason of or arising out of this Agreement, nor shall the Collateral Agent be required or obligated in any manner to perform or fulfill any of the obligations of any Grantor under or with respect to any Collateral.

8.8. Termination; Release. (a) On the Termination Date, this Agreement shall terminate (provided that all indemnities set forth herein including, without limitation in Section 6.1 hereof, shall survive such termination) and the Collateral Agent, at the request and expense of the respective Grantor, will promptly execute and deliver to such Grantor a proper instrument or instruments (including UCC termination statements on form UCC-3) acknowledging the satisfaction and termination of this Agreement, and will duly assign, transfer and deliver to such Grantor (without recourse and without any representation or warranty) such of the Collateral as may be in the possession of the Collateral Agent and as has not theretofore been sold or otherwise applied or released pursuant to this Agreement. As used in this Agreement, "Termination Date" shall mean the date on which the Payment in Full of the Obligations has occurred.

(b) In the event that any part of the Collateral is sold or otherwise disposed of (to a Person other than a Credit Party) in connection with a sale or disposition permitted by Section 7.05 of the Credit Agreement or is otherwise released pursuant to the Credit Agreement, and the proceeds of such sale or disposition (or from such release) are applied in accordance with the terms of the Credit Agreement to the extent required to be so applied, the Collateral Agent, at the request and expense of such Grantor, will duly release from the security interest created hereby (and will promptly execute and deliver such documentation, including termination or partial release statements, including UCC-3s, subordination agreements and the like in connection therewith to evidence the release of such item of Collateral or to subordinate its interest in such item of Collateral) and assign, transfer and deliver to such Grantor (without recourse and without any representation or warranty) such of the Collateral as is then being (or has been) so sold or otherwise disposed of, or released, and as may be in the possession of the Collateral Agent and has not theretofore been released pursuant to this Agreement. In the case of any sale or disposition of any Collateral permitted under Section 7.05 of the Credit Agreement (unless sold to another Credit Party), the security interest created hereby on such Collateral shall be automatically released without the need for further action by any Person. Furthermore, upon the release of any Grantor from the Guaranty in accordance with the provisions thereof, such Grantor (and the Collateral at such time assigned by the respective Grantor pursuant hereto) shall be automatically released from this Agreement, and the Collateral Agent, at the request and expense of such Grantor being released, will promptly execute and deliver such documentation, including termination or partial release statements, including UCC-3s, and the like in connection therewith) and assign, transfer and deliver to such Grantor (without recourse and without any representation or warranty) the Collateral of such Grantor being released.

(c) At any time that a Grantor desires that the Collateral Agent take any action to acknowledge or give effect to any release of Collateral pursuant to the foregoing Section 8.8(a) or (b), such Grantor shall deliver to the Collateral Agent a certificate signed by a Responsible Officer of such Grantor stating that the release of the respective Collateral is permitted pursuant to such Section 8.8(a) or (b). At any time that the Company or the respective Grantor desires that a Subsidiary of the Company which has been released from the Guaranty be released hereunder as provided in the penultimate sentence of Section 8.8(b) hereof, it shall deliver to the Collateral Agent a certificate signed by a Responsible Officer of the Company and the respective Grantor stating that the release of the respective Grantor (and its Collateral) is permitted pursuant to such Section 8.8(b).

(d) The Collateral Agent shall have no liability whatsoever to any other Secured Party as the result of any release of Collateral by it in accordance with, or which the Collateral Agent in good faith believes to be in accordance with, this Section 8.8.

8.9. Counterparts. This Agreement may be executed in any number of counterparts and by the different parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument. A set of counterparts executed by all the parties hereto shall be lodged with the Company and the Collateral Agent.

8.10. Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

8.11. The Collateral Agent and the other Secured Parties. The Collateral Agent will hold in accordance with this Agreement all items of the Collateral at any time received under this Agreement. It is expressly understood and agreed that the obligations of the Collateral Agent as holder of the Collateral and interests therein and with respect to the disposition thereof, and otherwise under this Agreement, are only those expressly set forth in this Agreement and in Section 9 of the Credit Agreement. The Collateral Agent shall act hereunder on the terms and conditions set forth herein and in Section 9 of the Credit Agreement.

8.12. Additional Grantors. It is understood and agreed that any Domestic Subsidiary of the Company that desires to become a Grantor hereunder, or is required to execute a counterpart of this Agreement after the date hereof pursuant to the requirements of the Credit Agreement or any other Loan Document, shall become a Grantor hereunder by (x) executing a counterpart hereof and delivering same to the Collateral Agent or by executing a Security Agreement Supplement and delivering the same to the Collateral Agent, in each case as may be requested by the Collateral Agent (provided such Security Agreement Supplement shall not require the consent of any Grantor), (y) delivering supplements to Annexes A through G, inclusive, hereto as are necessary to cause such Annexes to be complete and accurate with respect to such additional Grantor on such date and (z) taking all actions as specified in this Agreement as would have been taken by such Grantor had it been an original party to this Agreement, in each case with all documents required above to be delivered to the Collateral Agent and with all documents and actions required above to be taken to the reasonable satisfaction of the Collateral Agent and upon such execution and delivery, such Subsidiary shall constitute a Grantor hereunder.

8.13. ABL Priority Collateral. Notwithstanding anything herein to the contrary, prior to the Discharge of ABL Obligations, the requirements under this Agreement to deliver or grant control over ABL Priority Collateral to the Collateral Agent, or to give any notice to any Person or in respect of the provision of voting rights or the obtaining of any consent of any Person, in each case in connection with any ABL Priority Collateral, shall be deemed satisfied if the Grantors comply with the requirements of the similar provision of the applicable ABL Credit Document (as defined in the Intercreditor Agreement). Until Discharge of ABL Obligations, the delivery of any ABL Priority Collateral to the ABL Collateral Agent (as defined in the Intercreditor Agreement) pursuant to the ABL Credit Documents as bailee or agent for the Collateral Agent shall satisfy any delivery requirement hereunder or under any other Loan Document.

8.14. Intercreditor Agreement. This Agreement and the other Loan Documents are subject to the terms and conditions set forth in the Intercreditor Agreement in all respects and, in the event of any conflict between the terms of the Intercreditor Agreement and this Agreement, the terms of the Intercreditor Agreement shall govern. Notwithstanding anything herein to the contrary, the Lien and security interest granted to the Collateral Agent pursuant to any Loan Document and the exercise of any right or remedy in respect of the Collateral by the Collateral Agent (or any Secured Party) hereunder or under any other Loan Document are subject to the provisions of the Intercreditor Agreement and in the event of any conflict between the terms of the Intercreditor Agreement, this Agreement and any other Loan Document, the terms of the Intercreditor Agreement shall govern and control with respect to the exercise of any such right or remedy. Without limiting the generality of the foregoing, and notwithstanding anything herein to the contrary, no Loan Party shall be required hereunder or under any Loan Document to take any action with respect to the Collateral that is inconsistent with the provisions of the Intercreditor Agreement.

8.15. Release of Grantors. If at any time all of the Equity Interests of any Grantor (or, to the extent any Collateral Document requires releases thereunder to occur in accordance with the provisions of this Agreement, the pledgor, transferor, mortgagor or other corresponding party under such other Collateral Document) owned by the Company and its Subsidiaries are sold (to a Person other than the Company or any of its Subsidiaries) in a transaction permitted pursuant to the Credit Agreement (and which does not violate the terms of any other Loan Document then in effect), then, at the request and expense of the Company, the respective Grantor shall be immediately released as a Grantor pursuant to this Agreement without any further action hereunder (and upon the reasonable request of the Company and at the expense of the Grantors, the Collateral Agent (or, to the extent any other Collateral Document requires releases thereunder to occur in accordance with the provisions of this Agreement, the pledgee, assignee, mortgagee or other corresponding party under such other Collateral Document) shall execute and deliver such instruments of release as are reasonably necessary to evidence the release of such Grantor and otherwise reasonably satisfactory to the Collateral Agent). At any time the Company desires that a Grantor be released from this Agreement as provided in this Section 8.15, the Company shall deliver to the Collateral Agent a certificate signed by a Responsible Officer of the Company stating that (i) the transaction is permitted pursuant to the Credit Agreement (and does not violate the terms of any other Loan Documents then in effect) and (ii) the release of the respective Grantor is permitted pursuant to this Section 8.15.

***[Remainder of this page intentionally left blank; signature page follows]***

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered by their duly authorized officers as of the date first above written.

GRANTORS:

CIENA CORPORATION

By: \_\_\_\_\_

Name:

Title:

CIENA COMMUNICATIONS, INC.

By: \_\_\_\_\_

Name:

Title:

CIENA GOVERNMENT SOLUTIONS, INC.

By: \_\_\_\_\_

Name:

Title:

Accepted and Agreed to:

BANK OF AMERICA, N.A.,  
as Collateral Agent

By: \_\_

Name:

Title:

**FORM OF SECURITY AGREEMENT SUPPLEMENT**

SECURITY AGREEMENT SUPPLEMENT dated as of \_\_\_\_\_, \_\_\_\_\_, between [NAME OF GRANTOR] [\_\_\_\_\_] a [\_\_\_\_\_] corporation (the “**Grantor**”) and BANK OF AMERICA, N.A. (or any successor collateral agent), as Collateral Agent.

WHEREAS, CIENA CORPORATION, a Delaware corporation, the other Grantors party thereto and BANK OF AMERICA, N.A., as Collateral Agent are parties to a Term Loan Security Agreement dated as of July 15, 2014 (as heretofore amended and/or supplemented, the “**Security Agreement**”) under which the Borrower and the other Grantors party thereto have secured certain of the Borrower’s obligations and the Guarantors have secured their respective guarantees thereof (the “**Secured Obligations**”);

WHEREAS, [NAME OF GRANTOR] [\_\_\_\_\_] desires to become [is] a party to the Security Agreement as a Grantor thereunder;<sup>1</sup> and

WHEREAS, terms defined in the Security Agreement (or whose definitions are incorporated by reference in the recitals of the Security Agreement) and not otherwise defined herein have, as used herein, the respective meanings provided for therein;

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. *Party to Security Agreement*<sup>2</sup>. The Grantor acknowledges that, by signing this Security Agreement Supplement and delivering it to the Collateral Agent, the Grantor becomes a “Grantor” for all purposes of the Security Agreement and will become a party to the Security Agreement and will thereafter have all the rights and obligations of a Grantor thereunder and be bound by all the provisions thereof as fully as if the Grantor were one of the original parties thereto.

<sup>1</sup> If the Grantor is the Borrower, delete this recital and Section 1 hereof.

<sup>2</sup> Delete this Section if the Grantor is the Borrower or is already a party to the Security Agreement.

2. *Grant of Liens.* (a) In order to secure the Secured Obligations, the Grantor grants to the Collateral Agent for the benefit of the Secured Parties a continuing security interest in all the following property of the Grantor, whether now owned or existing or hereafter acquired or arising and regardless of where located (the “**New Collateral**”):

[describe property being added to the Collateral]<sup>3</sup>

(b) With respect to each right to payment or performance included in the Collateral from time to time, the Lien granted therein includes a continuing security interest in (i) any Supporting Obligation that supports such payment or performance and (i) any Lien that (x) secures such right to payment or performance or (y) secures any such Supporting Obligation.

(c) The foregoing Liens are granted as security only and shall not subject the Collateral Agent or any other Secured Party to, or transfer or in any way affect or modify, any obligation or liability of the Grantor with respect to any of the New Collateral or any transaction in connection therewith.

3. [Reserved.]

4. *Representations and Warranties.* (a) The Grantor is duly organized, validly existing and in good standing under the laws of [jurisdiction of organization].

(b) The Grantor has delivered a Perfection Certificate to the Administrative Agent. The information set forth therein is correct and complete as of the date hereof. Within 60 days after the date hereof, the Grantor will furnish to the Administrative Agent a file search report from each UCC filing office listed in such Perfection Certificate, showing the filing made at such filing office to perfect the Liens on the New Collateral.

(c) The execution, delivery and performance by the Grantor of this Security Agreement Supplement and each other Loan Document to which it is a party has been duly authorized by all necessary corporate

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<sup>3</sup> If the Grantor is not already a party to the Security Agreement, clauses (i) through (xii) of Section 1(a) and Section 1(b) of the Security Agreement may be appropriate



or other organizational action, and do not and will not (i) contravene the terms of any of the Grantor's Organization Documents; (i) conflict with or result in any breach or contravention of, or the creation of any Lien (other than Liens created under the Loan Documents) under, or require any payment to be made under (A) any material Contractual Obligation to which the Grantor is a party or affecting the Grantor or the properties of the Grantor or any of its Subsidiaries or (A) any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which the Grantor or its property is subject; or (i) violate any Law.

(d) No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with (a) the execution, delivery or performance by the Grantor of this Security Agreement Supplement or any other Loan Document, (b) the grant by the Grantor of the Liens granted by it pursuant to the foregoing Section 2 and the other Collateral Documents, or (c) the perfection or maintenance of the Liens created under the foregoing Section 2 and the other Collateral Documents (including, subject to the Intercreditor Agreement, the first priority nature thereof) other than (i) those that have already been obtained and are now in full force and effect, (ii) filings to perfect the Liens created by the foregoing Section 2 and the other Collateral Documents, (iii) those actions as contemplated by Section 2.1 of Security Agreement, and (iv) filings of the Loan Documents with the SEC after the Closing Date in accordance with the requirements thereof.

(e) The Security Agreement as supplemented hereby constitutes a valid and binding agreement of the Grantor, enforceable in accordance with its terms, except as limited by (i) applicable bankruptcy, insolvency, fraudulent conveyance or other similar laws affecting creditors' rights generally and (i) general principles of equity.

(f) Each of the representations and warranties set forth in Article II of the Security Agreement is true as applied to the Grantor and the New Collateral. For purposes of the foregoing sentence, references in said Sections to a "Grantor" shall be deemed to refer to the Grantor, references to Annexes to the Security Agreement shall be deemed to refer to the corresponding Annexes to this Security Agreement Supplement, references to "Collateral" shall be deemed to refer to the New Collateral, and references to the "Effective Date" shall be deemed to refer to the date on which the Grantor signs and delivers this Security Agreement Supplement.

5. *Governing Law.* This Security Agreement Supplement shall be construed in accordance with and governed by the laws of the State of New York.

IN WITNESS WHEREOF, the parties hereto have caused this Security Agreement Supplement to be duly executed by their respective authorized officers as of the day and year first above written.

[NAME OF GRANTOR]

By: \_\_\_\_\_

Name:

Title:

BANK OF AMERICA, N.A., as Collateral Agent

By: \_\_\_\_\_

Name:

Title:

**COPYRIGHT SECURITY AGREEMENT****(Copyrights, Copyright Registrations, Copyright Applications and Copyright Licenses)**

WHEREAS, [name of Grantor], a \_\_\_\_\_ corporation<sup>1</sup> (herein referred to as the “**Grantor**”) owns, or in the case of licenses is a party to, the Copyright Collateral (as defined below);

WHEREAS, CIENA CORPORATION, a Delaware corporation (the “**Borrower**”), the Lenders party thereto and BANK OF AMERICA, N.A., as administrative agent, are parties to that certain Credit Agreement dated as of July 15, 2014 (as amended from time to time, the “**Credit Agreement**”); and

WHEREAS, pursuant to (i) a Term Loan Security Agreement dated as of July 15, 2014 (as amended and/or supplemented from time to time, the “**Security Agreement**”) among the Borrower, the other Grantors party thereto and Bank of America, N.A., as collateral agent for the Secured Parties referred to therein (in such capacity, together with its successors in such capacity, the “**Grantee**”), (ii) a Guaranty Agreement dated as of July 15, 2014 (as amended and/or supplemented from time to time, the “**Guaranty Agreement**”) among the Guarantors party thereto and Bank of America, N.A., as administrative agent and collateral agent for the Secured Parties referred to therein, and (iii) certain other Collateral Documents (including this Copyright Security Agreement) the Grantor has [secured certain of its obligations (the “**Secured Obligations**”)]<sup>2</sup> [guaranteed certain obligations of the Borrower and secured such guarantee (the “**Grantor’s Secured Guarantee**”)]<sup>3</sup> by granting to the Grantee for the benefit of such Secured Parties a continuing security interest in personal property of the Grantor, including all right, title and interest of the Grantor in, to and under the Copyright Collateral (as defined below);

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<sup>1</sup> Modify as needed if the Grantor is not a corporation.

<sup>2</sup> Delete these bracketed words if the Grantor is a Guarantor.

<sup>3</sup> Delete these bracketed words if the Grantor is the Borrower.

WHEREAS, terms defined in the Security Agreement (or whose definitions are incorporated by reference in the recitals thereto) and not otherwise defined herein have, as used herein, the respective meanings provided for therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantor grants to the Grantee, to secure the [Secured Obligations] [Grantor's Secured Guarantee], a continuing security interest in all of the Grantor's right, title and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "**Copyright Collateral**"), whether now owned or existing or hereafter acquired or arising, but subject to Section 1.1(b) of the Security Agreement:

(i) each Copyright, owned by the Grantor, including, without limitation, each Copyright registration or application therefor referred to in Schedule 1 hereto;

(ii) each License, related to any Copyright (each, a "**Copyright License**") to which the Grantor is a party, including, without limitation, each Copyright License identified in Schedule 1 hereto; and

(iii) all proceeds of, revenues from, and accounts and general intangibles arising out of, the foregoing, including, without limitation, all proceeds of and revenues from any claim by the Grantor against third parties for past, present or future infringement of any Copyright (including, without limitation, any Copyright owned by the Grantor and identified in Schedule 1), and all rights and benefits of the Grantor under any Copyright License (including, without limitation, any Copyright License identified in Schedule 1).

The Grantor irrevocably constitutes and appoints the Grantee and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full power and authority in the name of the Grantor or in the Grantee's name, from time to time, in the Grantee's discretion, so long as any Event of Default shall have occurred and be continuing, to take with respect to the Copyright Collateral any and all appropriate action which the Grantor might take with respect to the Copyright Collateral and to execute any and all documents and instruments which may be necessary or desirable to carry out the terms of this Copyright Security Agreement and to accomplish the purposes hereof.

Except to the extent permitted in the Security Agreement or the Credit Agreement, the Grantor agrees not to sell, license, exchange, assign or otherwise transfer or dispose of, or grant any rights with respect to, or mortgage or otherwise encumber, any of the Copyright Collateral.

The foregoing security interest is granted in conjunction with the security interests granted by the Grantor to the Grantee pursuant to the Security Agreement. The Grantor acknowledges and affirms that the rights and remedies of the Grantee with respect to the security interest in the Copyright Collateral granted hereby are

more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

This Copyright Security Agreement shall be construed in accordance with and governed by the laws of the State of New York.

IN WITNESS WHEREOF, the Grantor has caused this Copyright Security Agreement to be duly executed by its officer thereunto duly authorized as of the date first listed above.

[NAME OF GRANTOR]

By: \_\_\_\_\_  
Name:  
Title:

Acknowledged:

BANK OF AMERICA, N.A.,  
as Collateral Agent,

By: \_\_\_\_\_  
Name:  
Title:

**FORM OF PATENT SECURITY AGREEMENT****(Patents, Patent Applications and Patent Licenses)**

WHEREAS, [name of Grantor], a \_\_\_\_\_ corporation<sup>1</sup> (herein referred to as the “**Grantor**”) owns, or in the case of licenses is a party to, the Patent Collateral (as defined below);

WHEREAS, CIENA CORPORATION, a Delaware corporation (the “**Borrower**”), the Lenders party thereto and BANK OF AMERICA, N.A., as administrative Agent, are parties to that certain Credit Agreement dated as of July 15, 2014 (as amended from time to time, the “**Credit Agreement**”); and

WHEREAS, pursuant to (i) a Term Loan Security Agreement dated as of July 15, 2014 (as amended and/or supplemented from time to time, the “**Security Agreement**”) among the Borrower, the other Grantors party thereto and Bank of America, N.A., as collateral agent for the Secured Parties referred to therein (in such capacity, together with its successors in such capacity, the “**Grantee**”), (ii) a Guaranty Agreement dated as of July 15, 2014 (as amended and/or supplemented from time to time, the “**Guaranty Agreement**”) among the Guarantors party thereto and Bank of America, N.A., as administrative agent and collateral agent for the Secured Parties referred to therein, and (iii) certain other Collateral Documents (including this Patent Security Agreement), the Grantor has [secured certain of its obligations (the “**Secured Obligations**”)]<sup>2</sup> [guaranteed certain obligations of the Borrower and secured such guarantee (the “**Grantor’s Secured Guarantee**”)]<sup>3</sup> by granting to the Grantee for the benefit of such Secured Parties a continuing security interest in personal property of the Grantor, including all right, title and interest of the Grantor in, to and under the Patent Collateral (as defined below);

WHEREAS, terms defined in the Security Agreement (or whose definitions are incorporated by reference in the recitals thereto) and not otherwise defined herein have, as used herein, the respective meanings provided for therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantor grants to the Grantee,

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<sup>1</sup> Modify as needed if the Grantor is not a corporation.

<sup>2</sup> Delete these bracketed words if the Grantor is a Guarantor.

<sup>3</sup> Delete these bracketed words if the Grantor is the Borrower.

to secure the [Secured Obligations] [Grantor's Secured Guarantee], a continuing security interest in all of the Grantor's right, title and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "**Patent Collateral**"), whether now owned or existing or hereafter acquired or arising, but subject to Section 1.1(b) of the Security Agreement:

(i) each Patent owned by the Grantor, including, without limitation, each Patent referred to in Schedule 1 hereto;

(ii) each License, related to any Patent (each, a "**Patent License**") to which the Grantor is a party, including, without limitation, each Patent License identified in Schedule 1 hereto; and

(iii) all proceeds of and revenues from the foregoing, including, without limitation, all proceeds of and revenues from any claim by the Grantor against third parties for past, present or future infringement of any Patent (including, without limitation, any Patent owned by the Grantor and identified in Schedule 1 hereto) and all rights and benefits of the Grantor under any Patent License (including, without limitation, any Patent License identified in Schedule 1 hereto).

The Grantor irrevocably constitutes and appoints the Grantee and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full power and authority in the name of the Grantor or in the Grantee's name, from time to time, in the Grantee's discretion, so long as any Event of Default shall have occurred and be continuing, to take with respect to the Patent Collateral any and all appropriate action which the Grantor might take with respect to the Patent Collateral and to execute any and all documents and instruments which may be necessary or desirable to carry out the terms of this Patent Security Agreement and to accomplish the purposes hereof.

Except to the extent permitted in the Security Agreement or the Credit Agreement, the Grantor agrees not to sell, license, exchange, assign or otherwise transfer or dispose of, or grant any rights with respect to, or mortgage or otherwise encumber, any of the Patent Collateral.

The foregoing security interest is granted in conjunction with the security interests granted by the Grantor to the Grantee pursuant to the Security Agreement. The Grantor acknowledges and affirms that the rights and remedies of the Grantee with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

This Patent Security Agreement shall be construed in accordance with and governed by the laws of the State of New York.



IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be duly executed by its officer thereunto duly authorized as of the date first listed above.

[NAME OF GRANTOR]

By: \_\_\_\_\_  
Name:  
Title:

Acknowledged:

BANK OF AMERICA, N.A.,  
as Collateral Agent,

By: \_\_\_\_\_  
Name:  
Title:

**FORM OF TRADEMARK SECURITY AGREEMENT**  
**(Trademarks, Trademark Registrations, Trademark Applications and Trademark Licenses)**

WHEREAS, [name of Grantor], a \_\_\_\_\_ corporation<sup>1</sup> (herein referred to as the “**Grantor**”) owns, or in the case of licenses is a party to, the Trademark Collateral (as defined below);

WHEREAS, CIENA CORPORATION, a Delaware corporation (the “**Borrower**”), the Lenders party thereto and BANK OF AMERICA, N.A., as Administrative Agent, are parties to that certain Credit Agreement dated as July 15, 2014 (as amended from time to time, the “**Credit Agreement**”); and

WHEREAS, pursuant to (i) a Term Loan Security Agreement dated as of July 15, 2014 (as amended and/or supplemented from time to time, the “**Security Agreement**”) among the Borrower, the other Grantors party thereto and Bank of America, N.A., as collateral agent for the Secured Parties referred to therein (in such capacity, together with its successors in such capacity, the “**Grantee**”), (ii) a Guaranty Agreement dated as of July 15, 2014 (as amended and/or supplemented from time to time, the “**Guaranty Agreement**”) among the Guarantors party thereto and Bank of America, N.A., as administrative agent and collateral agent for the Secured Parties referred to therein, and (iii) certain other Collateral Documents (including this Trademark Security Agreement), the Grantor has [secured certain of its obligations (the “**Secured Obligations**”)]<sup>2</sup> [guaranteed certain obligations of the Borrower and secured such guarantee (the “**Grantor’s Secured Guarantee**”)]<sup>3</sup> by granting to the Grantee for the benefit of such Secured Parties a continuing security interest in personal property of the Grantor, including all right, title and interest of the Grantor in, to and under the Trademark Collateral (as defined below);

WHEREAS, terms defined in the Security Agreement (or whose definitions are incorporated by reference in the recitals thereto) and not otherwise defined herein have, as used herein, the respective meanings provided for therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantor grants to the Grantee, to secure the [Secured Obligations] [Grantor’s Secured Guarantee], a continuing security interest in all of the Grantor’s right, title and interest in, to and under the following (all of the following

<sup>1</sup> Modify as needed if the Grantor is not a corporation.  
<sup>2</sup> Delete these bracketed words if the Grantor is a Guarantor.  
<sup>3</sup> Delete these bracketed words if the Grantor is the Borrower.

items or types of property being herein collectively referred to as the “**Trademark Collateral**”), whether now owned or existing or hereafter acquired or arising, but subject to Section 1.1(b) of the Security Agreement:

(i) each Trademark (as defined in the Security Agreement) owned by the Grantor, including, without limitation, each Trademark registration and application referred to in Schedule 1 hereto and all of the goodwill of the business connected with the use of, or symbolized by each Trademark;

(ii) each License (as defined in the Security Agreement), related to any Trademark (each, a “**Trademark License**”) to which the Grantor is a party, including, without limitation, each Trademark License identified in Schedule 1 hereto and all of the goodwill of the business connected with the use of, or symbolized by each Trademark licensed pursuant thereto; and

(iii) all proceeds of and revenues from the foregoing, including, without limitation, all proceeds of and revenues from any claim by the Grantor against third parties for past, present or future unfair competition with, or violation of intellectual property rights in connection with or injury to, or infringement or dilution of any Trademark owned by the Grantor (including, without limitation, any Trademark identified in Schedule 1 hereto), and all rights and benefits of the Grantor under any Trademark License (including, without limitation, any Trademark License identified in Schedule 1 hereto), or for injury to the goodwill associated with any of the foregoing;

*provided* that no security interest shall be granted in any United States intent-to-use Trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use Trademark applications under applicable federal law.

The Grantor irrevocably constitutes and appoints the Grantee and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full power and authority in the name of the Grantor or in the Grantee’s name, from time to time, in the Grantee’s discretion, so long as any Event of Default shall have occurred and be continuing, to take with respect to the Trademark Collateral any and all appropriate action which the Grantor might take with respect to the Trademark Collateral and to execute any and all documents and instruments which may be necessary or desirable to carry out the terms of this Trademark Security Agreement and to accomplish the purposes hereof.

Except to the extent permitted in the Security Agreement or the Credit Agreement, the Grantor agrees not to sell, license, exchange, assign or otherwise transfer or dispose of, or grant any rights with respect to, or mortgage or otherwise encumber, any of the Trademark Collateral.

The foregoing security interest is granted in conjunction with the security interests granted by the Grantor to the Grantee pursuant to the Security Agreement. The Grantor acknowledges and affirms that the rights and remedies of the Grantee with respect to the security interest in the Trademark Collateral granted hereby are more fully set forth in the

Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

This Trademark Security Agreement shall be construed in accordance with and governed by the laws of the State of New York.

IN WITNESS WHEREOF, the Grantor has caused this Trademark Security Agreement to be duly executed by its officer thereunto duly authorized as of the date first listed above.

[NAME OF GRANTOR]

By: \_\_\_\_\_  
Name:  
Title:

Acknowledged:

BANK OF AMERICA, N.A.,  
as Collateral Agent,

By: \_\_\_\_\_  
Name:  
Title:

**[NAME OF GRANTOR]**

**TRADEMARK REGISTRATIONS**

<b>TRADEMARK</b>	<b>REG NO.</b>	<b>REG. DATE</b>
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**TRADEMARK APPLICATIONS**

<b>TRADEMARK</b>	<b>REG NO.</b>	<b>REG. DATE</b>
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## TRADEMARK LICENSES

**Name of  
Agreement**

**Parties  
Licensor/Licensee**

**Date of  
Agreement**

**Subject  
Matter**

**AMENDMENTS TO PLEDGE AGREEMENT**

[Changed pages to Pledge Agreement follow]



TERM LOAN PLEDGE AGREEMENT

among

CIENA CORPORATION,  
EACH OTHER PLEDGOR  
FROM TIME TO TIME PARTY HERETO

and

BANK OF AMERICA, N.A.,  
as PLEDGEE

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Dated as of July 15, 2014

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## TERM LOAN PLEDGE AGREEMENT

TERM LOAN PLEDGE AGREEMENT, dated as of July 15, 2014 (as the same may be amended, restated, modified and/or supplemented from time to time, this "Agreement"), among each of the undersigned pledgors (each, a "Pledgor" and, together with any other entity that becomes a pledgor hereunder pursuant to Section 32 hereof, the "Pledgors") and BANK OF AMERICA, N.A., as collateral agent (in such capacity, together with any successor collateral agent, the "Pledgee"), for the benefit of the Secured Parties (as defined below). Certain capitalized terms as used herein are defined in Section 2 hereof.

### WITNESSETH :

WHEREAS, Ciena Corporation, a Delaware corporation (the "Company"), each lender from time to time party thereto (collectively, the "Lenders") and Bank of America, N.A., as administrative agent (in such capacity, together with any successor administrative agent, the "Administrative Agent") have entered into a Credit Agreement, dated as of July 15, 2014 (as amended, modified, restated and/or supplemented from time to time, the "Credit Agreement"), pursuant to which the Lenders have agreed, on a several basis, to make Loans to the Company upon the terms and subject to the conditions set forth therein;

WHEREAS, pursuant to the Guaranty, each Pledgor (other than the Company) has jointly and severally guaranteed to the Secured Parties the payment when due of all Guaranteed Obligations as described (and defined) therein;

WHEREAS, it is a condition precedent to the making of Loans to the Company that each Pledgor shall have executed and delivered to the Pledgee this Agreement; and

WHEREAS, each Pledgor will benefit from the incurrence of Loans by the Company;

NOW, THEREFORE, in consideration of the foregoing and other benefits accruing to each Pledgor, the receipt and sufficiency of which are hereby acknowledged, each Pledgor hereby makes the following representations and warranties to the Pledgee for the benefit of the Secured Parties and hereby covenants and agrees with the Pledgee for the benefit of the Secured Parties as follows:

1. SECURITY FOR OBLIGATIONS. This Agreement is made by each Pledgor for the benefit of the Secured Parties to secure the prompt and complete payment and performance when due of the Obligations.

2. DEFINITIONS. (%4) Unless otherwise defined herein, all capitalized terms used herein and defined in the Credit Agreement shall be used herein as therein defined. Reference to singular terms shall include the plural and vice versa.

(a) The following capitalized terms used herein shall have the definitions specified below:

“ABL Agent” shall have the meaning given such term in the Intercreditor Agreement.

“Administrative Agent” shall have the meaning set forth in the recitals hereto.

“Adverse Claim” shall have the meaning given such term in Section 8-102(a)(1) of the UCC.

“Agreement” shall have the meaning set forth in the first paragraph hereto.

“Canadian Subsidiary” shall mean any Subsidiary of the Company incorporated, organized or established or resident for the purposes of the Income Tax Act (Canada) as amended, in Canada or any province or territory thereof.

“Certificated Security” shall have the meaning given such term in Section 8-102(a)(4) of the UCC.

“Clearing Corporation” shall have the meaning given such term in Section 8-102(a)(5) of the UCC.

“Collateral” shall have the meaning set forth in Section 3.1 hereof.

“Collateral Accounts” shall mean any and all accounts established and maintained by the Pledgee in the name of any Pledgor to which Collateral may be credited.

“Company” shall have the meaning set forth in the recitals hereto.

“Credit Agreement” shall have the meaning set forth in the recitals hereto.

“Discharge of ABL Obligations” shall have the meaning given such term in the Intercreditor Agreement.

“Domestic Corporation” shall have the meaning set forth in the definition of “Stock”.

“Domestic Non-Subsidiary” shall mean a Domestic Person that is not a Subsidiary.

“Domestic Person” shall mean a Person that is organized under the laws of the United States, any State thereof or the District of Columbia.

“Event of Default” shall mean any Event of Default under, and as defined in, the Credit Agreement.

“Financial Asset” shall have the meaning given such term in Section 8-102(a)(9) of the UCC.

“Foreign Corporation” shall have the meaning set forth in the definition of “Stock”.

“Immaterial Certificated Security Investment” shall have the meaning set forth in Section 3.2(a)(i) hereof.

“Instrument” shall have the meaning given such term in Section 9-102(a)(47) of the UCC.

“Intercreditor Agreement” shall have the meaning given such term in the Credit Agreement.

“Investment Property” shall have the meaning given such term in Section 9-102(a)(49) of the UCC.

“Lenders” shall have the meaning set forth in the recitals hereto.

“Limited Liability Company Assets” shall mean all assets, whether tangible or intangible and whether real, personal or mixed (including, without limitation, all limited liability company capital and interest in other limited liability companies), at any time owned by any limited liability company.

“Limited Liability Company Interests” shall mean the entire limited liability company membership interest at any time owned by any Pledgor in any limited liability company.

“Location” of any Pledgor shall mean such Pledgor’s “location” as determined pursuant to Section 9-307 of the UCC.

“Margin Stock” shall have the meaning provided in Regulation U.

“Material Subsidiary” shall mean any Subsidiary that would be a “significant subsidiary” as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such Regulation S-X as in effect from time to time.

“Non-Voting Equity Interests” shall mean all Equity Interests of any Person which are not Voting Equity Interests.

“Notes” shall mean (x) all intercompany notes at any time issued to each Pledgor and (y) all other promissory notes from time to time issued to, or held by, each Pledgor (other than promissory notes issued in connection with the extensions of trade credit by any Pledgor in the ordinary course of business).

“Obligations” shall have the meaning given to such term in the Credit Agreement.

“Partnership Assets” shall mean all assets, whether tangible or intangible and whether real, personal or mixed (including, without limitation, all partnership capital and interest in other partnerships), at any time owned by any general partnership or limited partnership.

“Partnership Interest” shall mean the entire general partnership interest or limited partnership interest at any time owned by any Pledgor in any general partnership or limited partnership.

“Pledge Agreement Supplement” shall mean a pledge agreement supplement, in a form reasonably satisfactory to the Pledgee and attached hereto as Exhibit A, signed and delivered to the Pledgee for the purpose of adding a Subsidiary as a party hereto pursuant to Section 32 and/or adding additional property to the Collateral.

“Pledged Limited Liability Company Interests” shall mean all Limited Liability Company Interests at any time pledged or required to be pledged hereunder.

“Pledged Notes” shall mean all Notes at any time pledged or required to be pledged hereunder.

“Pledgee” shall have the meaning set forth in the first paragraph of this Agreement.

“Pledgor” shall have the meaning set forth in the first paragraph hereof.

“Proceeds” shall have the meaning given such term in Section 9-102(a)(64) of the UCC.

“Registered Organization” shall have the meaning given such term in Section 9-102(a)(70) of the UCC.

“Regulation U” shall mean Regulation U of the Board of Governors of the Federal Reserve System of the United States as from time to time in effect and any successor to all or a portion thereof.

“Securities Account” shall have the meaning given to such term in 8-501 of the UCC.

“Securities Act” shall mean the Securities Act of 1933, as amended, as in effect from time to time.

“Securities Intermediary” shall have the meaning given such term in Section 8-102(14) of the UCC.

“Security” and “Securities” shall have the meaning given such term in Section 8-102(a)(15) of the UCC and shall in any event include all Stock and all Notes.

“Security Entitlement” shall have the meaning given such term in Section 8-102(a)(17) of the UCC.

“State” shall mean any state of the United States.

“Stock” shall mean (x) with respect to corporations incorporated under the laws of the United States or any State thereof or the District of Columbia (each, a “Domestic Corporation”), all of the issued and outstanding shares of capital stock of any Domestic Corporation at any time owned by any Pledgor and (y) with respect to corporations which are not Domestic Corporations (each, a “Foreign Corporation”), all of the issued and outstanding shares of capital stock or other Equity Interests of any Foreign Corporation at any time owned by any Pledgor.

“Termination Date” shall have the meaning set forth in the Security Agreement.

“Transmitting Utility” has the meaning given such term in Section 9-102(a)(80) of the UCC.

“UCC” shall mean the Uniform Commercial Code as in effect from time to time in the State of New York; provided that, if perfection or the effect of perfection or non-perfection or the priority of any Lien on any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than New York, “UCC” means the Uniform Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

“ULC” means an unlimited company, an unlimited liability company or an unlimited liability corporation incorporated pursuant to, or otherwise governed by, the laws of any of the provinces or territories of Canada.

“ULC Shares” shall mean shares in any ULC at any time owned or otherwise held by any Pledgor.

“Uncertificated Security” shall have the meaning given such term in Section 8-102(a)(18) of the UCC.

“Voting Equity Interests” of any Person shall mean all classes of Equity Interests of such Person entitled to vote.

### 3. PLEDGE OF SECURITIES, ETC.

3.1 Pledge. To secure the Obligations now or hereafter owed or to be performed by such Pledgor (but subject to the proviso at the end of this Section 3.1), each Pledgor does hereby grant and pledge to the Pledgee for the benefit of the Secured Parties, and does hereby create a continuing security interest in favor of the Pledgee for the benefit of the Secured Parties in, all of its right, title and interest in and to the following, whether now existing or hereafter from time to time acquired (collectively, the “Collateral”):

(a) each of the Collateral Accounts, including any and all assets of whatever type or kind deposited by such Pledgor in any such Collateral Account, whether now owned or hereafter acquired, existing or arising, including, without limitation, all Financial Assets, Investment Property, monies, checks, drafts, Instruments, Securities or interests therein of any type or nature deposited or required by the Credit Agreement or any other Loan Document to be deposited in such Collateral Account, and all investments and all certificates and other Instruments (including depository receipts, if any) from time to time representing or evidencing the same, and all dividends, interest, distributions, cash and other property from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of the foregoing;

(b) all Securities owned or held by such Pledgor from time to time and all options and warrants owned by such Pledgor from time to time to purchase Securities, together with all rights, privileges, authority and powers of such Pledgor relating to such Securities in each such issuer or under any organizational document of each such issuer, and the certificates, instruments and agreements representing such Securities and any and all interest of such Pledgor in the entries on the books of any financial intermediary pertaining to such Securities;

(c) all Limited Liability Company Interests owned by such Pledgor from time to time and all of its right, title and interest in each limited liability company to which each such Limited Liability Company Interest relates, whether now existing or hereafter acquired, including, without limitation, to the fullest extent permitted under the terms and provisions of the documents and agreements governing such Limited Liability Company Interests and applicable law:

(A) all its capital therein and its interest in all profits, income, surpluses, losses, Limited Liability Company Assets of such limited liability company and other distributions to which such Pledgor shall at any time be entitled in respect of such Limited Liability Company Interests;

(B) all other payments due or to become due to such Pledgor in respect of Limited Liability Company Interests, whether under any limited liability company agreement or otherwise, whether as contractual obligations, damages, insurance proceeds or otherwise;

(C) all of its claims, rights, powers, privileges, authority, options, security interests, Liens and remedies, if any, under any limited liability company agreement or operating agreement, or at law or otherwise in respect of such Limited Liability Company Interests;

(D) all present and future claims, if any, of such Pledgor against any such limited liability company for monies loaned or advanced, for services rendered or otherwise;

(E) all of such Pledgor's rights under any limited liability company agreement or operating agreement or at law to exercise and enforce every right, power, remedy, authority, option and privilege of such Pledgor relating to such Limited Liability Company Interests, including any power to terminate, cancel or modify any such limited liability company agreement or operating agreement, to execute any instruments and to take any and all other action on behalf of and in the name of such Pledgor in respect of such Limited Liability Company Interests and any such limited liability company, to make determinations, to exercise any election (including, but not limited to, election of remedies) or option or to give or receive any notice, consent, amendment, waiver or approval, together with full power and authority to demand, receive, enforce, collect or receipt for any of the foregoing or for any Limited Liability Company Asset of such limited liability company, to

enforce or execute any checks, or other instruments or orders, to file any claims and to take any action in connection with any of the foregoing; and

(F) all other property hereafter delivered in substitution for or in addition to any of the foregoing, all certificates and instruments representing or evidencing such other property and all cash, securities, interest, dividends, rights and other property at any time and from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of the foregoing;

(d) all Partnership Interests owned by such Pledgor from time to time and all of its right, title and interest in each partnership to which each such Partnership Interest relates, whether now existing or hereafter acquired, including, without limitation, to the fullest extent permitted under the terms and provisions of the documents and agreements governing such Partnership Interests and applicable law:

(A) all its capital therein and its interest in all profits, income, surpluses, losses, Partnership Assets of any such partnership and other distributions to which such Pledgor shall at any time be entitled in respect of such Partnership Interests;

(B) all other payments due or to become due to such Pledgor in respect of Partnership Interests, whether under any partnership agreement or otherwise, whether as contractual obligations, damages, insurance proceeds or otherwise;

(C) all of its claims, rights, powers, privileges, authority, options, security interests, Liens and remedies, if any, under any partnership agreement or operating agreement, or at law or otherwise in respect of such Partnership Interests;

(D) all present and future claims, if any, of such Pledgor against any such partnership for monies loaned or advanced, for services rendered or otherwise;

(E) all of such Pledgor's rights under any partnership agreement or operating agreement or at law to exercise and enforce every right, power, remedy, authority, option and privilege of such Pledgor relating to such Partnership Interests, including any power to terminate, cancel or modify any partnership agreement or operating agreement, to execute any instruments and to take any and all other action on behalf of and in the name of such Pledgor in respect of such Partnership Interests and any such partnership, to make determinations, to exercise any election (including, but not limited to, election of remedies) or option or to give or receive any notice, consent, amendment, waiver or approval, together with full power and authority to demand, receive, enforce, collect or receipt for any of the foregoing or for any Partnership Asset, to enforce or execute any checks, or other instruments or orders, to file any claims and to take any action in connection with any of the foregoing; and



(F) all other property hereafter delivered in substitution for or in addition to any of the foregoing, all certificates and instruments representing or evidencing such other property and all cash, securities, interest, dividends, rights and other property at any time and from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of the foregoing;

(e) all Securities Accounts, Financial Assets and Investment Property owned by such Pledgor from time to time;

(f) all Security Entitlements owned by such Pledgor from time to time in any and all of the foregoing; and

(g) all Proceeds of any and all of the foregoing;

provided that (i)(x) no Voting Equity Interests of any Foreign Subsidiary which represents more than 66% of the total combined voting power of all classes of Voting Equity Interests of the respective Foreign Subsidiary shall be pledged hereunder, provided, however, that immediately upon the amendment of the Code to allow the pledge of a greater percentage of Stock in a Foreign Subsidiary without causing a repatriation (or deemed repatriation) of earnings or adverse tax consequences, the Equity Interests shall include, and the security interest granted by each Pledgor shall attach to, such greater percentage of Voting Equity Interests of each directly owned Foreign Subsidiary that is a Subsidiary of such Pledgor to secure all other Obligations and (y) each Pledgor shall be required to pledge hereunder 100% of the Non-Voting Equity Interests of each Foreign Subsidiary at any time and from time to time acquired by such Pledgor, which Non-Voting Equity Interests shall not be subject to the limitations described in the preceding clause (x) and (ii) notwithstanding anything herein to the contrary, in no event shall the security interest and lien granted under Section 3.1 hereof attach to, and the term "Collateral" (and the component terms thereof) shall not include, (x) any Equity Interests owned by any Pledgor in any Person for so long as the grant of such security interest shall constitute or result in (A) other than in the case of a Wholly-Owned Subsidiary of the Company, a breach or termination pursuant to the terms of, or a default under, any Indebtedness assumed by the Company or any of its Subsidiaries pursuant to Section 7.02(j) of the Credit Agreement or any organizational document of such Person (although the Company will use its commercially reasonable efforts to endeavor that the organizational documents of a Subsidiary do not contain a restriction on the pledge thereof), (B) if such Person is organized under the laws of any foreign jurisdiction (other than Canada or any province or territory thereof), a breach of any law or regulation which prohibits the creation of a security interest thereunder (other than to the extent that any such term specified in clause (A) or (B) above is rendered ineffective pursuant to Section 9-406, 9-407, 9-408 or 9-409 of the UCC (or any successor provision or provisions) of any relevant jurisdiction or any other then-applicable law (including the Bankruptcy Code) or principles of equity) or (C) if such Person is organized under the laws of any foreign jurisdiction (other than Canada or any province or territory thereof), require the consent of a Governmental Authority to permit the grant of a security interest therein (and such consent has not been obtained); provided however, that such security interest shall attach immediately at such time as the condition causing such abandonment, invalidation, unenforceability, breach or termination shall no longer be effective and to the extent severable, shall attach immediately to any

portion of such property or other rights that does not result in any of the consequences specified in clause (A), (B) or (C) above and (y) any Margin Stock unless the Secured Parties have made any necessary filings with the FRB in connection therewith and the Pledgors have provided the Pledgee with an executed Form FR U-1; provided further, that each applicable Pledgor shall provide to the Secured Parties notice of the existence of any Margin Stock (other than treasury stock) that would constitute Collateral absent this proviso at the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) and 6.01(b) of the Credit Agreement and, thereafter, such Margin Stock shall constitute Collateral to the extent the Secured Parties have made such necessary filings with the FRB in connection therewith and the Pledgors have provided the Pledgee with an executed Form FR U-1.

3.2 Procedures. (a) To the extent that any Pledgor at any time or from time to time owns, acquires or obtains any right, title or interest in any Collateral, such Collateral shall automatically (and without the taking of any action by such Pledgor) be pledged pursuant to Section 3.1 of this Agreement and, in addition thereto, subject to the Intercreditor Agreement, such Pledgor shall (to the extent provided below) take the following actions as set forth below (as promptly as practicable and, in any event, ~~within 30 days~~ no later than the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Pledgee in its sole discretion) after it obtains such Collateral) for the benefit of the Pledgee and the other Secured Parties:

(i) with respect to a Certificated Security (other than (x) a Certificated Security credited on the books of a Clearing Corporation or Securities Intermediary ~~or~~, (y) a Certificated Security issued by (A) any Foreign Subsidiary ~~(other than a Canadian Subsidiary or a Subsidiary organized under the laws of Luxembourg or the United Kingdom)~~ of the Company that is not a Material Subsidiary or (B) a Person that is not a Subsidiary and is organized under the laws of a foreign jurisdiction or (z) a Certificated Security issued by a Domestic Non-Subsidiary, which Certificated Security has a book value or purchase price (whichever is greater) of less than \$10,000,000 (an "Immaterial Certificated Security Investment")), such Pledgor shall physically deliver such Certificated Security to the Pledgee, endorsed to the Pledgee or endorsed in blank; provided that, notwithstanding the foregoing, with respect to (1) a Certificated Security issued by any Foreign Subsidiary of the Company that is not a Material Subsidiary or (2) an Immaterial Certificated Security Investment, such Pledgor shall (as promptly as practicable and, in any event, no later than the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Pledgee in its sole discretion) after it obtains such Collateral, notify the Pledgee thereof and, upon the request of the Pledgee, such Pledgor shall physically deliver any such Certificated Security to the Pledgee, endorsed to the Pledgee or endorsed in blank;

(ii) with respect to an Uncertificated Security (other than an Uncertificated Security credited on the books of a Clearing Corporation or Securities Intermediary) issued by a Subsidiary of the Company (other than any Foreign Subsidiary ~~(other than a Canadian Subsidiary or a Subsidiary organized under the laws~~

~~of Luxembourg or the United Kingdom) of the~~ of the Company that is not a Material Subsidiary), such Pledgor shall cause the issuer of such Uncertificated Security to duly authorize, execute, and deliver to the Pledgee, an agreement for the benefit of the Pledgee and the other Secured Parties substantially in the form of Annex H hereto (appropriately completed to the reasonable satisfaction of the Pledgee and with such modifications, if any, as shall be reasonably satisfactory to the Pledgee) pursuant to which such issuer agrees to comply with any and all instructions originated by the Pledgee without further consent by the registered owner and not to comply with instructions regarding such Uncertificated Security originated by any other Person other than a court of competent jurisdiction (it being understood that the Pledgee shall not deliver any such instructions until after the occurrence and during the continuance of an Event of Default); provided that, notwithstanding the foregoing, with respect to an Uncertificated Security issued by any Foreign Subsidiary of the Company that is not a Material Subsidiary, such Pledgor shall (as promptly as practicable and, in any event, no later than the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Pledgee in its sole discretion) after it obtains such Collateral, notify the Pledgee thereof and, upon the request of the Pledgee, such Pledgor shall otherwise comply with the delivery requirements of this clause (ii);

(iii) with respect to a Certificated Security, Uncertificated Security, Partnership Interest or Limited Liability Company Interest issued by a Subsidiary of the Company (other than any Foreign Subsidiary ~~(other than a Canadian Subsidiary or a Subsidiary organized under the laws of Luxembourg or the United Kingdom) of the Company~~ that is not a Material Subsidiary) in a Security Account or credited on the books of a Clearing Corporation or Securities Intermediary (including a Federal Reserve Bank, Participants Trust Company or The Depository Trust Company), such Pledgor shall promptly notify the Pledgee thereof and shall promptly use commercially reasonable efforts to take (x) all actions required (i) to comply with the applicable rules of such Clearing Corporation or Securities Intermediary and (ii) to perfect the security interest of the Pledgee under applicable law (including, in any event, under Sections 9-314(a), (b) and (c), 9-106 and 8-106(d) of the UCC) and (y) such other actions as the Pledgee deems necessary or reasonably desirable to effect the foregoing; provided that, notwithstanding the foregoing, with respect to a Certificated Security, Uncertificated Security, Partnership Interest or Limited Liability Company Interest issued by any Foreign Subsidiary of the Company that is not a Material Subsidiary in a Security Account or credited on the books of a Clearing Corporation or Securities Intermediary (including a Federal Reserve Bank, Participants Trust Company or The Depository Trust Company), such Pledgor shall (as promptly as practicable and, in any event, no later than the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Pledgee in its sole discretion) after it obtains such Collateral, notify the Pledgee thereof and, upon the request of the Pledgee, such Pledgor shall otherwise use commercially reasonable efforts to comply with the requirements of subclauses (x) and (y) of this clause (iii);

(iv) with respect to a Partnership Interest or a Limited Liability Company Interest (other than a Partnership Interest or Limited Liability Company Interest (x) credited to a Security Account or on the books of a Clearing Corporation or Securities Intermediary ~~or~~, (y) issued by a (A) Foreign Subsidiary ~~(other than a Canadian Subsidiary or a Subsidiary organized under the laws of Luxembourg or the United Kingdom)~~ of the Company that is not a Material Subsidiary or (B) a Person that is not a Subsidiary and is organized under the laws of a foreign jurisdiction or (z) that constitutes an Immaterial Certificated Security Investment (or would constitute an Immaterial Certificated Security Investment if such Partnership Interest or Limited Liability Company Interest were represented by a certificate)), (1) if such Partnership Interest or Limited Liability Company Interest is represented by a certificate and is a Security for purposes of the UCC, the procedure set forth in Section 3.2(a)(i) hereof, and (2) if such Partnership Interest or Limited Liability Company Interest is not represented by a certificate and is an Uncertificated Security for purposes of the UCC, the procedure set forth in Section 3.2(a)(ii) hereof; provided that, notwithstanding the foregoing, with respect to (1) a Partnership Interest or a Limited Liability Company Interest issued by any Foreign Subsidiary of the Company that is not a Material Subsidiary or (2) an Immaterial Certificated Security Investment (or a Partnership Interest or a Limited Liability Company Interest that would constitute an Immaterial Certificated Security Investment if such Partnership Interest or Limited Liability Company Interest were represented by a certificate), such Pledgor shall, (as promptly as practicable and, in any event, no later than the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement, as such date may be extended from time to time by the Pledgee in its sole discretion) after it obtains such Collateral, notify the Pledgee thereof and, upon the request of the Pledgee, such Pledgor shall otherwise comply with the requirements of this clause (iv);

(v) with respect to any Note with a value equal to ~~\$3,000,000~~ 10,000,000 or more, physical delivery of each such Note to the Pledgee, endorsed in blank, or, at the request of the Pledgee, endorsed to the Pledgee; and

(vi) with respect to cash proceeds from any of the Collateral described in Section 3.1 hereof upon the occurrence and continuance of an Event of Default, upon the Pledgee's written request, (i) establishment by the Pledgee of a cash account in the name of such Pledgor over which the Pledgee shall have "control" within the meaning of the UCC and at any time any Default or Event of Default is in existence no withdrawals or transfers may be made therefrom by any Person except with the prior written consent of the Pledgee and (ii) deposit of such cash in such cash account.

(a) In addition to the actions required to be taken pursuant to Section 3.2(a) hereof, each Pledgor shall take the following additional actions, subject to the Intercreditor Agreement, with respect to the Collateral:

(i) with respect to all Collateral of such Pledgor whereby or with respect to which the Pledgee may obtain “control” thereof within the meaning of Section 8-106 of the UCC (or under any provision of the UCC as same may be amended or supplemented from time to time, or under the laws of any relevant State other than the State of New York), such Pledgor shall take all actions requested from time to time by the Pledgee as may be necessary or reasonably advisable in the reasonable judgment of the Pledgee so that “control” of such Collateral is obtained and held by the Pledgee in accordance with Section 3.2(a) hereof; provided that within 60 days after the date hereof (or such longer period as may be agreed by the Pledgee in its sole discretion), each applicable Pledgor agrees to use commercially reasonable efforts to enter into control agreements with the relevant account bank with respect to each Securities Account that is subject to a control agreement pursuant to the ABL Credit Agreement which control agreements shall (i) name each of the Pledgee and Deutsche Bank AG New York Branch as secured parties and (ii) replace the existing control agreement with respect to such Securities Account;

(ii) each Pledgor shall cause, and hereby authorizes the Pledgee to cause, appropriate financing statements (on appropriate forms) under the Uniform Commercial Code as in effect in the various relevant States, covering all Collateral hereunder (with the form of such financing statements to be reasonably satisfactory to the Pledgee), to be filed in the relevant filing offices so that at all times the Pledgee’s security interest in all Investment Property and other Collateral which can be perfected by the filing of such financing statements (in each case to the maximum extent perfection by filing may be obtained under the laws of the relevant States, including, without limitation, Section 9-312(a) of the UCC) is so perfected. Notwithstanding the foregoing, if reasonably requested by any Pledgor, the Pledgee shall, at such Pledgor’s expense, make such filings as may be reasonably requested to evidence that the security interests hereunder do not attach to any property that is excluded from the Collateral pursuant to the proviso in Section 3.1 hereof; and

(i) Following the Discharge of ABL Obligations, each Pledgor agrees within 60 days (or such longer period as may be agreed by the Pledgee in its sole discretion) with respect to any Securities Account (other than an Excluded Account (as defined in the Security Agreement)) with an average daily balance greater than \$1,000,000, to take all actions requested from time to time by the Pledgee (including, without limitation, the execution and delivery of control agreements to the extent any such Pledgor has not entered into control agreements naming the Pledgee as a secured party in accordance with clause (i) of this subsection (b)) as may be necessary or reasonably advisable in the reasonable judgment of the Pledgee so that “control” of such Securities Accounts are obtained following the termination of the ABL Credit Agreement and thereafter, held by the Pledgee.

3.3 Subsequently Acquired Collateral. If any Pledgor shall acquire (by purchase, stock dividend, distribution or otherwise) any additional Collateral at any time or from time to time after the date hereof, such Collateral shall automatically (and without any further action being required to be taken) be subject to the pledge and security interests created pursuant to Section 3.1 hereof and, furthermore, such Pledgor will thereafter take (or cause to be taken) all action ~~(as promptly as practicable and, in any event, within 30 days after it obtains such Collateral)~~ with

respect to such Collateral in accordance with the procedures set forth in Section 3.2 hereof, and will ~~(i) with respect to any Collateral other than Equity Interests issued by (A) a Foreign Subsidiary (other than a Canadian Subsidiary or a Subsidiary organized under the laws of Luxembourg or the United Kingdom) of the Company that is not a Material Subsidiary or (B) a Person that is not a Subsidiary and is organized under the laws of a foreign jurisdiction, promptly thereafter deliver to the Pledgee a certificate executed by an authorized officer of such Pledgor describing such Collateral and certifying that the same has been duly pledged in favor of the Pledgee (for the benefit of the Secured Parties) hereunder and (ii) promptly thereafter (or in the case of any Equity Interests issued by (A) a Foreign Subsidiary (other than a Canadian Subsidiary or a Subsidiary organized under the laws of Luxembourg or the United Kingdom) of the Company that is not a Material Subsidiary or (B) a Person that is not a Subsidiary and is organized under the laws of a foreign jurisdiction,~~ at the time of delivery of any financial statements required to be delivered pursuant to Section 6.01(a) or 6.01(b) of the Credit Agreement), as such date may be extended from time to time by the Pledgee in its sole discretion, deliver to the Pledgee supplements to Annexes A through G hereto as are necessary to cause such Annexes to be complete and accurate at such time; provided that a supplement to Annex D shall only be required in connection with the acquisition of any Note with a value equal to \$3,000,000 or more. Without limiting the foregoing, each Pledgor shall be required to pledge hereunder in accordance with the terms hereof the Equity Interests of any Foreign Subsidiary at any time and from time to time after the date hereof acquired by such Pledgor, provided that (x) any such pledge of Voting Equity Interests of any Foreign Subsidiary shall be subject to the provisions of clause (x) of the proviso to Section 3.1 hereof and (y) each Pledgor shall be required to pledge hereunder 100% of the Non-Voting Equity Interests of each Foreign Subsidiary at any time and from time to time acquired by such Pledgor. Notwithstanding the foregoing, (i) if, prior to the Discharge of the ABL Obligations, any Pledgor acquires any Securities Account that is required to be subject to a control agreement pursuant to the terms of the ABL Credit Agreement, such Pledgor shall use commercially reasonable efforts to ensure that such control agreement names each of the Pledgee and Deutsche Bank AG New York Branch as secured parties and (ii) if, following the Discharge of the ABL Obligations, any Pledgor acquires any Securities Account (other than an Excluded Account (as defined in the Security Agreement)) with an average daily balance greater than \$1,000,000, the Pledgor shall comply with the provisions of Section 3.2(b)(iii) within 60 days (or such longer period as may be agreed by the ~~Pledgee~~Pledgee in its sole discretion) of acquiring such Securities Account.

3.4 Transfer Taxes. Each pledge of Collateral under Section 3.1 or Section 3.3 hereof shall be accompanied by any transfer tax stamps required in connection with the pledge of such Collateral.

3.5 Certain Representations and Warranties Regarding the Collateral. Each Pledgor represents and warrants that on the date hereof: (i) each Subsidiary of such Pledgor, and the direct ownership thereof, is listed in Annex B hereto; (ii) the Stock (and any warrants or options to purchase Stock) of each Subsidiary held by such Pledgor consists of the number and type of shares of the stock (or warrants or options to purchase any stock) of the corporations as described in Annex C hereto; (iii) such Stock referenced in clause (ii) of this paragraph constitutes that percentage of the issued and outstanding capital stock of the issuing corporation as is set forth in Annex C hereto; (iv) the Notes with a value equal to \$1,000,000 or more held by such Pledgor

consist of the promissory notes described in Annex D hereto where such Pledgor is listed as the lender; (v) the Limited Liability Company Interests of each Subsidiary held by such Pledgor consist of the number and type of interests of the Persons described in Annex E hereto; (vi) each such Limited Liability Company Interest referenced in clause (v) of this paragraph constitutes that percentage of the issued and outstanding equity interest of the issuing Person as set forth in Annex E hereto; (vii) the Partnership Interests of each Subsidiary held by such Pledgor consist of the number and type of interests of the Persons described in Annex F hereto; (viii) each such Partnership Interest referenced in clause (vii) of this paragraph constitutes that percentage or portion of the entire partnership interest of the issuing Person as set forth in Annex F hereto; (ix) the exact address of each chief executive office of such Pledgor is listed on Annex G hereto; and (x) such Pledgor has complied with the respective procedure set forth in Section 3.2(a) hereof with respect to each item of Collateral described in Annexes C through F hereto.

3.6 Conflicts with Foreign Pledge Agreements. To the extent that there is any overlap between, or conflict with, the provisions of this Agreement and any Foreign Pledge Agreement, such Foreign Pledge Agreement shall prevail with respect only to (i) any provision relating to the pledged collateral described in and covered under such Foreign Pledge Agreement and (ii) any provision where adherence to the law governing such Foreign Pledge Agreement is required for such Foreign Pledge Agreement to be enforceable in accordance with its terms.

4. APPOINTMENT OF SUB-AGENTS; ENDORSEMENTS, ETC. The Pledgee shall have the right to appoint one or more sub-agents for the purpose of retaining physical possession of the Collateral, which may be held (in the discretion of the Pledgee) in the name of the relevant Pledgor, endorsed or assigned in blank or in favor of the Pledgee or any nominee or nominees of the Pledgee or a sub-agent appointed by the Pledgee.

5. VOTING, ETC., WHILE NO EVENT OF DEFAULT OR SPECIFIED DEFAULT. Unless and until there shall have occurred and be continuing an Event of Default, each Pledgor shall be entitled to exercise any and all voting and other rights pertaining to the Collateral owned by it, and to give consents, waivers or ratifications in respect thereof; provided that, in each case, no vote shall be cast or any consent, waiver or ratification given or any action taken or omitted to be taken which would violate, or result in a breach of any covenant contained in, any of the terms of any Loan Document, or in a manner adverse to the interests of the Pledgee or any other Secured Party in the Collateral in any material respect, unless permitted by the terms of the Loan Documents. All such rights of each Pledgor to vote and to give consents, waivers and ratifications shall cease following written notice from the Pledgee in case an Event of Default has occurred and is continuing (provided that no such notice shall be required if any Event of Default under Section 8.01(f) of the Credit Agreement has occurred and is continuing), and Section 7 hereof shall become applicable.

6. DIVIDENDS AND OTHER DISTRIBUTIONS. Unless and until there shall have occurred and be continuing an Event of Default and following written notice from the Pledgee (provided that no such notice shall be required if any Event of Default under Section 8.01(f) of the Credit Agreement has occurred and is continuing), all cash dividends, cash distributions, cash Proceeds and other cash amounts payable in respect of the Collateral shall be paid to the respective Pledgor. The Pledgor shall be entitled to receive directly, subject to the other terms of this Agreement:

(i) all other or additional stock, notes, certificates, limited liability company interests, partnership interests, instruments or other securities or property (including, but not limited to, cash dividends other than as set forth above) paid or distributed by way of dividend or otherwise in respect of the Collateral;

(ii) all other or additional stock, notes, certificates, limited liability company interests, partnership interests, instruments or other securities or property (including, but not limited to, cash subject to the first sentence of this Section 6) paid or distributed in respect of the Collateral by way of stock-split, spin-off, split-up, reclassification, combination of shares or similar rearrangement; and

(iii) all other or additional stock, notes, certificates, limited liability company interests, partnership interests, instruments or other securities or property (including, but not limited to, cash) which may be paid in respect of the Collateral by reason of any consolidation, merger, exchange of stock, conveyance of assets, liquidation or similar corporate or other reorganization.

All cash dividends, cash distributions or other cash payments which are received by any Pledgor contrary to the provisions of this Section 6 or Section 7 hereof shall be received in trust for the benefit of the Pledgee, shall be segregated from other property or funds of such Pledgor and shall be promptly paid over to the Pledgee as Collateral in the same form as so received (with any necessary endorsement).

7. REMEDIES IN CASE OF AN EVENT OF DEFAULT. If there shall have occurred and be continuing an Event of Default, then and in every such case, subject to the Intercreditor Agreement, the Pledgee shall be entitled to exercise all of the rights, powers and remedies (whether vested in it by this Agreement, any other Loan Document or by law) for the protection and enforcement of its rights in respect of the Collateral, and the Pledgee shall be entitled to exercise all the rights and remedies of a secured party under the UCC as in effect in any relevant jurisdiction and also shall be entitled, without limitation, to exercise the following rights, which each Pledgor hereby agrees to be commercially reasonable:

(i) Following written notice to such Pledgor (provided that no such notice shall be required if any Event of Default under Section 8.01(f) of Credit Agreement has occurred and is continuing), to receive all amounts payable in respect of the Collateral otherwise payable under Section 6 hereof to such Pledgor;

(ii) to transfer all or any part of the Collateral into the Pledgee's name or the name of its nominee or nominees;

(iii) to accelerate any Pledged Note which may be accelerated in accordance with its terms, and take any other lawful action to collect upon any Pledged Note (including, without limitation, to make any demand for payment thereon);



(iv) to appoint by instrument in writing a receiver (which term as used in this Agreement includes a receiver and manager) or agent of all or any part of the Collateral and remove or replace from time to time any receiver or agent;

(v) to institute proceedings in any court of competent jurisdiction for the appointment of a receiver of all or any part of the Collateral;

(vi) to vote (and exercise all rights and powers in respect of voting) all or any part of the Collateral (whether or not transferred into the name of the Pledgee) and give all consents, waivers and ratifications in respect of the Collateral and otherwise act with respect thereto as though it were the outright owner thereof (each Pledgor hereby irrevocably constituting and appointing the Pledgee the proxy and attorney-in-fact of such Pledgor, with full power of substitution to do so);

(vii) at any time and from time to time to sell, assign and deliver, or grant options to purchase, all or any part of the Collateral, or any interest therein, at any public or private sale, without demand of performance, advertisement or notice of intention to sell or of the time or place of sale or adjournment thereof or to redeem or otherwise purchase or dispose (all of which are hereby waived by each Pledgor), for cash, on credit or for other property, for immediate or future delivery without any assumption of credit risk, and for such price or prices and on such terms as the Pledgee in its absolute discretion may determine, provided at least 10 days' written notice of the time and place of any such sale shall be given to the respective Pledgor. The Pledgee shall not be obligated to make any such sale of Collateral regardless of whether any such notice of sale has theretofore been given. Each Pledgor hereby waives and releases to the fullest extent permitted by law any right or equity of redemption with respect to the Collateral, whether before or after sale hereunder, and all rights, if any, of marshalling the Collateral and any other security or the Obligations or otherwise. At any such sale, unless prohibited by applicable law, the Pledgee on behalf of the Secured Parties may bid for and purchase all or any part of the Collateral so sold free from any such right or equity of redemption. Neither the Pledgee nor any other Secured Party shall be liable for failure to collect or realize upon any or all of the Collateral or for any delay in so doing nor shall any of them be under any obligation to take any action whatsoever with regard thereto; and

(viii) to set off any and all Collateral against any and all Obligations, and to withdraw any and all cash or other Collateral from any and all Collateral Accounts and to apply such cash and other Collateral to the payment of any and all Obligations.

8. REMEDIES, CUMULATIVE, ETC. Each and every right, power and remedy of the Pledgee provided for in this Agreement or in any other Loan Agreement, or now or hereafter existing at law or in equity or by statute shall be cumulative and concurrent and shall be in addition to every other such right, power or remedy. The exercise or beginning of the exercise by the Pledgee or any other Secured Party of any one or more of the rights, powers or remedies provided for in this Agreement or any other Loan Document or now or hereafter existing at law or

in equity or by statute or otherwise shall not preclude the simultaneous or later exercise by the Pledgee or any other Secured Party of all such other rights, powers or remedies, and no failure or delay on the part of the Pledgee or any other Secured Party to exercise any such right, power or remedy shall operate as a waiver thereof. No notice to or demand on any Pledgor in any case shall entitle it to any other or further notice or demand in similar or other circumstances or constitute a waiver of any of the rights of the Pledgee or any other Secured Party to any other or further action in any circumstances without notice or demand. The Secured Parties agree that this Agreement may be enforced only by the action of the Pledgee, acting upon the instructions of the Required Lenders, and that no other Secured Party shall have any right individually to seek to enforce or to enforce this Agreement or to realize upon the security to be granted hereby, it being understood and agreed that such rights and remedies may be exercised by the Pledgee for the benefit of the Secured Parties upon the terms of this Agreement and the other Collateral Documents.

9. RECEIVER'S POWERS. (a) Any receiver appointed by the Pledgee pursuant to Section 7 hereof is vested with the rights and remedies which could have been exercised by the Pledgee in respect of any Pledgor or the Collateral and such other powers and discretions as are granted in the instrument of appointment and any supplemental instruments. The identity of the receiver, its replacement and its remuneration are within the sole and unfettered discretion of the Pledgee.

(a) Any receiver appointed by the Pledgee pursuant to Section 7 hereof will act as agent for the Pledgee for the purposes of taking possession of the Collateral, but otherwise and for all other purposes (except as provided below), as agent for the Pledgors. The receiver may sell, lease, or otherwise dispose of Collateral in accordance with the terms hereof as agent for the Pledgors or as agent for the Pledgee as the Pledgee may determine in its discretion. Each Pledgor agrees to ratify and confirm all actions of the receiver acting as agent for such Pledgor so long as such actions are taken in accordance with the terms hereof.

(b) The Pledgee, in appointing or refraining from appointing any receiver, does not incur liability to the receiver, the Pledgors or otherwise and is not responsible for any misconduct or negligence of such receiver except to the extent resulting from the gross negligence or willful misconduct of the Pledgee (as determined by a court of competent jurisdiction in a final and non-appealable decision) (it being agreed that appointing or refraining to appoint any receiver in the reasonable judgment of the Pledgee's or based on the advice of advisors or counsel shall not constitute gross negligence or willful misconduct).

10. ULC SHARES. (a) Notwithstanding anything else contained in this Agreement or any other document or agreement among all or some of the parties hereto, each Pledgor is the sole registered and beneficial owner of all its Collateral that is ULC Shares and will remain so until such time as such ULC Shares are effectively transferred into the name of the Pledgee, any of the Secured Parties, or any nominee of the foregoing or any other Person on the books and records of such ULC. Accordingly, such Pledgor shall be entitled to receive and retain for its own account any dividend on or other distribution, if any, in respect of ULC Shares that are Collateral and shall have the right to vote such ULC Shares and to control the direction, management and policies of any ULC to the same extent as such Pledgor would if such ULC Shares were not

pledged to the Pledgee for the benefit of the Secured Parties pursuant hereto. Nothing in this Agreement or any other document or agreement among all or some of the parties hereto is intended to, and nothing in this Agreement or any other document or agreement among all or some of the parties hereto shall, constitute the Pledgee, any of the Secured Parties or any Person other than a Pledgor, a member of any ULC for the purposes of Companies Act (Nova Scotia), the Business Corporations Act (British Columbia), the Business Corporations Act (Alberta) or any other applicable legislation until such time as notice is given to such Pledgor and further steps are taken hereunder or thereunder so as to register the Pledgee, any of the Secured Parties or any nominee of the foregoing, as specified in such notice, as the holder of shares of such ULC. To the extent any provision hereof would have the effect of constituting the Pledgee or any of the Secured Parties a member of a ULC prior to such time, such provision shall be severed herefrom and ineffective with respect to Collateral that is shares of such ULC without otherwise invalidating or rendering unenforceable this Agreement or invalidating or rendering unenforceable such provision insofar as it relates to Collateral that is not shares of such ULC.

(b) Except upon the exercise of rights to sell or otherwise dispose of Collateral that is ULC Shares if there shall have occurred and be continuing an Event of Default, no Pledgor shall cause or permit, or enable any ULC in which it holds ULC Shares that are Collateral to cause or permit, the Pledgee or any other Secured Party to: (a) be registered as a shareholder or member of a ULC; (b) have any notation entered in its favour in the share register of a ULC; (c) be held out as a shareholder or member of a ULC; (d) receive, directly or indirectly, any dividends, property or other distributions from a ULC by reason of the Pledgee or any other Secured Party holding a security interest in a ULC or ULC Shares; or (e) act as a shareholder or member of a ULC, or exercise any rights of a shareholder or member including the right to attend a meeting of, or to vote the shares of, a ULC.

11. APPLICATION OF PROCEEDS. (a) Subject to the Intercreditor Agreement, all monies collected by the Pledgee upon any sale or other disposition of, any collection from, or other realization upon all or any part of, the Collateral (whether or not expressly characterized as such) in connection with the exercise of its rights and remedies in accordance with this Agreement, together with all other monies received by the Pledgee hereunder, shall be applied in the manner provided in Section 5.4 of the Security Agreement.

(b) It is understood and agreed that each Pledgor shall remain jointly and severally liable with respect to the Obligations to the extent of any deficiency between the amount of the proceeds of the Collateral pledged by it hereunder and the aggregate amount of the Obligations.

(c) It is understood and agreed by each Pledgor and each Secured Party that the Pledgee shall have no liability for any determinations made by it in this Section 11, in each case except to the extent resulting from the gross negligence or willful misconduct of the Pledgee (as determined by a court of competent jurisdiction in a final and non-appealable decision). Each Pledgor and each Secured Party also agrees that the Pledgee may (but shall not be required to), at any time and in its sole discretion, and with no liability resulting therefrom, petition a court of competent jurisdiction regarding any application of Collateral in accordance with the requirements hereof, and the Pledgee shall be entitled to wait for, and may conclusively rely on, any such determination.

12. PURCHASERS OF COLLATERAL. Upon any sale of the Collateral by the Pledgee hereunder (whether by virtue of the power of sale herein granted, pursuant to judicial process or otherwise), the receipt of the Pledgee or the officer making such sale shall be a sufficient discharge to the purchaser or purchasers of the Collateral so sold, and such purchaser or purchasers shall not be obligated to see to the application of any part of the purchase money paid over to the Pledgee or such officer or be answerable in any way for the misapplication or nonapplication thereof.

13. INDEMNITY. The parties hereto agree that the terms of Section 10.04 of the Credit Agreement are incorporated herein by reference, *mutatis mutandis*. If and to the extent that the obligations of any Pledgor under this Section 13 are unenforceable for any reason, such Pledgor hereby agrees to make the maximum contribution to the payment and satisfaction of such obligations which is permissible under applicable law. The indemnity obligations of the each Pledgor contained in this Section 13 shall continue in full force and effect notwithstanding the Payment in Full of the Obligations.

14. PLEDGEE NOT A PARTNER OR LIMITED LIABILITY COMPANY MEMBER. (a) Nothing herein shall be construed to make the Pledgee or any other Secured Party liable as a member of any limited liability company or as a partner of any partnership and neither the Pledgee nor any other Secured Party by virtue of this Agreement or otherwise (except as referred to in the following sentence) shall have any of the duties, obligations or liabilities of a member of any limited liability company or as a partner in any partnership. The parties hereto expressly agree that, unless the Pledgee shall become the absolute owner of Collateral consisting of a Limited Liability Company Interest or a Partnership Interest pursuant hereto, this Agreement shall not be construed as creating a partnership or joint venture among the Pledgee, any other Secured Party, any Pledgor and/or any other Person.

(b) Except as provided in the last sentence of paragraph (a) of this Section 14, the Pledgee, by accepting this Agreement, did not intend to become a member of any limited liability company or a partner of any partnership or otherwise be deemed to be a co-venturer with respect to any Pledgor, any limited liability company, partnership and/or any other Person either before or after an Event of Default shall have occurred. The Pledgee shall have only those powers set forth herein and the Secured Parties shall assume none of the duties, obligations or liabilities of a member of any limited liability company or as a partner of any partnership or any Pledgor except as provided in the last sentence of paragraph (a) of this Section 14.

(c) The Pledgee and the other Secured Parties shall not be obligated to perform or discharge any obligation of any Pledgor as a result of the pledge hereby effected.

(d) The acceptance by the Pledgee of this Agreement, with all the rights, powers, privileges and authority so created, shall not at any time or in any event obligate the Pledgee or any other Secured Party to appear in or defend any action or proceeding relating to the Collateral to which it is not a party, or to take any action hereunder or thereunder, or to expend any money or incur any expenses or perform or discharge any obligation, duty or liability under the Collateral.

15. **FURTHER ASSURANCES; POWER-OF-ATTORNEY.** (a) Each Pledgor agrees that it will, at such Pledgor's own expense, file and refile, or cause to be filed or refiled, under the UCC or other applicable law such financing statements, continuation statements and other documents, in form reasonably acceptable to the Pledgee, in such offices as the Pledgee (acting on its own or on the instructions of the Required Lenders) may reasonably deem necessary or appropriate and wherever required or permitted by law in order to perfect and preserve the Pledgee's security interest in the Collateral hereunder and hereby authorizes the Pledgee to file financing statements and amendments thereto relative to all or any part of the Collateral (including, without limitation, financing statements which list the Collateral specifically and/or "all assets" as collateral) without the signature of such Pledgor where permitted by law, in such offices as the Pledgee may reasonably deem necessary or advisable or wherever required or permitted by law in order to perfect and preserve the Pledgee's security interest in the Collateral hereunder and agrees to do such further acts and things and to execute and deliver to the Pledgee such additional conveyances, assignments, agreements and instruments as the Pledgee may reasonably require or deem advisable to carry into effect the purposes of this Agreement or to further assure and confirm unto the Pledgee its rights, powers and remedies hereunder or thereunder.

(b) Each Pledgor hereby constitutes and appoints the Pledgee its true and lawful attorney-in-fact, irrevocably, with full authority in the place and stead of such Pledgor and in the name of such Pledgor or otherwise, from time to time after the occurrence and during the continuance of an Event of Default, in the Pledgee's discretion, to act, require, demand, receive and give acquittance for any and all monies and claims for monies due or to become due to such Pledgor under or arising out of the Collateral, to endorse any checks or other instruments or orders in connection therewith and to file any claims or take any action or institute any proceedings and to execute any instrument which the Pledgee may deem necessary or advisable to accomplish the purposes of this Agreement, which appointment as attorney is coupled with an interest.

16. **THE PLEDGEE AS COLLATERAL AGENT.** The Pledgee will hold in accordance with this Agreement all items of the Collateral at any time received under this Agreement. It is expressly understood, acknowledged and agreed by each Secured Party that by accepting the benefits of this Agreement each such Secured Party acknowledges and agrees that the obligations of the Pledgee as holder of the Collateral and interests therein and with respect to the disposition thereof, and otherwise under this Agreement, are only those expressly set forth in this Agreement and in Section 9 of the Credit Agreement. The Pledgee shall act hereunder on the terms and conditions set forth herein and in Section 9 of the Credit Agreement. Notwithstanding the foregoing, the ABL Collateral Agent (as defined in the Intercreditor Agreement) has agreed pursuant to Section 5.04 of the Intercreditor Agreement to hold that part of the Collateral that is in its possession or control (or in the possession or control of its agents or bailees), including, without limitation, any Securities Accounts, as collateral agent and as bailee for the Pledgee.

17. **TRANSFER BY THE PLEDGORS.** Subject to the Intercreditor Agreement, except as permitted by the terms of the Loan Documents prior to the Termination Date, no Pledgor will sell or otherwise dispose of, grant any option with respect to, or mortgage, pledge or otherwise encumber any of the Collateral or any interest therein.

18. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE PLEDGORS. (a) Each Pledgor represents, warrants and covenants as to itself and each of its Subsidiaries that:

(i) it is the legal, beneficial and record owner of, and has good and marketable title to, all of its Collateral consisting of one or more Securities, Partnership Interests and Limited Liability Company Interests and that it has sufficient interest in all of its Collateral in which a security interest is purported to be created hereunder for such security interest to attach (subject, in each case, to no pledge, Lien, mortgage, hypothecation, security interest, charge, option, Adverse Claim or other encumbrance whatsoever, except the Liens and security interests created by this Agreement or permitted under the Loan Documents);

(ii) it has full power, authority and legal right to pledge all the Collateral pledged by it pursuant to this Agreement;

(iii) this Agreement has been duly authorized, executed and delivered by such Pledgor and constitutes a legal, valid and binding obligation of such Pledgor enforceable against such Pledgor in accordance with its terms, except to the extent that the enforceability hereof may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforcement is sought in equity or at law);

(iv) except to the extent already obtained or made, no consent of any other party (including, without limitation, any stockholder, partner, member or creditor of such Pledgor or any of its Subsidiaries) and no consent, license, permit, approval or authorization of, exemption by, notice or report to, or registration, filing or declaration with, any Governmental Authority is required to be obtained by such Pledgor (which has not been obtained or made) in connection with (a) the execution, delivery or performance of this Agreement by such Pledgor, (b) the validity or enforceability of this Agreement against such Pledgor, (c) the perfection of the Pledgee's security interest in such Pledgor's Collateral or (d) except for (i) compliance with or as may be required by applicable securities laws and (ii) the consent of the landlord under the Ottawa Capitalized Lease, or any renewal, replacement, refinancing or extension thereof, to any Transfer (as defined in the Ottawa Capitalized Lease as in effect on the original date thereof) (or similar term contained in any renewal, replacement, refinancing or extension of the Ottawa Capitalized Lease) not permitted by the terms thereof, the exercise by the Pledgee of any of its rights or remedies provided herein;

(v) neither the execution, delivery or performance by such Pledgor of this Agreement, nor compliance by it with the terms and provisions hereof nor the consummation of the transactions contemplated hereby: (i) will contravene any provision of any applicable law, statute, rule or regulation, or any applicable order, writ, injunction or decree of any court, arbitrator or governmental instrumentality, domestic or foreign, applicable to such Pledgor; (ii) will conflict or be inconsistent with or result in any breach of any of the terms, covenants, conditions or provisions of, or constitute a default under, or result in the creation or imposition of (or the obligation to create or impose) any Lien (except pursuant to the

Collateral Documents) upon any of the properties or assets of such Pledgor or any of its Subsidiaries pursuant to the terms of any indenture, lease, mortgage, deed of trust, credit agreement, loan agreement or any other material agreement, contract or other instrument to which such Pledgor or any of its Subsidiaries is a party or is otherwise bound, or by which it or any of its properties or assets is bound or to which it may be subject; or (iii) will violate any provision of the certificate of incorporation, by-laws, certificate of partnership, partnership agreement, certificate of formation or limited liability company agreement (or equivalent organizational documents), as the case may be, of such Pledgor or any of its Subsidiaries;

(vi) all of such Pledgor's Collateral (consisting of Securities, Limited Liability Company Interests and Partnership Interests) of any Subsidiary has been duly and validly issued, and in the case of any Stock of a Domestic Corporation is fully paid and non-assessable and is subject to no options to purchase or similar rights;

(vii) each of such Pledgor's Pledged Notes constitutes, or when executed by the obligor that is a Subsidiary thereof will constitute, the legal, valid and binding obligation of such obligor, enforceable in accordance with its terms, except to the extent that the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforcement is sought in equity or at law); and

(viii) the security interests created under this Agreement (when executed and delivered by all parties hereto) are effective to create in favor of the Pledgee, for the benefit of the Secured Parties, a legal, valid and enforceable security interest in all right, title and interest of the Pledgors in all of the Collateral, and when proper UCC financing statements have been filed in the appropriate filing offices against each Pledgor and the Pledgee has obtained "control" (within the meaning of the UCC) of the Collateral, the Pledgee, for the benefit of the Secured Parties, shall have a perfected security interest in all Collateral to the extent such security interest can be perfected by filing a UCC financing statement under the UCC or by the Pledgee having "control" of the Collateral, subject to no security interests of any other Person (other than Permitted Liens), subject to the terms of the Intercreditor Agreement.

(a) Each Pledgor covenants and agrees that it will defend the Pledgee's right, title and security interest in and to such Pledgor's Collateral and the proceeds thereof against the claims and demands of all persons whomsoever (other than Permitted Liens); and each Pledgor covenants and agrees that it will have like title to and right to pledge any other property at any time hereafter pledged to the Pledgee by such Pledgor as Collateral hereunder as provided herein and will likewise defend the right thereto and security interest therein of the Pledgee and the other Secured Parties.

19. LEGAL NAMES; TYPE OF ORGANIZATION (AND WHETHER A REGISTERED ORGANIZATION AND/OR A TRANSMITTING UTILITY); JURISDICTION OF ORGANIZATION; LOCATION; ORGANIZATIONAL IDENTIFICATION NUMBERS; FEDERAL EMPLOYER IDENTIFICATION NUMBERS; CHANGES THERETO; ETC.As of the

date hereof, the exact legal name of each Pledgor, the type of organization of such Pledgor, whether or not such Pledgor is a Registered Organization, the jurisdiction of organization of such Pledgor, such Pledgor's Location, the organizational identification number (if any) of each Pledgor, the Federal Employer Identification Number (if any) and whether or not such Pledgor is a Transmitting Utility, is listed on Annex A hereto for such Pledgor. No Pledgor shall change its legal name, its type of organization, its status as a Registered Organization (in the case of a Registered Organization), its status as a Transmitting Utility or as a Person which is not a Transmitting Utility, as the case may be, its jurisdiction of organization, its Location, or its organizational identification number (if any) or its Federal Employer Identification Number (if any), except that any such changes shall be permitted (so long as not in violation of the applicable requirements of the Loan Documents and so long as same do not involve (x) a Registered Organization ceasing to constitute same or (y) any Pledgor changing its jurisdiction of organization or Location from the United States or a State thereof to a jurisdiction of organization or Location, as the case may be, outside the United States or a State thereof) if (i) it shall have given to the Pledgee not less than 10 days' prior written notice of each change to the information listed on Annex A (as adjusted for any subsequent changes thereto previously made in accordance with this sentence), together with a supplement to Annex A which shall correct all information contained therein for such Pledgor, and (ii) in connection with the respective change or changes, it shall have taken all action reasonably requested by the Pledgee to maintain the security interests of the Pledgee in the Collateral intended to be granted hereby at all times fully perfected and in full force and effect. In addition, to the extent that any Pledgor does not have an organizational identification number on the date hereof and later obtains one, such Pledgor shall promptly thereafter deliver a notification to the Pledgee of such organizational identification number and shall take all actions reasonably satisfactory to the Pledgee to the extent necessary to maintain the security interest of the Pledgee in the Collateral intended to be granted hereby fully perfected and in full force and effect.

20. PLEDGORS' OBLIGATIONS ABSOLUTE, ETC. The obligations of each Pledgor under this Agreement shall be absolute and unconditional and shall remain in full force and effect without regard to, and shall not be released, suspended, discharged, terminated or otherwise affected by, any circumstance or occurrence whatsoever (other than termination of this Agreement pursuant to Section 22 hereof), including, without limitation:

(i) any renewal, extension, amendment or modification of, or addition or supplement to or deletion from any Loan Document (other than this Agreement in accordance with its terms), or any other instrument or agreement referred to therein, or any assignment or transfer thereof;

(ii) any waiver, consent, extension, indulgence or other action or inaction under or in respect of any such agreement or instrument including, without limitation, this Agreement (other than a waiver consent or extension with respect to this Agreement in accordance with its terms);

(iii) any furnishing of any additional security to the Pledgee or its assignee or any acceptance thereof or any release of any security by the Pledgee or its assignee;



(iv) any limitation on any party's liability or obligations under any such instrument or agreement or any invalidity or unenforceability, in whole or in part, of any such instrument or agreement or any term thereof; or

(v) any bankruptcy, insolvency, reorganization, composition, adjustment, dissolution, liquidation or other like proceeding relating to any Pledgor or any Subsidiary of any Pledgor, or any action taken with respect to this Agreement by any trustee or receiver, or by any court, in any such proceeding, whether or not such Pledgor shall have notice or knowledge of any of the foregoing.

21. SALE OF COLLATERAL WITHOUT REGISTRATION. (a) If an Event of Default shall have occurred and be continuing and any Pledgor shall have received from the Pledgee a written request or requests that such Pledgor cause any registration, qualification or compliance under any federal or state securities law or laws to be effected with respect to all or any part of the Collateral consisting of Securities, Limited Liability Company Interests or Partnership Interests, such Pledgor as soon as practicable and at its expense will use its best efforts to cause such registration to be effected (and be kept effective) and will use its best efforts to cause such qualification and compliance to be effected (and be kept effective) as may be so requested and as would permit or facilitate the sale and distribution of such Collateral consisting of Securities, Limited Liability Company Interests or Partnership Interests, including, without limitation, registration under the Securities Act, as then in effect (or any similar statute then in effect), appropriate qualifications under applicable blue sky or other state securities laws and appropriate compliance with any other governmental requirements; provided, that the Pledgee shall furnish to such Pledgor such information regarding the Pledgee as such Pledgor may request in writing and as shall be required in connection with any such registration, qualification or compliance. Each Pledgor will cause the Pledgee to be kept reasonably advised in writing as to the progress of each such registration, qualification or compliance and as to the completion thereof, will furnish to the Pledgee such number of prospectuses, offering circulars and other documents incident thereto as the Pledgee from time to time may reasonably request, and will indemnify, to the extent permitted by law, the Pledgee and all other Secured Parties participating in the distribution of such Collateral consisting of Securities, Limited Liability Company Interests or Partnership Interests against all claims, losses, damages and liabilities caused by any untrue statement (or alleged untrue statement) of a material fact contained therein (or in any related registration statement, notification or the like) or by any omission (or alleged omission) to state therein (or in any related registration statement, notification or the like) a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as the same may have been caused by an untrue statement or omission based upon information furnished in writing to such Pledgor by the Pledgee or such other Secured Party expressly for use therein.

(b) If at any time when the Pledgee shall determine to exercise its right to sell all or any part of the Collateral consisting of Securities, Limited Liability Company Interests or Partnership Interests pursuant to Section 7 hereof, and such Collateral or the part thereof to be sold shall not, for any reason whatsoever, be effectively registered under the Securities Act, as then in effect, the Pledgee may, in its sole and absolute discretion, sell such Collateral or part thereof by private sale in such manner and under such circumstances as the Pledgee may deem necessary or advisable in

order that such sale may legally be effected without such registration. Without limiting the generality of the foregoing, in any such event the Pledgee, in its sole and absolute discretion (i) may proceed to make such private sale notwithstanding that a registration statement for the purpose of registering such Collateral or part thereof shall have been filed under such Securities Act, (ii) may approach and negotiate with a single possible purchaser to effect such sale, and (iii) may restrict such sale to a purchaser who will represent and agree that such purchaser is purchasing for its own account, for investment, and not with a view to the distribution or sale of such Collateral or part thereof. In the event of any such sale, the Pledgee shall incur no responsibility or liability for selling all or any part of the Collateral at a price which the Pledgee, in its sole and absolute discretion, may in good faith deem reasonable under the circumstances, notwithstanding the possibility that a substantially higher price might be realized if the sale were deferred until the registration as aforesaid.

22. TERMINATION; RELEASE. (a) On the Termination Date, this Agreement shall terminate (provided that all indemnities set forth herein including, without limitation, in Section 13 hereof shall survive any such termination) and the Pledgee, at the request and expense of such Pledgor, will execute and deliver to such Pledgor a proper instrument or instruments (including UCC termination statements) acknowledging the satisfaction and termination of this Agreement (including, without limitation, UCC termination statements and instruments of satisfaction, discharge and/or reconveyance), and will duly release from the security interest created hereby and assign, transfer and deliver to such Pledgor (without recourse and without any representation or warranty) such of the Collateral as may be in the possession of the Pledgee or any of its sub-agents hereunder and as has not theretofore been sold or otherwise applied or released pursuant to this Agreement, together with any moneys at the time held by the Pledgee or any of its sub-agents hereunder and, with respect to any Collateral consisting of an Uncertificated Security issued by a Subsidiary of the Company (other than an Uncertificated Security credited on the books of a Clearing Corporation or Securities Intermediary), a termination of the agreement relating thereto executed and delivered by the issuer of such Uncertificated Security pursuant to Section 3.2(a)(ii) or by the respective partnership or limited liability company pursuant to Section 3.2(a)(iv)(2).

(b) In the event that any part of the Collateral is sold or otherwise disposed of (to a Person other than a Loan Party) at any time prior to the Termination Date, in connection with a sale or disposition permitted by Section 7.05 of the Credit Agreement, or is otherwise released pursuant to the Credit Agreement, and the proceeds of such sale or disposition (or from such release) are applied in accordance with the terms of the Credit Agreement to the extent required to be so applied, the Pledgee, at the request and expense of such Pledgor, will duly release from the security interest created hereby (and will execute and deliver such documentation, including termination or partial release statements and the like in connection therewith) and assign, transfer and deliver to such Pledgor (without recourse and without any representation or warranty) such of the Collateral as is then being (or has been) so sold or otherwise disposed of, or released, and as may be in the possession of the Pledgee (or, in the case of Collateral held by any sub-agent designated pursuant to Section 4 hereof, such sub-agent) and has not theretofore been released pursuant to this Agreement. Furthermore, upon the release of any Guarantor from the Guaranty in accordance with the provisions thereof, such Pledgor (and the Collateral at such time assigned or pledged by the respective Pledgor pursuant hereto) shall be released from this Agreement. In the case of any such sale or disposition of any property constituting Collateral in a transaction permitted pursuant to Section 7.05 of the

Credit Agreement, the Liens created by this Agreement on such Collateral shall be automatically released without need for further action by any Person.

(c) At any time that any Pledgor desires that the Pledgee deliver any release or such other documentation as provided in the foregoing Section 22(a) or (b), such Pledgor shall deliver to the Pledgee (and the relevant sub-agent, if any, designated pursuant to Section 4 hereof) a certificate signed by a Responsible Officer of such Pledgor stating that the release of the respective Collateral is permitted pursuant to Section 22(a) or (b) hereof. At any time that the Company or the respective Pledgor desires that a Guarantor which has been released from the Guaranty be released hereunder as provided in the penultimate sentence of Section 22(b), it shall deliver to the Pledgee a certificate signed by a Responsible Officer of the Company and the respective Pledgor stating that the release of the respective Pledgor (and its Collateral) is permitted pursuant to such Section 22(b).

(d) The Pledgee shall have no liability whatsoever to any other Secured Party as the result of any release of Collateral by it in accordance with, or which the Pledgee in good faith believes to be in accordance with, this Section 22.

23. NOTICES, ETC. Except as otherwise specified herein, all notices, requests, demands or other communications to or upon the respective parties hereto shall be sent or delivered by mail, telecopy or courier service and all such notices and communications shall, when mailed, telecopied or sent by courier, be effective when deposited in the mails, delivered to the overnight courier, or sent by telecopier, except that notices and communications to the Pledgee or any Pledgor shall not be effective until received by the Pledgee or such Pledgor, as the case may be. All notices and other communications shall be in writing and addressed as follows:

(a) if to any Pledgor, at:  
 c/o Ciena Corporation  
 7035 Ridge Road  
 Hanover, Maryland 21076  
 Attention: Treasurer's Office  
 Facsimile: (410) 865-8001

with a copy to:

7035 Ridge Road  
 Hanover, Maryland 21076  
 Attention: General Counsel's Office  
 Facsimile: (410) 865-8901

(b) if to the Pledgee, at:  
 Bank of America, N.A.  
 Agency Management  
 900 West Trade Street  
 Mail Code: NC1-026-06-03

Charlotte, NC 28255-0001  
Attention: Priscilla Baker  
Telephone: 980-386-3475  
Facsimile: 704-409-0918  
Electronic Mail: priscilla.l.baker@baml.com

or at such other address or addressed to such other individual as shall have been furnished in writing by any Person described above to the party required to give notice hereunder.

24. **WAIVER; AMENDMENT.** Except as provided in Sections 32 and 34 hereof and Section 10.01 of the Credit Agreement, none of the terms and conditions of this Agreement may be changed, waived, modified or varied in any manner whatsoever.

25. **SUCCESSORS AND ASSIGNS.** This Agreement shall create a continuing security interest in the Collateral and shall (i) remain in full force and effect, subject to release and/or termination as set forth in Section 22 hereof, (ii) be binding upon each Pledgor, its successors and assigns; provided, however, that no Pledgor shall assign any of its rights or obligations hereunder without the prior written consent of the Pledgee, and (iii) inure, together with the rights and remedies of the Pledgee hereunder, to the benefit of the Pledgee, the other Secured Parties and their respective successors, transferees and assigns. All agreements, statements, representations and warranties made by each Pledgor herein or in any certificate or other instrument delivered by such Pledgor or on its behalf under this Agreement shall be considered to have been relied upon by the Secured Parties and shall survive the execution and delivery of this Agreement and the other Loan Documents regardless of any investigation made by the Secured Parties or on their behalf.

26. **HEADINGS DESCRIPTIVE.** The headings of the several Sections of this Agreement are inserted for convenience only and shall not in any way affect the meaning or construction of any provision of this Agreement.

27. **GOVERNING LAW; SUBMISSION TO JURISDICTION; VENUE; WAIVER OF JURY TRIAL.** (a) THIS AGREEMENT AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

(b) EACH PLEDGOR IRREVOCABLY AND UNCONDITIONALLY AGREES THAT IT WILL NOT COMMENCE ANY ACTION, LITIGATION OR PROCEEDING OF ANY KIND OR DESCRIPTION, WHETHER IN LAW OR EQUITY, WHETHER IN CONTRACT OR IN TORT OR OTHERWISE, AGAINST THE PLEDGEE, ANY SECURED PARTY OR ANY RELATED PARTY THEREOF IN ANY WAY RELATING TO THIS AGREEMENT, ANY OTHER COLLATERAL DOCUMENT OR THE TRANSACTIONS RELATING HERETO OR THERETO, IN ANY FORUM OTHER THAN THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY

THEREOF, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE JURISDICTION OF SUCH COURTS AND AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION, LITIGATION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION, LITIGATION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT SHALL AFFECT ANY RIGHT THAT THE PLEDGEE OR ANY SECURED PARTY MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT AGAINST ANY PLEDGOR OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) EACH PLEDGOR IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT IN ANY COURT REFERRED TO IN PARAGRAPH (B) OF THIS SECTION. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 23. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

(e) EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER COLLATERAL DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

28. PLEDGOR'S DUTIES. It is expressly agreed, anything herein contained to the contrary notwithstanding, that each Pledgor shall remain liable to perform all of the obligations,

if any, assumed by it with respect to the Collateral and the Pledgee shall not have any obligations or liabilities with respect to any Collateral by reason of or arising out of this Agreement, except for the safekeeping of Collateral actually in Pledgee's possession, nor shall the Pledgee be required or obligated in any manner to perform or fulfill any of the obligations of any Pledgor under or with respect to any Collateral.

29. COUNTERPARTS. This Agreement may be executed in any number of counterparts and by the different parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument. A set of counterparts executed by all the parties hereto shall be lodged with the Company and the Pledgee.

30. SEVERABILITY. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

31. RECOURSE. This Agreement is made with full recourse to each Pledgor and pursuant to and upon all the representations, warranties, covenants and agreements on the part of such Pledgor contained herein and in the other Loan Documents and otherwise in writing in connection herewith or therewith.

32. ADDITIONAL PLEDGORS. It is understood and agreed that any Wholly-Owned Domestic Subsidiary of the Company that is required to become a party to this Agreement after the date hereof pursuant to the requirements of the Credit Agreement shall become a Pledgor hereunder by (x) executing a counterpart hereof, or a Pledge Agreement Supplement in the form attached hereto as Exhibit A, and delivering the same to the Pledgee (provided such Pledge Agreement Supplement shall not require the consent of any Pledgor), (y) delivering supplements to Annexes A through G hereto as are necessary to cause such annexes to be complete and accurate with respect to such additional Pledgor on such date and (z) taking all actions as specified in this Agreement as would have been taken by such Pledgor had it been an original party to this Agreement, in each case with all documents required above to be delivered to the Pledgee and with all documents and actions required above to be taken to the reasonable satisfaction of the Pledgee and upon such execution and delivery, such Subsidiary shall constitute a Pledgor hereunder.

33. LIMITED OBLIGATIONS. It is the desire and intent of each Pledgor and the Secured Parties that this Agreement shall be enforced against each Pledgor to the fullest extent permissible under the laws applied in each jurisdiction in which enforcement is sought. Notwithstanding anything to the contrary contained herein, in furtherance of the foregoing, it is noted that the obligations of each Pledgor constituting a Guarantor have been limited as (and to the extent) provided in the Guaranty.

34. ABL PRIORITY COLLATERAL. Notwithstanding anything herein to the contrary, prior to the Discharge of ABL Obligations, the requirements under this Agreement to deliver or grant control over ABL Priority Collateral to the Pledgee, or to give any notice to any Person or in respect of the provision of voting rights or the obtaining of any consent of any Person, in each case in connection with any ABL Priority Collateral, shall be deemed satisfied if the Pledgors comply with the requirements of the similar provision of the applicable ABL Credit Document (as defined in the Intercreditor Agreement). Until the Discharge of ABL Obligations, the delivery of any ABL Priority Collateral to the ABL Collateral Agent (as defined in the Intercreditor Agreement) pursuant to the ABL Credit Documents as bailee for the Pledgee shall satisfy any delivery requirement hereunder or under any other Loan Document.

35. INTERCREDITOR AGREEMENT. This Agreement and the other Loan Documents are subject to the terms and conditions set forth in the Intercreditor Agreement in all respects and, in the event of any conflict between the terms of the Intercreditor Agreement and this Agreement, the terms of the Intercreditor Agreement shall govern. Notwithstanding anything herein to the contrary, the Lien and security interest granted to the Pledgee pursuant to any Loan Document and the exercise of any right or remedy in respect of the Collateral by the Pledgee (or any Secured Party) hereunder or under any other Loan Document are subject to the provisions of the Intercreditor Agreement and in the event of any conflict between the terms of the Intercreditor Agreement, this Agreement and any other Loan Document, the terms of the Intercreditor Agreement shall govern and control with respect to the exercise of any such right or remedy. Without limiting the generality of the foregoing, and notwithstanding anything herein to the contrary, no Loan Party shall be required hereunder or under any Loan Document to take any action with respect to the Collateral that is inconsistent with the provisions of the Intercreditor Agreement.

36. RELEASE OF PLEDGORS.

At any time all of the Equity Interests of any Pledgor owned by the Company or any other Pledgor are sold (to a Person other than the Company or any of its Subsidiaries) in a transaction permitted pursuant to the Credit Agreement, then such Pledgor shall be released as a Pledgor pursuant to this Agreement without any further action hereunder (it being understood that the sale of all of the Equity Interests in any Person that owns, directly or indirectly, all of the Equity Interests in any Pledgor shall be deemed to be a sale of all of the Equity Interests in such Pledgor for purposes of this Section), and upon the reasonable request of the Company and at the expense of the Pledgors, the Pledgee is authorized and directed, and hereby agrees, to execute and deliver such instruments of release as are reasonably requested by the Pledgor to evidence the release of such Pledgor. At any time that the Company desires that a Pledgor be released from this Agreement as provided in this Section 36, the Company shall deliver to the Pledgee a certificate signed by a Responsible Officer of the Company stating that (i) the transaction is permitted pursuant to the Credit Agreement and (ii) the release of the respective Pledgor is permitted pursuant to this Section 36. The Pledgee shall have no liability whatsoever to any other Secured Party as a result of the release of any Pledgor by it in accordance with, or which it believes to be in accordance with, this Section 36.

\* \* \* \*

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered by their duly authorized officers as of the date first above written.

**PLEDGORS:**

CIENA CORPORATION

By: \_\_\_\_\_  
Name:  
Title:

CIENA COMMUNICATIONS, INC.

By: \_\_\_\_\_  
Name:  
Title:

CIENA GOVERNMENT SOLUTIONS, INC.

By: \_\_\_\_\_  
Name:  
Title:



Accepted and Agreed to:

BANK OF AMERICA, N.A.,  
as Collateral Agent and Pledgee

By: \_\_\_\_\_  
Name:  
Title:

**CIENA CORPORATION**  
**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**

I, Gary B. Smith, certify that:

1. I have reviewed this quarterly report of Ciena Corporation;
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.

Dated: March 8, 2017

/s/ Gary B. Smith

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Gary B. Smith

President and Chief Executive Officer

**CIENA CORPORATION**  
**CERTIFICATION OF CHIEF FINANCIAL OFFICER**

I, James E. Moylan, Jr., certify that:

1. I have reviewed this quarterly report of Ciena Corporation;
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 8, 2017

/s/ James E. Moylan Jr.

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James E. Moylan Jr.

Senior Vice President and Chief Financial Officer

**CIENA CORPORATION**  
**Written Statement of Chief Executive Officer**  
**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

The undersigned, the Chief Executive Officer of Ciena Corporation (the "Company"), hereby certifies that, to his knowledge, on the date hereof:

- (a) the Report on Form 10-Q of the Company for the quarter ended January 31, 2017 filed on the date hereof with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (b) information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Gary B. Smith

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Gary B. Smith

President and Chief Executive Officer

March 8, 2017

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Ciena Corporation and will be retained by Ciena Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

**CIENA CORPORATION**  
**Written Statement of Chief Financial Officer**  
**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

The undersigned, the Chief Financial Officer of Ciena Corporation (the "Company"), hereby certifies that, to his knowledge, on the date hereof:

- (a) the Report on Form 10-Q of the Company for the quarter ended January 31, 2017 filed on the date hereof with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (b) information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James E. Moylan Jr.

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Senior Vice President and Chief Financial Officer

March 8, 2017

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Ciena Corporation and will be retained by Ciena Corporation and furnished to the Securities and Exchange Commission or its staff upon request.