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# 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 April 30, 2010**

**OR**

o **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: 0-21969**

# Ciena Corporation

(Exact name of registrant as specified in its charter)

| **Delaware** | **23-2725311** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| **1201 Winterson Road, Linthicum, MD** | **21090** |
| (Address of Principal Executive Offices) | (Zip Code) |

**(410) 865-8500**
(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 o

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

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 o | Non-accelerated filer o (do not check if a smaller reporting company) | Smaller reporting company o |
|---|---|---|---|

Indicate by check mark whether the registrant is a shell company (as determined in Rule 12b-2 of the Exchange Act). YES o 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 June 4, 2010** |
|---|---|
| common stock, $.01 par value | 93,093,998 |

**CIENA CORPORATION**

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**FORM 10-Q**

**PART I — FINANCIAL INFORMATION**

***Item 1. Financial Statements***

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

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Revenue: | | | | |
| Products | $ 118,849 | $ 206,420 | $ 258,566 | $ 355,474 |
| Services | 25,352 | 47,051 | 53,035 | 73,873 |
| Total revenue | 144,201 | 253,471 | 311,601 | 429,347 |
| Cost of goods sold: | | | | |
| Products | 65,419 | 118,221 | 141,786 | 194,890 |
| Services | 18,062 | 30,308 | 37,252 | 49,355 |
| Total cost of goods sold | 83,481 | 148,529 | 179,038 | 244,245 |
| Gross profit | 60,720 | 104,942 | 132,563 | 185,102 |
| Operating expenses: | | | | |
| Research and development | 49,482 | 71,142 | 96,182 | 121,175 |
| Selling and marketing | 33,295 | 45,328 | 67,114 | 79,565 |
| General and administrative | 12,615 | 21,503 | 24,200 | 34,266 |
| Acquisition and integration costs | — | 39,221 | — | 66,252 |
| Amortization of intangible assets | 6,224 | 17,121 | 12,628 | 23,102 |
| Restructuring costs | 6,399 | 1,849 | 6,475 | 1,828 |
| Goodwill impairment | 455,673 | — | 455,673 | — |
| Total operating expenses | 563,688 | 196,164 | 662,272 | 326,188 |
| Loss from operations | (502,968) | (91,222) | (529,709) | (141,086) |
| Interest and other income (loss), net | 3,508 | 3,748 | 8,168 | 2,975 |
| Interest expense | (1,852) | (4,113) | (3,696) | (5,941) |
| Loss on cost method investments | (2,570) | — | (3,135) | — |
| Loss before income taxes | (503,882) | (91,587) | (528,372) | (144,052) |
| Benefit for income taxes | (672) | (1,578) | (331) | (710) |
| Net loss | $ (503,210) | $ (90,009) | $ (528,041) | $ (143,342) |
| Basic net loss per common share | $ (5.53) | $ (0.97) | $ (5.82) | $ (1.55) |
| Diluted net loss per potential common share | $ (5.53) | $ (0.97) | $ (5.82) | $ (1.55) |
| Weighted average basic common shares outstanding | 90,932 | 92,614 | 90,777 | 92,590 |
| Weighted average dilutive potential common shares outstanding | 90,932 | 92,614 | 90,777 | 92,590 |

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)**

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | $ 485,705 | $ 584,229 |
| Short-term investments | 563,183 | 29,537 |
| Accounts receivable, net | 118,251 | 178,959 |
| Inventories | 88,086 | 233,405 |
| Prepaid expenses and other | 50,537 | 95,246 |
| Total current assets | 1,305,762 | 1,121,376 |
| Long-term investments | 8,031 | — |
| Equipment, furniture and fixtures, net | 61,868 | 110,885 |
| Goodwill | — | 39,991 |
| Other intangible assets, net | 60,820 | 517,185 |
| Other long-term assets | 67,902 | 117,524 |
| Total assets | $ 1,504,383 | $ 1,906,961 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | $ 53,104 | $ 105,138 |
| Accrued liabilities | 103,349 | 185,808 |
| Restructuring liabilities | 1,811 | 3,270 |
| Income tax payable | — | 1,306 |
| Deferred revenue | 40,565 | 56,713 |
| Total current liabilities | 198,829 | 352,235 |
| Long-term deferred revenue | 35,368 | 34,978 |
| Long-term restructuring liabilities | 7,794 | 6,537 |
| Other long-term obligations | 8,554 | 9,413 |
| Convertible notes payable | 798,000 | 1,174,665 |
| Total liabilities | 1,048,545 | 1,577,828 |
| Commitments and contingencies | | |
| 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; 92,038,360 and 93,079,180 shares issued and outstanding | 920 | 931 |
| Additional paid-in capital | 5,665,028 | 5,682,647 |
| Accumulated other comprehensive income | 1,223 | 230 |
| Accumulated deficit | (5,211,333) | (5,354,675) |
| Total stockholders' equity | 455,838 | 329,133 |
| Total liabilities and stockholders' equity | $ 1,504,383 | $ 1,906,961 |

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

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

| | Six Months Ended April 30, | |
|---|---|---|
| | 2009 | 2010 |
| Cash flows from operating activities: | | |
| Net loss | $(528,041) | $(143,342) |
| Adjustments to reconcile net loss to net cash provided by (used in) operating activities: | | |
| Amortization of (discount) premium on marketable securities | (904) | 575 |
| Loss on cost method investments | 3,135 | — |
| Gain on embedded redemption feature | — | (6,640) |
| Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements | 10,830 | 13,543 |
| Impairment of goodwill | 455,673 | — |
| Share-based compensation costs | 17,591 | 16,799 |
| Amortization of intangible assets | 15,930 | 33,618 |
| Provision for inventory excess and obsolescence | 8,809 | 7,100 |
| Provision for warranty | 9,235 | 8,847 |
| Other | 1,171 | 1,037 |
| Changes in assets and liabilities, net of effect of acquisition: | | |
| Accounts receivable | 21,728 | (53,255) |
| Inventories | (6,626) | (38,250) |
| Prepaid expenses and other | 6,253 | 4,944 |
| Accounts payable, accruals and other obligations | (16,371) | 83,525 |
| Income taxes payable | — | 1,306 |
| Deferred revenue | 3,572 | (3,043) |
| Net cash provided by (used in) operating activities | 1,985 | (73,236) |
| Cash flows from investing activities: | | |
| Payments for equipment, furniture, fixtures and intellectual property | (12,632) | (18,275) |
| Restricted cash | (109) | (9,046) |
| Purchase of available for sale securities | (719,165) | (63,591) |
| Proceeds from maturities of available for sale securities | 239,072 | 424,841 |
| Proceeds from sales of available for sale securities | 523,137 | 179,380 |
| Acquisition of business | — | (711,932) |
| Net cash provided by (used in) investing activities | 30,303 | (198,623) |
| Cash flows from financing activities: | | |
| Proceeds from issuance of 4.0% convertible notes payable, net | — | 369,660 |
| Proceeds from issuance of common stock and warrants | 539 | 831 |
| Net cash provided by financing activities | 539 | 370,491 |
| Effect of exchange rate changes on cash and cash equivalents | (15) | (108) |
| Net increase in cash and cash equivalents | 32,827 | 98,632 |
| Cash and cash equivalents at beginning of period | 550,669 | 485,705 |
| Cash and cash equivalents at end of period | $ 583,481 | $ 584,229 |
| | | |
| **Supplemental disclosure of cash flow information** | | |
| Cash paid (refunded) during the period for: | | |
| Interest | $ 2,560 | $ 2,560 |
| Income taxes, net | $ (281) | $ 1,294 |
| **Non-cash investing and financing activities** | | |
| Purchase of equipment in accounts payable | $ 605 | $ 649 |
| Debt issuance costs in accrued liabilities | $ — | $ 5,021 |

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 ("Ciena") have been prepared by Ciena, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. In the opinion of management, 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 generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. The October 31, 2009 condensed consolidated balance sheet was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America. However, Ciena believes that the disclosures are adequate to understand the information presented. 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 notes thereto included in Ciena's annual report on Form 10-K for the fiscal year ended October 31, 2009.

On March 19, 2010, Ciena completed its acquisition of substantially all of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Networks ("MEN Business"). Ciena's results of operations for the second quarter and six-month period ended April 30, 2010 reflect the operations of the MEN Business beginning on the March 19, 2010 acquisition date. See Note 3 below.

Ciena has a 52 or 53 week fiscal year, which ends on the Saturday nearest to the last day of October of each year. For purposes of financial statement presentation, each fiscal year is described as having ended on October 31, and each fiscal quarter is described as having ended on January 31, April 30 and July 31 of each fiscal year.

During the first quarter of fiscal 2010, Ciena recorded an adjustment to reduce its warranty liability and cost of goods sold by $3.3 million, to correct an overstatement of warranty expenses related to prior periods. The adjustment related to an error in the methodology of computing the annual failure rate used to calculate the warranty accrual. There was no tax impact as a result of this adjustment. Ciena believes this adjustment is not material to its financial statements for prior annual or interim periods, the first six months of fiscal 2010 or the expected annual results for fiscal 2010.

## (2) SIGNIFICANT ACCOUNTING POLICIES

*Use of Estimates*

The preparation of the financial statements and related disclosures in conformity with accounting principles generally accepted in the United States requires management to make estimates and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates are used for bad debts, valuation of inventories and investments, recoverability of intangible assets, other long-lived assets and goodwill, income taxes, warranty obligations, restructuring liabilities, derivatives and 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. Restricted cash collateralizing letters of credits are included in other current assets and other long-term assets depending upon the duration of the restriction.

*Investments*

Ciena's investments are principally in marketable debt securities. These investments are classified as available-for-sale and are reported at fair value, with unrealized gains and losses recorded in accumulated other comprehensive income. Ciena recognizes losses 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 its 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. All others

are considered long-term 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.

*Equipment, Furniture and Fixtures*

Equipment, furniture and fixtures are recorded at cost. Depreciation and amortization are computed using the straight-line method over useful lives of two years to five years for equipment, furniture and fixtures and the shorter of useful life or lease term for leasehold improvements. Upon a triggering event or changes in circumstances, a review of the carrying amount of our equipment, furniture and fixtures is performed and an impairment loss is recognized only if the carrying amount of the asset or asset group is determined to be not recoverable and exceeds its fair value. An impairment loss is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value.

Qualifying internal use software and website development costs incurred during the application development stage that consist primarily of outside services and purchased software license costs, are capitalized and amortized straight-line over the estimated useful life.

*Segment Reporting*

Effective upon the March 19, 2010 completion of the acquisition of the MEN Business, Ciena reorganized its internal organizational structure and the management of its business. Ciena's chief operating decision maker, its chief executive officer, evaluates performance and allocates resources based on multiple factors, including segment profit (loss) information for the following product categories: (i) Packet-Optical Transport; (ii) Packet-Optical Switching; (iii) Carrier Ethernet Service Delivery; and (iv) Software and Services. Operating segments are defined as components of an enterprise: that engage in business activities which 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 four product categories above to be its operating segments for reporting purposes. See Notes 3 and 19.

*Goodwill and Other Intangible Assets*

Ciena has recorded goodwill as a result of several acquisitions. All of the goodwill on Ciena's Condensed Consolidated Balance Sheet as of April 30, 2010 is a result of the acquisition of the MEN Business. Goodwill is assigned to the reporting units that are expected to benefit from the synergies of the combination. Ciena has determined that its operating segments and reporting units for goodwill assignment are the same. This determination is based on the fact that components below Ciena's operating segment level, such as individual product or service offerings, do not constitute a reporting unit because they do not constitute a business for which discrete financial information is available.

Ciena tests the reporting unit's goodwill for impairment on an annual basis, which Ciena has determined to be the last business day of its fiscal September each year. Testing is required between annual tests if events occur or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value. Prior to the reorganization of Ciena's operations described above, Ciena tested its goodwill for impairment as a single reporting unit.

Ciena has recorded finite-lived and indefinite 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, from nine months to seven years, which approximates the use of intangible assets. Upon a triggering event or changes in circumstances, a review of the fair value of our finite-lived intangible assets is performed. Impairments of finite-lived intangible assets are recognized only if the carrying amount of the asset or asset group is determined to not be recoverable and exceeds its fair value. Upon a triggering event or changes in circumstances, a review of the fair value of our finite-lived intangible assets is performed and an impairment loss is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value.

Indefinite-lived intangible assets are carried at cost. Ciena's other indefinite-lived intangible assets reflect in-process research and development assets acquired from the MEN Business. In-process research and development assets will be impaired, if abandoned, or amortized in future periods, depending upon the ability of Ciena to use the research and development in future periods. Future expenditures to complete

the in-process research and development projects will be expensed as incurred.

*Minority Equity Investments*

Ciena has certain minority equity investments in privately held technology companies that are classified as other 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 these companies. These investments involve a high degree of risk as the markets for the technologies or products manufactured by these companies are usually early stage at the time of Ciena's investment and such markets may never be significant. Ciena could lose its entire investment in some or all of these companies. Ciena monitors these investments for impairment and makes appropriate reductions in carrying values when necessary.

*Concentrations*

Substantially all of Ciena's cash and cash equivalents and short-term and long-term investments in marketable debt securities are maintained at three 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. Generally, these deposits may be redeemed upon demand and, therefore, management believes that they bear minimal risk.

Historically, a large percentage of Ciena's revenue has been the result of sales to a small number of communications service providers. Consolidation among Ciena's customers has increased this concentration. Consequently, Ciena's accounts receivable are concentrated among these customers. See Notes 8 and 19 below.

Additionally, Ciena's access to certain materials or components is dependent upon sole or limited source suppliers. The inability of any supplier to fulfill Ciena's supply requirements 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 and forecast future demand, or if they 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. 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 generally deferred and recognized ratably over the period during which the services are to be performed.

Ciena applies the percentage of completion method to long-term arrangements where it is required to undertake significant production, customizations or modification, and reasonable and reliable estimates of revenue and cost are available. Utilizing the percentage of completion method, Ciena recognizes revenue based on the ratio of actual costs incurred to date to total estimated costs expected to be incurred. In instances that do not meet the percentage of completion method criteria, recognition of revenue is deferred until there are no uncertainties regarding customer acceptance.

Some of Ciena's communications networking equipment is integrated with software that is essential to the functionality of the equipment. 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 of the product is specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

Arrangements with customers may include multiple deliverables, including any combination of equipment, services and software. If multiple element arrangements include software or software-related elements that are essential to the equipment, Ciena allocates the arrangement fee to be allocated to those separate units of accounting. Multiple element arrangements that include software are separated into more than one unit of accounting if the functionality of the delivered element(s) is not dependent on the undelivered element(s), there is vendor-specific objective evidence of the fair value of the undelivered element(s), and general revenue recognition criteria related to the delivered element(s) have been met. The amount of product and services revenue recognized is affected by Ciena's judgments as to whether an arrangement includes multiple elements and, if so, whether vendor-specific objective evidence of fair value exists. Changes to the elements in

an arrangement and Ciena's ability to establish vendor-specific objective evidence for those elements could affect the timing of revenue recognition. For all other deliverables, Ciena separates the elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, objective and reliable evidence of fair value exists for the undelivered element(s), and delivery of the undelivered element(s) is probable and substantially in Ciena's control. Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or using the residual method if objective evidence of fair value does not exist for the delivered element(s). The revenue recognition criteria described above are applied to each separate unit of accounting. If these criteria are not met, revenue is deferred until the criteria are met or the last element has been delivered.

*Warranty Accruals*

Ciena provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. Estimated warranty costs include estimates for material costs, technical support labor costs and associated overhead. The warranty liability is included in cost of goods sold and 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 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 its customers. 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 such customer. If a customer's financial condition changes, Ciena may be required to record an allowance for doubtful accounts, which would 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, consulting, depreciation, facility costs and information technologies.

*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 share-based award based on the fair value of the underlying common stock on the date of grant. In each case, Ciena only recognizes expense to its consolidated statement of operations for those options or shares that are expected ultimately to vest. Ciena uses two attribution methods to record expense, the straight-line method for grants with service-based vesting and the graded-vesting method, which considers each performance period or tranche separately, for all other awards. See Note 17 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.

Ciena adopted the accounting guidance on uncertainty related to income tax positions at the beginning of fiscal 2008. The total amount of unrecognized tax benefits increased by $0.7 million during the first six months of fiscal 2010 to $8.1 million, which includes $1.3 million of interest and some minor penalties. Ciena classified interest and penalties related to uncertain tax positions as a component of income tax expense. All of the uncertain tax positions, if recognized, would decrease the effective income tax rate.

On March 19, 2010, as a result of the acquisition of the MEN Business, Ciena recorded a liability and an indemnification asset of $2.6 million related to the uncertain income tax positions of the MEN Business. During the period ending April 30, 2010 subsequent to the acquisition, this acquired liability and associated indemnification asset were reduced by $2.0 million due to a lapse in applicable statute of limitations.

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's major tax jurisdictions include the United States, United Kingdom, Canada and India, with open tax years beginning with fiscal years 2006, 2004, 2005 and 2007, respectively. However, limited adjustments can be made to Federal tax returns in earlier years in order to reduce net operating loss carryforwards.

Ciena has not provided U.S. deferred income taxes on the cumulative unremitted earnings of its non-U.S. affiliates as it plans to permanently 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 any expansion requirements.

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 tax law "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 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. The fair value of investments in marketable debt securities is determined using quoted market prices for those securities or similar financial instruments. For information related to the fair value of Ciena's convertible notes, see Note 7 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;
- 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 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 align its workforce, facilities and operating costs with perceived market opportunities and business conditions. Ciena implements these restructuring plans and incurs the associated liability concurrently. Generally accepted accounting principles require that a liability for the cost associated with an exit or disposal activity be recognized in the period in which the liability is incurred, except for one-time employee termination benefits related to a service period of more than 60 days, which are accrued over the service period. See Note 5 below.

*Foreign Currency*

Some of Ciena's foreign branch offices and subsidiaries use the U.S. dollar as their functional currency, because Ciena, as the U.S. parent entity, exclusively funds the operations of these branch offices and subsidiaries with U.S. dollars. 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 U.S. dollar is the functional currency of foreign branch offices or subsidiaries, re-measurement adjustments are recorded in other income. The net gain (loss) on foreign currency re-measurement and exchange rate changes is immaterial for separate financial statement presentation.

*Derivatives*

Ciena's 4% convertible senior notes include a redemption feature that is accounted for as a separate embedded derivative. The embedded redemption feature is recorded at fair value on a recurring basis and these changes are included in interest and other income (expense), net on the Condensed Consolidated Statement of Operations.

Occasionally, Ciena uses foreign currency forward contracts to hedge certain forecasted foreign currency transactions relating to operating expenses. These derivatives, designated as cash flow hedges, have maturities of less than one year and permit net settlement.

At the inception of the cash flow hedge and on an ongoing basis, Ciena assesses the hedging relationship to determine its effectiveness in offsetting changes in cash flows attributable to the hedged risk during the hedge period. The effective portion of the hedging instrument'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 into the operating expense line item 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, net. See Note 14 below.

*Computation of Basic Net Income (Loss) per Common Share and Diluted Net Income (Loss) per Dilutive Potential Common 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 the potential dilution of common stock equivalent shares that would occur 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 16.

*Software Development Costs*

Generally accepted accounting principles require the capitalization of certain software development costs 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 costs qualifying for capitalization have been insignificant. Accordingly, Ciena has not capitalized any software development costs.

*Newly Issued Accounting Standards*

In October 2009, the FASB amended the accounting standards for revenue recognition with multiple deliverables. The amended guidance allows the use of management's best estimate of selling price for individual elements of an arrangement when vendor-specific objective evidence or third-party evidence is unavailable. Additionally, it eliminates the residual method of revenue recognition in accounting for multiple deliverable arrangements. The guidance is effective for fiscal years beginning on or after June 15, 2010 and early adoption is permitted. Ciena is currently evaluating the impact this new guidance could have on its financial condition, results of operations and cash flows.

In October 2009, the FASB amended the accounting standards for revenue arrangements with software elements. The amended guidance modifies the scope of the software revenue recognition guidance to exclude tangible products that contain both software and non-software components that function together to deliver the product's essential functionality. The pronouncement is effective for fiscal years beginning on or after June 15, 2010 and early adoption is permitted. This guidance must be adopted in the same period an entity adopts the amended revenue arrangements with multiple deliverables guidance described above. Ciena is currently evaluating the impact this new guidance could have on its financial condition, results of operations and cash flows.

**(3) BUSINESS COMBINATIONS**

*Acquisition of MEN Business*

On March 19, 2010, Ciena completed its acquisition of the MEN Business. Ciena believes that this transaction strengthens its position as a leader in next-generation, converged optical Ethernet networking and will accelerate the execution of its corporate and research and development strategies. Ciena believes that the additional geographic reach, expanded customer relationships, and broader portfolio of complementary network solutions derived from the acquisition will augment and accelerate the growth of its business.

The $773.8 million aggregate purchase price for the acquisition consisted entirely of cash. The purchase price is subject to adjustment based upon the amount of net working capital transferred to Ciena at closing. The purchase price was decreased at closing by approximately $62.0 million based on the estimated working capital delivered at closing. As of the date of this report, Ciena estimates that the adjustment will further decrease the aggregate purchase price by up to an additional $18.7 million, subject to finalization between the parties. This estimated further adjustment has been reflected in the financial statements accordingly. Prior to closing, Ciena elected to replace the $239.0 million in aggregate principal of convertible notes that were to be issued to Nortel as part of the aggregate purchase price with cash equivalent to 102% of the face amount of the notes replaced, or $243.8 million. Ciena completed a private placement of 4.0% Convertible Senior Notes due March 15, 2015 in aggregate principal amount of $375.0 million to fund this election and reduce the amount of cash on hand required to fund the aggregate purchase price. See Note 15 below.

Given the structure of the transaction as an asset carve-out from Nortel, Ciena expects that the transaction will result in a costly and complex integration with a number of operational risks. Ciena expects to incur acquisition and integration costs of approximately $180 million, with the majority of these costs to be incurred in fiscal 2010. This estimate principally reflects costs associated with equipment and information technology, transaction expense, severance expense and consulting and third party service fees associated with integration. In addition to these integration costs, Ciena has incurred inventory obsolescence charges and may incur additional expenses related to, among other things, facilities restructuring. As a result, the expense related to the acquisition that Ciena incurs and recognizes for financial statement purposes will be significantly higher than the estimated acquisition and integration costs above. As of April 30, 2010, Ciena has incurred $66.3 million in transaction, consulting and third party service fees, $1.9 million in severance expense, and an additional $2.4 million, primarily related to purchases of capitalized information technology equipment. In addition to the estimated integration costs above, Ciena also expects to incur significant transition services expense. Ciena is currently relying upon an affiliate of Nortel to perform certain critical operational and business support functions during an interim integration period. Ciena can utilize certain of these support services for a period of up to 24 months following the acquisition of the MEN Business (12 months in EMEA). The cost of these transition services is estimated to be approximately $94 million annually. The actual expense will depend upon the scope of the services that Ciena utilizes and the time within which Ciena is able

to complete the planned transfer of these services to internal resources or other third party providers.

During fiscal 2010, Ciena adopted the new FASB guidance on business combinations. The acquisition of the MEN Business has been accounted for under the acquisition method of accounting which requires the total purchase price to be allocated to the acquired assets and assumed liabilities based on their estimated fair values. The fair values assigned to the acquired assets and assumed liabilities are based on valuations using management's best estimates and assumptions. The allocation of the purchase price as reflected in these consolidated financial statements is based on the best information available to management at the time these consolidated financial statements were issued and is preliminary pending the completion of the valuation analysis of selected assets and liabilities and the final agreement of the purchase price adjustment described above. During the measurement period (which is not to exceed one year from the acquisition date), Ciena is required to retrospectively adjust the provisional assets or liabilities if new information is obtained about facts and circumstances that existed as of the acquisition date that, if known, would have resulted in the recognition of those assets or liabilities as of that date. The following table summarizes the allocation of the purchase price for the MEN Business based on the estimated fair value of the acquired assets and assumed liabilities (in thousands):

| | Amount |
|---|---|
| Unbilled receivables | $ 7,454 |
| Inventories | 114,169 |
| Prepaid expenses and other | 32,517 |
| Other long-term assets | 21,821 |
| Equipment, furniture and fixtures | 45,351 |
| Developed technology | 218,774 |
| In-process research and development | 11,000 |
| Customer relationships, outstanding purchase orders and contracts | 257,964 |
| Trade name | 2,000 |
| Goodwill | 39,991 |
| Deferred revenue | (18,801) |
| Accrued liabilities | (36,349) |
| Other long-term obligations | (2,644) |
| Total purchase price allocation | $ 693,247 |

Any change in the estimated fair value of the net assets during the measurement period will change the amount of the purchase price allocable to goodwill. Any subsequent change to the purchase price allocation that is material to Ciena's consolidated financial results will be adjusted retroactively.

Unbilled receivables represent unbilled claims for which Ciena will invoice customers upon its completion of the acquired projects.

Under the acquisition method of accounting, Ciena revalued the acquired finished goods inventory to fair value, which was determined to be most appropriately recognized as the estimated selling price less the sum of (a) costs of disposal, and (b) a reasonable profit allowance for Ciena's selling effort. This revaluation resulted in an increase in inventory carrying value of approximately $40.7 million for marketable inventory offset by a decrease of $4.8 million for unmarketable inventory.

Prepaid expenses and other include product demonstration units used to support research and development projects and indemnification assets related to uncertain tax contingencies acquired and recorded as part of other long-term obligations. Other long-term assets represent spares used to support customer maintenance commitments.

Developed technology represents purchased technology which has reached technological feasibility and for which development had been completed as of the date of the acquisition. Developed technology will be amortized on a straight line basis over its estimated useful lives of two to seven years.

In-process research and development represents development projects that had not reached technological feasibility at the time of the acquisition. In-process research and development assets will be impaired, if abandoned, or amortized in future periods, depending upon the ability of Ciena to use the research and development in future periods. Future expenditures to complete the in-process research and development projects will be expensed as incurred.

Customer relationships, outstanding purchase orders and contracts represent agreements with existing customers of the MEN Business. These intangible assets are expected to have estimated useful lives of nine months to seven years, with the exception of $12.0 million related to a contract asset for acquired in-process projects which will be billed in full by Ciena and recognized as a reduction in revenue within the next year. Trade name represents acquired product trade names which are expected to have a useful life of nine months.

Goodwill represents the purchase price in excess of the amounts assigned to acquired tangible or intangible assets and assumed liabilities. Amounts allocated to goodwill are tax deductible in all relevant jurisdictions. The goodwill is attributable to the assigned workforce of the MEN Business and the synergies expected to arise as a result of the acquisition.

Deferred revenue represents obligations assumed by Ciena to provide maintenance support services for which payment for such services was already made to Nortel.

Accrued liabilities represent assumed warranty obligations, other customer contract obligations, and certain employee benefit plans. Other long-term obligations represent uncertain tax contingencies.

The following unaudited pro forma financial information summarizes the results of operations for the periods indicated as if Ciena's acquisition of the MEN Business had been completed as of the beginning of each of the periods presented. Revenue specific to the MEN Business since the March 19, 2010 acquisition date was $53.5 million. As Ciena has begun to integrate the combined operations, eliminating overlapping processes and expenses and integrating its products and sales efforts with those of the acquired MEN Business, it is impractical to determine the earnings specific to the MEN Business since the acquisition date.

These pro forma amounts (in thousands) do not purport to be indicative of the results that would have actually been obtained if the acquisition occurred as of the beginning of the periods presented or that may be obtained in the future.

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Pro forma revenue | $ 415,201 | $ 351,248 | $ 855,637 | $ 783,160 |
| Pro forma net loss | $ (593,601) | $ 160,420 | $ (735,467) | $ 384,790 |

**(4) GOODWILL AND LONG-LIVED ASSETS**

*Goodwill*

As a result of its acquisition of the MEN Business, Ciena recorded goodwill of $40.0 million. This goodwill was assigned to the Packet-Optical Transport reporting unit as that unit is expected to benefit from the synergies of the combination.

The table below sets forth changes in the carrying amount of goodwill in each of our reporting units for the period indicated (in thousands):

| | Packet-Optical Transport | Packet-Optical Switching | Carrier Ethernet Service Delievery | Software and Services | Total |
|---|---|---|---|---|---|
| Balance as of October 31, 2009 | $ — | $ — | $ — | $ — | $ — |
| Acquired | 39,991 | — | — | — | 39,991 |
| Balance as of April 30, 2010 | $39,991 | $ — | $ — | $ — | $39,991 |

The table below sets forth changes in the carrying amount of goodwill for the period indicated (in thousands):

| | Total |
|---|---|
| Balance as of October 31, 2008 | $ 455,673 |
| Impairment loss | (455,673) |
| Balance as of April 30, 2009 | $ — |

*Goodwill Impairment*

Prior to the acquisition of the MEN Business, Ciena assessed its goodwill based upon a single reporting unit and tested its single reporting unit's goodwill for impairment on an annual basis, which Ciena has determined to be the last business day of fiscal September each year. Testing is required between annual tests if events occur or circumstances change that would, more likely than not, reduce the fair value of the reporting unit below its carrying value. Based on a combination of factors, including current macroeconomic conditions and a sustained decline in Ciena's common stock price and market capitalization below net book value, Ciena conducted an interim impairment assessment of goodwill during the second quarter of fiscal 2009. Ciena performed the step one fair value comparison, and its market capitalization was $721.8 million and its carrying value, including goodwill, was $949.0 million. Ciena applied a 25% control premium to its market capitalization to determine a fair value of $902.2 million. Because step one indicated that Ciena's fair value was less than its carrying value, Ciena performed the step two analysis. Under the step two analysis, the implied fair value of goodwill requires valuation of a reporting unit's tangible and intangible assets and liabilities in a manner similar to the allocation of purchase price in a business combination. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, goodwill is deemed impaired and is written down to the extent of the difference. The implied fair value of the reporting unit's goodwill was determined to be $0, and, as a result, Ciena recorded a goodwill impairment of $455.7 million, representing the full carrying value of the goodwill.

*Long-Lived Assets*

Ciena's long-lived assets, excluding goodwill, include: equipment, furniture and fixtures; finite-lived intangible assets; and maintenance spares. Ciena tests long-lived assets for impairment whenever triggering events or changes in circumstances indicate that the assets' carrying amount is not recoverable from its undiscounted cash flows. Ciena's long-lived assets are assigned to reporting units which represent the lowest level for which cash flows can be identified.

Due to the reorganization described in Note 2 above, Ciena performed an impairment analysis of its long-lived assets during the second quarter of fiscal 2010. As of April 30, 2010, based on Ciena's estimate of future, undiscounted cash flows by asset group, no impairment was required. If actual market conditions differ or forecasts change, Ciena may be required to record a non-cash impairment charge related to long-lived assets in future periods. Such charges would have the effect of decreasing Ciena's earnings or increasing its losses in such period.

**(5) RESTRUCTURING COSTS**

In April 2010, Ciena committed to certain restructuring actions and subsequently effected a headcount reduction of approximately 70 employees, principally affecting our Global Product Group and Global Field Organization outside of the Europe, Middle East and Africa (EMEA) region. This action resulted in a restructuring charge of $1.9 million in the second quarter of fiscal 2010.

The following table sets forth the activity and balance of the restructuring liability accounts for the six months ended April 30, 2010 (in thousands):

| | Workforce reduction | Consolidation of excess facilities | Total |
|---|---|---|---|
| Balance at October 31, 2009 | $ 170 | $ 9,435 | $ 9,605 |
| Additional liability recorded | 1,828 | — | 1,828 |
| Cash payments | (101) | (1,525) | (1,626) |
| Balance at April 30, 2010 | $ 1,897 | $ 7,910 | $ 9,807 |
| Current restructuring liabilities | $ 1,897 | $ 1,373 | $ 3,270 |
| Non-current restructuring liabilities | $ — | $ 6,537 | $ 6,537 |

In May 2010, following the end of its fiscal second quarter, Ciena informed employees of its proposal to reorganize and restructure portions of Ciena's business and operations in the EMEA region. Ciena anticipates reductions to its workforce in EMEA of approximately 120 to 140 positions in the near term with reductions expected to principally affect employees in Ciena's Global Field Organization and Global Supply Chain organization. Execution of any specific reorganization is subject to local legal requirements, including notification and consultation processes with employees and employee representatives. Ciena estimates completing the reorganization by August 31, 2010. These actions are intended to reduce operating expense and better align Ciena's workforce and operating costs with market and business opportunities following the completion of Ciena's acquisition of the MEN Business. At this time, Ciena is unable to reasonably estimate the future impact of this activity on the Condensed Consolidated Statement of Operations.

The following table sets forth the activity and balance of the restructuring liability accounts for the six months ended April 30, 2009 (in thousands):

| | Workforce reduction | Consolidation of excess facilities | Total |
|---|---|---|---|
| Balance at October 31, 2008 | $ 982 | $ 3,243 | $ 4,225 |
| Additional liability recorded | 3,575 | 2,900 | 6,475 |
| Cash payments | (2,460) | (377) | (2,837) |
| Balance at April 30, 2009 | $ 2,097 | $ 5,766 | $ 7,863 |
| Current restructuring liabilities | $ 2,097 | $ 1,054 | $ 3,151 |
| Non-current restructuring liabilities | $ — | $ 4,712 | $ 4,712 |

**(6) MARKETABLE SECURITIES**

As of the dates indicated, short-term and long-term investments are comprised of the following (in thousands):

| | April 30, 2010 | | | |
|---|---|---|---|---|
| | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
| U.S. government obligations | $ 29,299 | $ — | $ — | $ 29,299 |
| Publicly traded equity securities | 238 | — | — | 238 |
| | $ 29,537 | $ — | $ — | $ 29,537 |
| Included in short-term investments | 29,537 | — | — | 29,537 |
| Included in long-term investments | — | — | — | — |
| | $ 29,537 | $ — | $ — | $ 29,537 |

| | October 31, 2009 | | | |
|---|---|---|---|---|
| | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
| U.S. government obligations | $ 570,505 | $ 460 | $ 2 | $ 570,963 |
| Publicly traded equity securities | 251 | — | — | 251 |
| | $ 570,756 | $ 460 | $ 2 | $ 571,214 |
| Included in short-term investments | 562,781 | 404 | $ 2 | 563,183 |
| Included in long-term investments | 7,975 | 56 | — | 8,031 |
| | $ 570,756 | $ 460 | $ 2 | $ 571,214 |

Gross unrealized losses related to marketable debt investments, included in short-term and long-term investments, were primarily due to changes in interest rates. Ciena's management determined that the gross unrealized losses at October 31, 2009 were temporary in nature because Ciena had the ability and intent to hold these investments until a recovery of fair value, which may be maturity. As of the dates indicated, gross unrealized losses were as follows (in thousands):

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| | April 30, 2010 | | | | | |
|---|---|---|---|---|---|---|
| | Unrealized Losses Less Than 12 Months | | Unrealized Losses 12 Months or Greater | | Total | |
| | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses | Fair Value |
| U.S. government obligations | $ — | $ — | $ — | $ — | $ — | $ — |
| | $ — | $ — | $ — | $ — | $ — | $ — |

| | October 31, 2009 | | | | | |
|---|---|---|---|---|---|---|
| | Unrealized Losses Less Than 12 Months | | Unrealized Losses 12 Months or Greater | | Total | |
| | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses | Fair Value |
| U.S. government obligations | $ 2 | $ 37,744 | $ — | $ — | $ 2 | $ 37,744 |
| | $ 2 | $ 37,744 | $ — | $ — | $ 2 | $ 37,744 |

The following table summarizes final legal maturities of debt investments at April 30, 2010 (in thousands):

| | Amortized Cost | Estimated Fair Value |
|---|---|---|
| Less than one year | $ 29,299 | $ 29,299 |
| Due in 1-2 years | — | — |
| | $ 29,299 | $ 29,299 |

**(7) FAIR VALUE MEASUREMENTS**

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

| | April 30, 2010 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets: | | | | |
| U.S. government obligations | $ — | $ 29,299 | $ — | $ 29,299 |
| Embedded redemption feature | — | — | 8,350 | 8,350 |
| Publicly traded equity securities | 238 | — | — | 238 |
| Total assets measured at fair value | $ 238 | $ 29,299 | $ 8,350 | $ 37,887 |

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

| | April 30, 2010 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets: | | | | |
| Short-term investments | $ 238 | $ 29,299 | $ — | $ 29,537 |
| Other long-term assets | — | — | 8,350 | 8,350 |
| Total assets measured at fair value | $ 238 | $ 29,299 | $ 8,350 | $ 37,887 |

Ciena's Level 1 assets include corporate equity securities publicly traded on major exchanges that are valued using quoted prices in active markets. Ciena's Level 2 investments include U.S. government obligations. These investments are valued using observable inputs such as quoted market prices, benchmark yields, reported trades, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency. Investments are held by a custodian who obtains investment prices from a third party pricing provider that uses standard inputs to models which vary by asset class.

Ciena's Level 3 asset reflects the embedded redemption feature contained within Ciena's 4.0% convertible senior notes. See Note 15 below. The embedded redemption feature is bifurcated from Ciena's 4.0% convertible senior notes using the "with-and-without" approach. As such, the total value of the embedded redemption feature is calculated as the difference between the value of the 4.0% convertible senior notes (the "Hybrid Instrument") and the value of an identical instrument but without the embedded redemption feature (the "Host Instrument"). Both the Host Instrument and the Hybrid Instrument are valued using a modified binomial model. The modified binomial model utilizes a risk free interest rate, an implied volatility of Ciena's stock, the recovery rates of bonds, and the implied default intensity of the 4.0% convertible senior notes.

As of the dates indicated, the following table sets forth, in thousands, the reconciliation of changes in Level 3 fair value measurements:

| | Level 3 |
|---|---|
| Balance at October 31, 2009 | $ — |
| Issuances | 1,710 |
| Changes in unrealized gain (loss) | 6,640 |
| Transfers into Level 3 | — |
| Transfers out of Level 3 | — |
| Balance at April 30, 2010 | $ 8,350 |

*Fair value of outstanding convertible notes*

At April 30, 2010, the fair value of the outstanding $500.0 million of 0.875% convertible senior notes, $375.0 million of 4.0% convertible senior notes and $298.0 million of 0.25% convertible senior notes was $385.6 million, $443.6 million and $260.2 million, respectively. Fair value for the 0.875% and the 0.25% convertible senior notes is based on the quoted market price for the notes on the date above. Due to the lack of trading activity, fair value of the 4.0% convertible senior notes is based on a modified binomial model. The modified binomial model utilizes a risk free interest rate, an implied volatility of Ciena's stock, the recovery rates of bonds, and the implied default intensity of the 4.0% convertible senior notes.

**(8) ACCOUNTS RECEIVABLE**

As of October 31, 2009 one customer accounted for 10.7% of net accounts receivable, and as of April 30, 2010 no customers accounted for greater than 10.0% of net accounts receivable.

Ciena's allowance for doubtful accounts receivable is based on management's assessment, on a specific identification basis, of the collectibility of customer accounts. As of October 31, 2009 and April 30, 2010, allowance for doubtful accounts was $0.1 million.

**(9) INVENTORIES**

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

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| Raw materials | $ 19,694 | $ 21,309 |
| Work-in-process | 1,480 | 3,958 |
| Finished goods | 90,914 | 236,135 |
| | 112,088 | 261,402 |
| Provision for excess and obsolescence | (24,002) | (27,997) |
| | $ 88,086 | $ 233,405 |

Ciena writes down its inventory for estimated obsolescence or unmarketable inventory in 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. During the first six months of fiscal 2010, Ciena recorded a provision for excess and obsolescence related to its pre-acquisition inventory of $7.1 million, primarily due to product rationalization decisions in connection with the acquisition of the MEN Business. Deductions from the provision for excess and obsolete inventory relate to disposal activities. The following table summarizes the activity in Ciena's reserve for excess and obsolete inventory for the period indicated (in thousands):

| | Inventory Reserve |
|---|---|
| Reserve balance as of October 31, 2009 | $ 24,002 |
| Provision for excess for obsolescence | 7,100 |
| Actual inventory disposed | (3,105) |
| Reserve balance as of April 30, 2010 | $ 27,997 |

During the first six months of fiscal 2009, Ciena recorded a provision for excess and obsolete inventory of $8.8 million, primarily related to changes in forecasted sales for certain products. Deductions from the provision for excess and obsolete inventory relate to disposal activities. The following table summarizes the activity in Ciena's reserve for excess and obsolete inventory for the period indicated (in thousands):

| | Inventory Reserve |
|---|---|
| Reserve balance as of October 31, 2008 | $ 23,257 |
| Provision for excess and obsolescence | 8,809 |
| Actual inventory disposed | (9,928) |
| Reserve balance as of April 30, 2009 | $ 22,138 |

**(10) PREPAID EXPENSES AND OTHER**

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

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| Interest receivable | $ 993 | $ 3 |
| Prepaid VAT and other taxes | 14,527 | 23,221 |
| Deferred deployment expense | 4,242 | 5,749 |
| Product demonstration units, net | — | 27,954 |
| Prepaid expenses | 8,869 | 9,765 |
| Capitalized acquisition costs | 12,473 | — |
| Restricted cash | 7,477 | 6,908 |
| MEN Business purchase price adjustment receivable | — | 18,685 |
| Other non-trade receivables | 1,956 | 2,961 |
| | $ 50,537 | $ 95,246 |

Prepaid expenses and other as of April 30, 2010 include $28.0 million and $18.7 million related to product demonstration units, net acquired as part of the MEN Business and the MEN Business purchase price adjustment receivable, respectively. Capitalized acquisition costs at October 31, 2009 include direct costs related to Ciena's then pending acquisition of the MEN Business. In the first quarter of fiscal 2010, Ciena adopted newly issued accounting guidance related to business combinations, which required the full amount of these capitalized acquisition costs to be expensed in the Condensed Consolidated Statement of Operations.

**(11) EQUIPMENT, FURNITURE AND FIXTURES**

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

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| Equipment, furniture and fixtures | $ 293,093 | $ 347,499 |
| Leasehold improvements | 45,761 | 48,853 |
| | 338,854 | 396,352 |
| Accumulated depreciation and amortization | (276,986) | (285,467) |
| | $ 61,868 | $ 110,885 |

Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements was $10.8 million and $13.5 million for the first six months of fiscal 2009 and 2010, respectively.

**(12) OTHER INTANGIBLE ASSETS**

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

| | October 31, 2009 | | | April 30, 2010 | | |
|---|---|---|---|---|---|---|
| | Gross Intangible | Accumulated Amortization | Net Intangible | Gross Intangible | Accumulated Amortization | Net Intangible |
| Finite-lived intangibles: | | | | | | |
| Developed technology | $ 185,833 | $ (147,504) | $ 38,329 | $ 406,833 | $ (160,228) | $ 246,605 |
| Patents and licenses | 47,370 | (42,811) | 4,559 | 45,388 | (44,568) | 820 |
| Customer relationships, covenants not to compete, outstanding purchase orders and contracts | 60,981 | (43,049) | 17,932 | 320,945 | (62,185) | 258,760 |
| Total finite-lived intangibles | 294,184 | (233,364) | 60,820 | 773,166 | (266,981) | 506,185 |
| Indefinite-lived intangibles: | | | | | | |
| In-process research and development | — | — | — | 11,000 | — | 11,000 |
| Total indefinite-lived intangibles | — | — | — | 11,000 | — | 11,000 |
| Total other intangible assets | $ 294,184 | $ (233,364) | $ 60,820 | $ 784,166 | $ (266,981) | $ 517,185 |

The aggregate amortization expense of finite-lived other intangible assets was $15.9 million and $27.8 million for the first six months of fiscal 2009 and 2010, respectively. In addition, during the second quarter of fiscal 2010, revenue was reduced by $5.8 million related to the amortization of contract assets from the acquisition of the MEN Business. In-process research and development assets are impaired, if abandoned, or amortized in future periods, depending upon the ability of Ciena to use the research and development in future periods. See Note 3 above for information pertaining to newly acquired intangible assets related to the MEN Business. Expected future amortization of finite-lived other intangible assets for the fiscal years indicated is as follows (in thousands):

| Period ended October 31, | |
|---|---|
| 2010 (remaining six months) | $ 94,235 |
| 2011 | 91,373 |
| 2012 | 71,993 |
| 2013 | 69,573 |
| 2014 | 55,415 |
| Thereafter | 123,596 |
| | $ 506,185 |

**(13) OTHER BALANCE SHEET DETAILS**

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

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| Maintenance spares inventory, net | $ 31,994 | $ 54,348 |
| Restricted cash | 18,792 | 28,407 |
| Deferred debt issuance costs, net | 12,832 | 22,046 |
| Embedded redemption feature | — | 8,350 |
| Investments in privately held companies | 907 | 907 |
| Other | 3,377 | 3,466 |
| | $ 67,902 | $ 117,524 |

Deferred debt issuance costs are amortized using the straight line method which approximates the effect of the effective interest rate method on the maturity of the related debt. Amortization of debt issuance costs, which is included in interest expense, was $1.1 million and $1.5 million during the first six months of fiscal 2009 and fiscal 2010, respectively.

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

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| Warranty | $ 40,196 | $ 64,681 |
| Compensation, payroll related tax and benefits | 20,025 | 38,824 |
| Vacation | 11,508 | 15,386 |
| Interest payable | 2,045 | 3,965 |
| Other | 29,575 | 62,952 |
| | $ 103,349 | $ 185,808 |

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

| Six months ended April 30, | Beginning Balance | Acquired | Provisions | Settlements | Balance at end of period |
|---|---|---|---|---|---|
| 2009 | $37,258 | — | 9,235 | (7,610) | $38,883 |
| 2010 | $40,196 | 26,000 | 8,847 | (10,362) | $64,681 |

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

| | October 31, 2009 | April 30, 2010 |
|---|---|---|
| Products | $ 11,998 | $ 13,265 |
| Services | 63,935 | 78,426 |
| | 75,933 | 91,691 |
| Less current portion | (40,565) | (56,713) |
| Long-term deferred revenue | $ 35,368 | $ 34,978 |

**(14) FOREIGN CURRENCY FORWARD CONTRACTS**

Ciena uses foreign currency forward contracts to reduce variability in non-U.S. dollar denominated operating expenses. Ciena uses these derivatives to partially offset its market exposure to fluctuations in certain foreign currencies. These derivatives are designated as cash flow hedges and have maturities of less than one year. These forward contracts are not designed to provide foreign currency protection over the long-term. Ciena considers several factors, including offsetting exposures, significance of exposures, costs associated with entering into a particular instrument, and potential effectiveness when designing its hedging activities.

The effective portion of the derivative's 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 into the operating expense line item to which the hedged transaction relates. Ciena records the ineffective portion of the hedging instruments in interest and other income, net. As of October 31, 2009 and April 30, 2010, there were no foreign currency forward contracts outstanding and Ciena did not enter into any foreign currency forward contracts during the first six months of fiscal 2010.

Ciena's foreign currency forward contracts are classified as follows (in thousands):

| Line Item in Condensed Consolidated Statement of Operations | Reclassified to Condensed Consolidated Statement of Operations (Effective Portion) Quarter Ended April 30, 2009 | Quarter Ended April 30, 2010 | Six Months Ended April 30, 2009 | Six Months Ended April 30, 2010 |
|---|---|---|---|---|
| Research and development | $ 264 | $ — | $ 304 | $ — |
| Selling and marketing | 573 | — | 738 | — |
| | $ 837 | $ — | $ 1,042 | $ — |

| Line Item in Condensed Consolidated Balance Sheet | Recognized in Other Comprehensive Income (Loss) Quarter Ended April 30, 2009 | Quarter Ended April 30, 2010 | Recognized in Other Comprehensive Income (Loss) Six Months Ended April 30, 2009 | Six Months Ended April 30, 2010 |
|---|---|---|---|---|
| Accumulated other comprehensive income (loss) | $ 811 | $ — | $ (1,484) | $ — |
| | $ 811 | $ — | $ (1,484) | $ — |

| Line Item in Condensed Consolidated Statement of Operations | Ineffective Portion Quarter Ended April 30, 2009 | Quarter Ended April 30, 2010 | Ineffective Portion Six Months Ended April 30, 2009 | Six Months Ended April 30, 2010 |
|---|---|---|---|---|
| Interest and other income, net | $ — | $ — | $ — | $ — |
| | $ — | $ — | $ — | $ — |

**(15) CONVERTIBLE NOTES PAYABLE**

*Ciena 4.0% Convertible Senior Notes, due March 15, 2015*

On March 15, 2010, Ciena completed a private placement of 4.0% convertible senior notes due March 15, 2015, in aggregate principal amount of $375.0 million (the “Notes”). Interest is payable on the Notes on March 15 and September 15 of each year, beginning on September 15, 2010. The Notes are senior unsecured obligations of Ciena and rank equally with all of Ciena’s other existing and future senior unsecured debt.

At the election of the holder, the Notes may be converted prior to maturity into shares of Ciena common stock at the initial conversion rate of 49.0557 shares per $1,000 in principal amount, which is equivalent to an initial conversion price of approximately $20.38 per share. The Notes may be redeemed by Ciena on or after March 15, 2013 if the closing sale price of Ciena’s common stock for at least 20 trading days in any 30 consecutive trading day period ending on the date one day prior to the date of the notice of redemption exceeds 150% of the conversion price. Ciena may redeem the Notes in whole or in part, at a redemption price in cash equal to the principal amount to be redeemed, plus accrued and unpaid interest, including any additional interest to, but excluding, the redemption date, plus a “make-whole premium” payment. The “make whole premium” payment will be made in cash and equal the present value of the remaining interest payments, to maturity, computed using a discount rate equal to 2.75%. This redemption feature is accounted for as a separate embedded derivative and, for accounting purposes, is bifurcated from the indenture because it is not clearly and closely related to the Notes. As of April 30, 2010, the embedded redemption feature in the amount of $8.4 million is included in other long-term assets on the Condensed Consolidated Balance Sheet. During the first six months of fiscal 2010, the changes in fair value of the embedded redemption feature in the amount of $6.6 million were reflected as interest and other income (expense), net on the Condensed Consolidated Statement of Operations.

The shares of common stock issuable upon conversion of the Notes have not been registered for resale on a shelf registration statement. In some instances, Ciena’s failure to timely file periodic reports with the SEC or remove restrictive legends on the Notes may require it to pay additional interest on the Notes; which will accrue at the rate of 0.50% per annum of the principal amount of Notes outstanding for each day such failure to file or to remove the restrictive legend has occurred and is continuing.

If Ciena undergoes a “fundamental change” (as that term is defined in the indenture governing the Notes to include certain change in control transactions), holders of Notes will have the right, subject to certain exemptions, to require Ciena to purchase for cash any or all of their Notes

at a price equal to the principal amount, plus accrued and unpaid interest. If the holder elects to convert his or her Notes in connection with a specified fundamental change, in certain circumstances, Ciena will be required to increase the applicable conversion rate, depending on the price paid per share for Ciena common stock and the effective date of the fundamental change transaction.

The indenture governing the Notes provides for customary events of default which include (subject in certain cases to customary grace and cure periods), among others, the following: nonpayment of principal or interest; breach of covenants or other agreements in the Indenture; defaults in failure to pay certain other indebtedness; and certain events of bankruptcy or insolvency. Generally, if an event of default occurs and is continuing, the trustee or the holders of at least 25% in aggregate principal amount of the Notes may declare the principal of, accrued interest on, and premium, if any, on all the Notes immediately due and payable.

Ciena estimates that the net proceeds from the offering of the Notes are approximately $364.3 million after deducting the placement agents' fees and other estimated fees and expenses. Ciena used $243.8 million of this amount to fund its payment election to replace its contractual obligation to issue convertible notes to Nortel as part of the aggregate purchase price for the acquisition of the MEN Business. The remaining proceeds were used to reduce the cash on hand required to fund the aggregate purchase price of the MEN Business. See Note 3 above.

**(16) 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 (loss) per common share ("Basic EPS") and the diluted net income (loss) 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 (i) common shares outstanding, (ii) shares issuable upon vesting of restricted stock units, (iii) shares issuable upon exercise of outstanding stock options, employee stock purchase plan options and warrants using the treasury stock method; and (iv) shares underlying Ciena's outstanding convertible notes.

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| **Numerator** | 2009 | 2010 | 2009 | 2010 |
| Net loss | $(503,210) | $ 90,009 | $(528,041) | $ 143,342 |
| Add: Interest expense for 0.250% convertible senior notes | — | — | — | — |
| Add: Interest expense for 4.000% convertible senior notes | — | — | — | — |
| Add: Interest expense for 0.875% convertible senior notes | — | — | — | — |
| Net loss used to calculate diluted EPS | $(503,210) | $ 90,009 | $(528,041) | $ 143,342 |

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| **Denominator** | 2009 | 2010 | 2009 | 2010 |
| Basic weighted average shares outstanding | 90,932 | 92,614 | 90,777 | 92,590 |
| Add: Shares underlying outstanding stock options, employees stock purchase plan options, warrants and restricted stock units | — | — | — | — |
| Add: Shares underlying 0.250% convertible senior notes | — | — | — | — |
| Add: Shares underlying 4.000% convertible senior notes | — | — | — | — |
| Add: Shares underlying 0.875% convertible senior notes | — | — | — | — |
| Dilutive weighted average shares outstanding | 90,932 | 92,614 | 90,777 | 92,590 |

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| **EPS** | 2009 | 2010 | 2009 | 2010 |
| Basic EPS | $ (5.53) | $ (0.97) | $ (5.82) | $ (1.55) |
| Diluted EPS | $ (5.53) | $ (0.97) | $ (5.82) | $ (1.55) |

*Explanation of Shares Excluded due to Anti-Dilutive Effect*

For the quarter and six months ended April 30, 2009, the weighted average number of shares set forth in the table below, underlying outstanding stock options, employee stock purchase plan options, restricted stock units, and warrants, is considered anti-dilutive because Ciena incurred a net loss. In addition, the shares, representing the weighted average number of shares issuable upon conversion of Ciena's 0.25% convertible senior notes, 4.0% convertible senior notes and 0.875% convertible senior notes, are considered anti-dilutive because the related interest expense on a per common share "if converted" basis exceeds Basic EPS for the period.

For the quarter and six months ended April 30, 2010, the weighted average number of shares set forth in the table below, underlying outstanding stock options, employee stock purchase plan options, restricted stock units, and warrants, is considered anti-dilutive because Ciena incurred a net loss. In addition, the shares, representing the weighted average number of shares issuable upon conversion of Ciena's outstanding convertible senior notes, are considered anti-dilutive because the related interest expense on a per common share "if converted" basis exceeds Basic EPS for the period.

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

**Shares excluded from EPS Denominator due to anti-dilutive effect**

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Shares underlying stock options, restricted stock units and warrants | 7,992 | 2,082 | 7,950 | 1,864 |
| 0.25% convertible senior notes | 7,539 | 7,539 | 7,539 | 7,539 |
| 4.00% convertible senior notes | — | 9,607 | — | 4,777 |
| 0.875% convertible senior notes | 13,108 | 13,108 | 13,108 | 13,108 |
| Total excluded due to anti-dilutive effect | 28,639 | 32,336 | 28,597 | 27,288 |

**(17) SHARE-BASED COMPENSATION EXPENSE**

Ciena grants equity awards under its 2008 Omnibus Incentive Plan ("2008 Plan") and 2003 Employee Stock Purchase Plan ("ESPP"). These plans were approved by shareholders and are described in Ciena's annual report on Form 10-K. In connection with its acquisition of the MEN Business, Ciena also adopted the 2010 Inducement Equity Award Plan, pursuant to which it has made awards to eligible persons as described below.

*2008 Plan*

Ciena has previously granted stock options and restricted stock units under its 2008 Plan. Pursuant to Board and stockholder approval, effective April 14, 2010 Ciena amended its 2008 Plan to (i) increase the number of shares available for issuance by five million shares; and (ii) reduce from 1.6 to 1.31 the fungible share ratio used for counting full value awards, such as restricted stock units, against the shares remaining available under the 2008 Plan. As of April 30, 2010, there were approximately 6.1 million shares authorized and remaining available for issuance under the 2008 Plan.

*2010 Inducement Equity Award Plan*

On December 8, 2009, the Compensation Committee of the Board of Directors approved the 2010 Inducement Equity Award Plan (the "2010 Plan"). The 2010 Plan is intended to enhance Ciena's ability to attract and retain certain key employees transferred to Ciena in connection with its acquisition of the MEN Business. The 2010 Plan authorizes the issuance of restricted stock or restricted stock units representing up to 2.25 million shares of Ciena common stock. Upon the March 19, 2011 termination of the 2010 Plan, any shares then remaining available shall cease to be available for issuance under the 2010 Plan or any other existing Ciena equity incentive plan. As of April 30, 2010, there were approximately 0.6 million shares authorized and available for issuance under the 2010 Plan.

*Stock Options*

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

| | Shares Underlying Options Outstanding | Weighted Average Exercise Price |
|---|---|---|
| Balance as of October 31, 2009 | 5,538 | $ 45.80 |
| Granted | 84 | 12.40 |
| Exercised | (78) | 13.53 |
| Canceled | (319) | 76.06 |
| Balance as of April 30, 2010 | 5,225 | $ 44.02 |

The total intrinsic value of options exercised during the first six months of fiscal 2009 and fiscal 2010, was $0.4 million and $0.7 million, respectively. The weighted average fair values of each stock option granted by Ciena during the first six months of fiscal 2009 and fiscal 2010 were $4.26 and $6.95, respectively.

The following table summarizes information with respect to stock options outstanding at April 30, 2010, based on Ciena's closing stock price of $18.53 per share on the last trading day of Ciena's second fiscal quarter of 2010 (shares and intrinsic value in thousands):

| | Options Outstanding at April 30, 2010 | | | | Vested Options at April 30, 2010 | | | |
|---|---|---|---|---|---|---|---|---|
| Range of Exercise Price | Number of Shares | Weighted Average Remaining Contractual Life (Years) | Weighted Average Exercise Price | Aggregate Intrinsic Value | Number of Shares | Weighted Average Remaining Contractual Life (Years) | Weighted Average Exercise Price | Aggregate Intrinsic Value |
| $ 0.01 - $16.52 | 898 | 6.95 | $ 11.07 | $ 6,698 | 629 | 5.95 | $ 11.51 | $ 4,417 |
| $16.53 - $17.43 | 531 | 5.74 | 17.21 | 702 | 493 | 5.51 | 17.21 | 652 |
| $17.44 - $22.96 | 452 | 5.13 | 21.75 | 5 | 412 | 4.82 | 21.86 | 5 |
| $22.97 - $31.71 | 1,468 | 4.95 | 29.41 | — | 1,307 | 4.62 | 29.56 | — |
| $31.72 - $46.90 | 888 | 6.23 | 39.45 | — | 681 | 5.74 | 39.96 | — |
| $46.91 - $73.78 | 443 | 2.82 | 59.54 | — | 443 | 2.82 | 59.54 | — |
| $73.79 - $1,046.50 | 545 | 1.60 | 176.98 | — | 545 | 1.60 | 176.98 | — |
| $ 0.01 - $1,046.50 | 5,225 | 5.08 | $ 44.02 | $ 7,405 | 4,510 | 4.55 | $ 47.33 | $ 5,074 |

*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. Ciena estimates the fair value of each option award on the date of grant using the Black-Scholes option-pricing model, with the following weighted average assumptions:

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Expected volatility | 65.0% | 61.9% | 65.0% | 61.9% |
| Risk-free interest rate | 2.1 - 2.4% | 2.8 - 3.0% | 1.7 - 2.4% | 2.4 - 3/0% |
| Expected life (years) | 5.2 - 5.3 | 5.3 - 5.5 | 5.2 - 5.3 | 5.3 - 5.5 |
| Expected dividend yield | 0.0% | 0.0% | 0.0% | 0.0% |

Ciena considered the implied volatility and historical volatility of its stock price in determining its expected volatility, and, finding both to be equally reliable, determined that a combination of both would result in the best estimate of expected volatility.

The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of Ciena's employee stock options.

The expected life of employee stock options represents the weighted-average period the stock options are expected to remain outstanding. Ciena gathered detailed historical information about specific exercise behavior of its grantees, which it used to determine the expected term.

The dividend yield assumption is based on Ciena's history of not making dividends and its expectation of future dividend payouts.

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. Ciena relies upon historical experience in establishing forfeiture rates. If actual forfeitures differ from current estimates, total unrecognized share-based compensation expense will be adjusted for future changes in estimated forfeitures.

*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 to four year period. 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 acceleration of vesting, of such awards.

Ciena's outstanding restricted stock units include "performance-accelerated" restricted stock units (PARS), which vest in full four years after the date of grant (assuming that the grantee is still employed by Ciena at that time). Under the PARS, the Compensation Committee may establish performance targets which, if satisfied, provide for the acceleration of vesting of that portion of the award designated by the Compensation Committee. As a result, the grantee may have the opportunity, subject to satisfaction of performance conditions, to vest as to the entire award prior to the expiration of the four-year period above. 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 each reporting period, Ciena reassesses the probability of achieving the performance targets and the performance period required to meet those targets.

The aggregate intrinsic value of Ciena's restricted stock units is based on Ciena's closing stock price on the last trading day of each period as indicated. The following table is a summary of Ciena's restricted stock unit activity for the periods indicated, with the aggregate intrinsic 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 intrinsic value in thousands):

| | Restricted Stock Units Outstanding | Weighted Average Grant Date Fair Value Per Share | Aggregate Intrinsic Value |
|---|---|---|---|
| Balance as of October 31, 2009 | 3,716 | $ 14.67 | $ 43,591 |
| Granted | 3,175 | | |
| Vested | (930) | | |
| Canceled or forfeited | (89) | | |
| Balance as of April 30, 2010 | 5,872 | $ 13.77 | $ 108,808 |

The total fair value of restricted stock units that vested and were converted into common stock during the first six months of fiscal 2009 and fiscal 2010 was $3.8 million and $12.0 million, respectively. The weighted average fair value of each restricted stock unit granted by Ciena during the first six months of fiscal 2009 and fiscal 2010 was $6.96 and $13.34, respectively.

*Assumptions for Restricted Stock Unit Awards*

The fair value of each restricted stock unit award is estimated using the intrinsic value method, which 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 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 cost is reversed.

*2003 Employee Stock Purchase Plan*

The ESPP is a non-compensatory plan and issuances thereunder do not result in share-based compensation expense. The following table is a summary of ESPP activity and shares available for issuance for the periods indicated (shares in thousands):

| | ESPP shares available for issuance | Intrinic value at exercise date |
|---|---|---|
| Balance as of October 31, 2009 | 3,469 | |
| Evergreen provision | 102 | |
| Issued March 15, 2010 | (33) | $26 |
| Balance as of April 30, 2010 | 3,538 | |

*Share-Based Compensation Expense for Periods Reported*

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

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Product costs | $ 445 | $ 549 | $ 1,158 | $ 927 |
| Service costs | 425 | 452 | 822 | 883 |
| Share-based compensation expense included in cost of sales | 870 | 1,001 | 1,980 | 1,810 |
| Research and development. | 2,817 | 2,259 | 5,383 | 4,646 |
| Sales and marketing | 2,685 | 2,665 | 5,388 | 5,123 |
| General and administrative | 2,773 | 2,301 | 5,192 | 4,876 |
| Acquisition and integration costs | — | 345 | — | 345 |
| Share-based compensation expense included in operating expense | 8,275 | 7,570 | 15,963 | 14,990 |
| Share-based compensation expense capitalized in inventory, net | (48) | (53) | (352) | (1) |
| Total share-based compensation | $ 9,097 | $ 8,518 | $ 17,591 | $ 16,799 |

As of April 30, 2010, total unrecognized compensation expense was $78.5 million: (i) $8.5 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 1.0 year; and (ii) $70.0 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.7 years.

**(18) COMPREHENSIVE LOSS**

The components of comprehensive loss were as follows for the periods indicated (in thousands):

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Net loss | $(503,210) | $(90,009) | $(528,041) | $(143,342) |
| Change in unrealized gain (loss) on available-for-sale securities | (89) | (272) | 1,677 | (458) |
| Change in unrealized gain (loss) on foreign forward contracts | 1,648 | — | (442) | — |
| Change in accumulated translation adjustments | 251 | 98 | 7 | (535) |
| Total comprehensive loss | $(501,400) | $(90,183) | $(526,799) | $(144,335) |

**(19) SEGMENT AND ENTITY WIDE DISCLOSURES**

*Segment Reporting*

Effective upon the March 19, 2010 completion of Ciena's acquisition of the MEN Business, Ciena reorganized its internal organizational structure and the management of its business. Ciena's chief operating decision maker, its chief executive officer, evaluates performance and allocates resources based on multiple factors, including segment profit (loss) information for the following product categories:

- *Packet-Optical Transport* — includes optical transport solutions that increase network capacity and enable delivery of a broader mix of high-bandwidth services. These products are used by network operators to facilitate the cost-effective and efficient transport of voice, video and data traffic in core networks, as well as regional, metro and access networks. Ciena's principal products in this segment include its Optical Multiservice Edge 6500 (OME 6500); Optical Metro 5200 (OM 5200); CN 4200™ FlexSelect™ Advanced Services Platform and CoreStream® Agility Optical Transport System. This segment also includes Ciena's legacy SONET/SDH products and legacy data networking products, as well as certain enterprise-oriented transport solutions that support storage and LAN extension, interconnection of data centers, and virtual private networks. This segment also includes sales of operating system software and enhanced software features embedded in each of these products.
- *Packet-Optical Switching* — includes optical switching platforms that enable automated optical infrastructures for the delivery of a wide variety of enterprise and consumer-oriented network services. Ciena's principal products in this segment include its CoreDirector® Multiservice Optical Switch; CoreDirector FS; and the 5430 Reconfigurable Switching System. These products include multiservice, multi-protocol switching systems that consolidate the functionality of an add/drop multiplexer, digital cross-connect and packet switch into a single, high-capacity intelligent switching system. These products address both the core and metro segments of communications networks and support key managed service services, Ethernet/TDM Private Line, Triple Play and IP services. This segment also includes sales of operating system software and enhanced software features embedded in each of these products.
- *Carrier Ethernet Service Delivery* — includes service delivery and aggregation switches, as well as legacy broadband access products for residential services. These products support the access and aggregation tiers of communications networks and have principally been deployed to support wireless backhaul infrastructures and business data services. Employing sophisticated Carrier Ethernet switching technology, these products deliver quality of service capabilities, virtual local area networking and switching functions, and carrier-grade operations, administration and maintenance features. This segment includes the metro Ethernet routing switch (MERS) product line and Ciena's legacy broadband products that transition legacy voice networks to support Internet-based (IP) telephony, video services and DSL. This segment also includes sales of operating system software and enhanced software features embedded in each of these products.
- *Software and Services* — includes Ciena's integrated network and service management software designed to automate and simplify network management and operation, while increasing network performance and functionality. These software solutions can track individual services across multiple product suites, facilitating planned network maintenance, outage detection and identification of customers or services affected by network troubles. This segment also includes a broad range of consulting and support services offered within the Ciena Specialist Services practice, which include installation and deployment, maintenance support, consulting, network design and training activities.

Reportable segment asset information is not disclosed because it is not reviewed by the chief operating decision maker for purposes of evaluating performance and allocating resources.

The table below (in thousands, except percentage data) sets forth Ciena's segment revenue, including the presentation of prior periods to reflect the change in reportable segments, for the respective periods:

| | Quarter Ended April 30, | | | | Six Months Ended April 30, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | 2009 | %* | 2010 | %* |
| Revenue: | | | | | | | | |
| Packet-Optical Transport | $ 60,353 | 41.8 | $ 97,689 | 38.5 | $ 143,636 | 46.2 | $ 181,159 | 42.2 |
| Packet-Optical Switching | 42,681 | 29.6 | 32,434 | 12.8 | 87,338 | 28.0 | 55,832 | 13.0 |
| Carrier Ethernet Service Delivery | 13,357 | 9.3 | 74,806 | 29.5 | 22,884 | 7.3 | 115,245 | 26.8 |
| Software and Services | 27,810 | 19.3 | 48,542 | 19.2 | 57,743 | 18.5 | 77,111 | 18.0 |
| Consolidated revenue | $ 144,201 | 100.0 | $ 253,471 | 100.0 | $ 311,601 | 100.0 | $ 429,347 | 100.0 |

* Denotes % of total revenue

*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; goodwill impairment; interest and other income (net), interest expense, equity investment gains or losses, gains or losses on extinguishment of debt, and provisions (benefit) for income taxes.

The table below (in thousands) sets forth Ciena's segment profit (loss) and the reconciliation to consolidated net income (loss) including the presentation of prior periods to reflect the change in reportable operating segments during the respective periods:

| | Quarter Ended April 30, | | Six Months Ended April 30, | |
|---|---|---|---|---|
| | 2009 | 2010 | 2009 | 2010 |
| Segment profit (loss): | | | | |
| Packet-Optical Transport | $ (3,548) | $ (6,595) | $ 7,474 | $ 13,528 |
| Packet-Optical Switching | 14,559 | 5,467 | 32,882 | 3,429 |
| Carrier Ethernet Service Delivery | (4,295) | 25,972 | (14,898) | 34,854 |
| Software and Services | 4,522 | 8,956 | 10,923 | 12,116 |
| Total segment profit (loss) | 11,238 | 33,800 | 36,381 | 63,927 |
| | | | | |
| Reconciling items: | | | | |
| Selling and marketing | (33,295) | (45,328) | (67,114) | (79,565) |
| General and administrative | (12,615) | (21,503) | (24,200) | (34,266) |
| Acquisition and integration costs | — | (39,221) | — | (66,252) |
| Amortization of intangible assets | (6,224) | (17,121) | (12,628) | (23,102) |
| Restructuring costs | (6,399) | (1,849) | (6,475) | (1,828) |
| Goodwill impairment | (455,673) | — | (455,673) | — |
| Interest and other financial charges, net | (914) | (365) | 1,337 | (2,966) |
| (Provision) benefit for income taxes | 672 | 1,578 | 331 | 710 |
| Consolidated net loss | $ (503,210) | $ (90,009) | $ (528,041) | $ (143,342) |

*Entity Wide Reporting*

The following table reflects Ciena's geographic distribution of revenue based on the location of the purchaser, with any country accounting for greater than 10% of total revenue in the period specifically identified. Revenue attributable to geographic regions outside of the United States and the United Kingdom is reflected as "Other International" revenue. For the periods below, Ciena's geographic distribution of revenue was as follows (in thousands, except percentage data):

| | Quarter Ended April 30, | | | | Six Months Ended April 30, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | 2009 | %* | 2010 | %* |
| United States | $ 91,700 | 63.6 | $ 180,523 | 71.2 | $ 190,647 | 61.2 | $ 304,435 | 70.9 |
| United Kingdom | 18,581 | 12.9 | n/a | — | 45,298 | 14.5 | n/a | — |
| Other International | 33,920 | 23.5 | 72,948 | 28.8 | 75,656 | 24.3 | 124,912 | 29.1 |
| Total | $ 144,201 | 100.0 | $ 253,471 | 100.0 | $ 311,601 | 100.0 | $ 429,347 | 100.0 |

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

* Denotes % of total revenue

The following table reflects Ciena's geographic distribution of equipment, furniture and fixtures, with any country accounting for greater than 10% of total equipment, furniture and fixtures specifically identified. Equipment, furniture and fixtures 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, furniture and fixtures was as follows (in thousands, except percentage data):

| | October 31, | | April 30, | |
|---|---|---|---|---|
| | 2009 | %* | 2010 | %* |
| United States | $ 47,875 | 77.4 | $ 56,553 | 51.0 |
| Canada | n/a | — | 44,193 | 39.9 |
| Other International | 13,993 | 22.6 | 10,139 | 9.1 |
| Total | $ 61,868 | 100.0 | $ 110,885 | 100.0 |

n/a Denotes equipment, furniture and fixtures representing less than 10% of total equipment, furniture and fixtures

* Denotes % of total equipment, furniture and fixtures

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

| | Quarter Ended April 30, | | | | Six Months Ended April 30, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | 2009 | %* | 2010 | %* |
| Company A | 40,105 | 27.8 | 70,808 | 27.9 | 72,661 | 23.3 | 113,323 | 26.4 |
| Company B | n/a | — | 36,531 | 14.4 | n/a | — | 51,867 | 12.1 |
| Company C | n/a | — | n/a | — | 33,239 | 10.7 | n/a | — |
| Total | $ 40,105 | 27.8 | $ 107,339 | 42.3 | $ 105,900 | 34.0 | $ 165,190 | 38.5 |

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

* Denotes % of total revenue

**(20) CONTINGENCIES**

*Foreign Tax Contingencies*

Ciena has received assessment notices from the Mexican tax authorities asserting deficiencies in payments between 2001 and 2005 related primarily to income taxes and import taxes and duties. Ciena has filed judicial petitions appealing these assessments. As of October 31, 2009 and April 30, 2010, Ciena had accrued liabilities of $1.1 million and $1.3 million, respectively, related to these contingencies, which are reported as a component of other current accrued liabilities. As of April 30, 2010, Ciena estimates that it could be exposed to possible losses of up to $5.8 million, for which it has not accrued liabilities. Ciena has not accrued the additional income tax liabilities because it does not believe that such losses are more likely than not to be incurred. Ciena has not accrued the additional import taxes and duties because it does not believe the incurrence of such losses are probable. Ciena continues to evaluate the likelihood of probable and reasonably possible losses, if any, related to these assessments. As a result, future increases or decreases to accrued liabilities may be necessary and will be recorded in the period when such amounts are estimable and more likely than not (for income taxes) or probable (for non-income taxes).

In addition to the matters described above, 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 our results of operations, financial position or cash flows.

*Litigation*

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, which seeks injunctive relief and damages, was served upon Ciena on January 20, 2009. Ciena filed an answer to the complaint and counterclaims against Graywire on March 26, 2009, and an amended answer and counterclaims on April 17, 2009. On April 27, 2009, Ciena and certain other defendants filed an application for *inter partes* reexamination of the '673 Patent with the U.S. Patent and Trademark Office (the "PTO"). On the same date, Ciena and the other defendants filed a motion to stay the case pending reexamination of all of the patents-in-suit. On July 17, 2009, the district court granted the defendants' motion to stay the case. On July 23, 2009, the PTO granted the defendants' application for reexamination with respect to certain claims of the '673 Patent. Ciena believes that it has valid defenses to the lawsuit and intends to defend it vigorously in the event the stay of the case is lifted.

As a result of its June 2002 merger with ONI Systems Corp., Ciena became a defendant in a securities class action lawsuit filed in the United States District Court for the Southern District of New York in August 2001. The complaint named ONI, certain former ONI officers, and certain underwriters of ONI's initial public offering (IPO) as defendants, and alleges, among other things, that the underwriter defendants violated the securities laws by failing to disclose alleged compensation arrangements in ONI's registration statement and by engaging in manipulative practices to artificially inflate ONI's stock price after the IPO. The complaint also alleges that ONI and the named former officers violated the securities laws by failing to disclose the underwriters' alleged compensation arrangements and manipulative practices. The former ONI officers have been dismissed from the action without prejudice. Similar complaints have been filed against more than 300 other issuers that have had initial public offerings since 1998, and all of these actions have been included in a single coordinated proceeding. On October 6, 2009, the Court entered an opinion granting final approval to a settlement among the plaintiffs, issuer defendants and underwriter defendants, and directing that the Clerk of the Court close these actions. Notices of appeal of the opinion granting final approval have been filed. A description of this litigation and the history of the proceedings can be found in "Item 3. Legal Proceedings" of Part I of Ciena's Annual Report on Form 10-K filed with the Securities and Exchange Commission on December 22, 2009. No specific amount of damages has been claimed in this action. Due to the inherent uncertainties of litigation and because the settlement remains subject to appeal, the ultimate outcome of the matter is uncertain.

In addition to the matters described above, Ciena is subject to various legal proceedings, claims and litigation arising in the ordinary course of business. Ciena does 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 2. Management's Discussion and Analysis of Financial Condition and Results of Operations*

*Some of the statements contained, or incorporated by reference, in this quarterly report discuss future events or expectations, contain projections of results of operations or financial condition, changes in the markets for our products and services, or state other "forward-looking" information. Ciena's "forward-looking" information is based on various factors and was derived using numerous assumptions. In some cases, you can identify these "forward-looking statements" by words like "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of those words and other comparable words. You should be aware that these statements only reflect our current predictions and beliefs. These statements are subject to known and unknown risks, uncertainties and other factors, and actual events or results may differ materially. Important factors that could cause our actual results to be materially different from the forward-looking statements are disclosed throughout this report, particularly in Item 1A "Risk Factors" of Part II of this report below. 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 in our annual report on Form 10-K, which we filed with the Securities and Exchange Commission on December 22, 2009, for a more complete understanding of the risks associated with an investment in Ciena's securities. Ciena undertakes no obligation to revise or update any forward-looking statements.*

**Overview**

We are a provider of communications networking equipment, software and services that support the transport, switching, aggregation and management of voice, video and data traffic. Our Packet-Optical Transport, a Packet-Optical Switching and Carrier Ethernet Service Delivery products are used, individually or as part of an integrated solution, in networks operated by communications service providers, cable

operators, governments and enterprises around the globe.

We are a network specialist targeting the transition of disparate, legacy communications networks to converged, next-generation architectures, better able to handle increased traffic volumes and deliver more efficiently a broader mix of high-bandwidth communications services at a lower cost. Our products, through their embedded network element software and our network service and transport management software suites, enable network operators to efficiently and cost-effectively deliver critical enterprise and consumer-oriented communication services. Together with our professional support and consulting services, our product offerings seek to enable software-defined, automated networks that address the business challenges, communications infrastructure requirements and service needs of our customers. Our customers face an increasingly challenging and rapidly changing environment. This environment requires that our customers' networks be able to address growing capacity needs and quickly adapt to execute new business strategies and support the delivery of innovative revenue-creating services. By improving network productivity and automation, reducing operating costs and providing flexibility to enable new and integrated service offerings, our equipment, software and services solutions create business and operational value for our customers.

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 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 important information about Ciena on our website at www.ciena.com.

*Acquisition of Nortel Metro Ethernet Networks Business (the "MEN Acquisition")*

On March 19, 2010, we completed our acquisition of substantially all of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Networks business (the "MEN Business"). The $773.8 million aggregate purchase price for the MEN Acquisition consisted entirely of cash, with the final amount subject to adjustment based upon the amount of net working capital transferred to us at closing. The purchase price was decreased at closing by approximately $62.0 million based on the estimated working capital delivered at closing. As of the date of this report, Ciena estimates that the purchase price adjustment will further decrease the aggregate purchase price by up to an additional $18.7 million, subject to finalization between the parties. In accordance with the terms of the MEN Acquisition, prior to closing, we elected to replace the $239.0 million in aggregate principal of convertible notes that were to be issued to Nortel as part of the purchase price with cash equivalent to 102% of the face amount of the notes replaced, or $243.8 million. See "Private Placement of $375 Million in Convertible Notes" below for more information on the source of funds for this payment election and the purchase price.

*Rationale for MEN Acquisition*

The MEN Business that we acquired is a leading provider of next-generation, communications network equipment, with a significant global installed base and a strong technology heritage. The MEN Business is a leader in high-capacity 40G and 100G coherent optical transport technology that enables network operators to seamlessly upgrade their existing 2.5G and 10G networks, thereby enabling a significant increase in network capacity without the need for new fiber deployments or complex re-engineering. The product and technology assets that we acquired include:

- long-haul optical transport portfolio;
- metro optical Ethernet switching and transport solutions;
- Ethernet transport, aggregation and switching technology;
- multiservice SONET/SDH product families; and
- network management software products.

In addition to these hardware and software solutions, we also acquired the network implementation and support service resources related to the MEN Business.

We believe that the MEN Acquisition represents a transformative opportunity for Ciena. We believe that this transaction strengthens our position as a leader in next-generation, converged optical Ethernet networking and will accelerate the execution of our corporate and research and development strategies. We believe that the additional geographic reach, expanded customer relationships, and broader portfolio of complementary network solutions derived from the MEN Acquisition will augment and accelerate the growth of our business. We also expect that the transaction will add desired scale to our business, enable increased operating leverage and provide an opportunity to optimize our research and development investment toward next-generation technologies and product platforms. We believe that the benefits of this

transaction will help us better compete with traditional, larger network equipment vendors.

*Integration Activities and Expense*

We have made considerable progress to date on integration-related activities in connection with the MEN Acquisition including the substantial completion of our organizational structure, sales coverage plans, decisions on the rationalization of our combined product portfolio and, as described in "Restructuring Activities" below, the realization of initial operating synergies from the MEN Acquisition. Significant additional integration efforts remain, however, including the rationalization of our supply chain, third party manufacturers and facilities, the execution of our combined product and software development plan, and the reduced reliance upon and winding down of transition services. Given the magnitude of the MEN Acquisition and its structure as an asset carve-out from Nortel, we expect that the integration of the MEN Business will be costly and complex, with a number of operational risks. We expect to incur acquisition and integration-related costs of approximately $180 million, with the majority of these costs to be incurred in fiscal 2010. This estimate principally reflects costs associated with equipment and information technology, transaction expense, severance expense and consulting and third party service fees associated with integration. In addition to these integration costs, Ciena has incurred inventory obsolescence charges and may incur additional expenses related to, among other things, facilities restructuring. As a result, the expense we incur and recognize for financial statement purposes as a result of the MEN Acquisition will be significantly higher. As of April 30, 2010, we have incurred $66.3 million in transaction, consulting and third party service fees, $1.9 million in severance expense, and an additional $2.4 million, primarily related to purchases of capitalized information technology equipment. Any material delays in integrating the MEN Business or additional, unanticipated expense may harm our business and results of operations.

In addition to the integration costs above, we also expect to incur significant transition services expense. We are currently relying upon an affiliate of Nortel to perform certain critical operational and business support functions during an interim integration period that will continue until we can perform these services ourselves or locate another provider. These support services include key finance and accounting functions, supply chain and logistics management, maintenance and product support services, order management and fulfillment, trade compliance, and information technology services. We can utilize certain of these support services for a period of up to 24 months following the MEN Acquisition (12 months in EMEA). These services are estimated to be approximately $94 million should we utilize all of the transition services for a full year. The actual expense we incur will depend upon the scope of the services that we utilize and the time within which we are able to complete the planned transfer of these services to internal resources or other third party providers. We expect to incur additional costs as we simultaneously build up internal resources, including headcount, facilities and information systems, or engage third party providers, while we rely upon and transition away from these transition support services. The wind down and transfer of critical transition services is a complex undertaking and may be disruptive to our business and operations.

*Effect of MEN Acquisition upon Results of Operations and Financial Condition*

Due to the relative scale of the operations of the MEN Business, we expect the MEN Acquisition will materially affect our operations, financial results and liquidity.

We expect our revenue and operating expense to increase in future periods materially as compared to periods prior to the acquisition. Although the acquired assets generated approximately $1.1 billion in revenue during Nortel's fiscal 2009, the performance and financial contribution of MEN Business we acquired, are subject to a number of factors, some of which are outside of our control. These factors include overall market conditions, the level of competition for sales of Packet-Optical Transport Products, and customer receptivity to Ciena, particularly in international jurisdictions, where the effect of Nortel's bankruptcy proceedings have had a more pronounced negative impact on the MEN Business. In addition, these result of operations may be adversely affected by our product portfolio decisions affecting legacy products of the business. Similarly, our operating expense will increase significantly, reflecting the increase in the global scale of our operations, the addition of approximately 2,000 employees of the MEN Business and the additional expense resulting from the MEN Acquisition noted above. These and other effects on our financial statements described below and elsewhere in this report may make period to period comparisons difficult.

As a result of the MEN Acquisition, we recorded $40.0 million in goodwill and $489.7 million in other intangible assets that will be amortized over their useful lives and increase our operating expense. See "Critical Accounting Policies and Estimates- Goodwill" and "-Intangibles" below for information relating to these items. Under acquisition accounting rules, we revalued the acquired finished goods inventory of the MEN Business to fair value upon closing. This revaluation increased marketable inventory carrying value by approximately $40.7 million. Of this amount, we recognized $11.1 million as an increase in cost of goods sold during the second quarter of fiscal 2010, with the balance expected to be recognized during the remainder of fiscal 2010. See Note 3 of the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report.

Our use of cash to fund the purchase price for the MEN Business, and our private placement of a new issue of convertible debt in March 2010, have changed our liquidity position significantly, resulting in additional indebtedness and materially reducing our cash and investment balance. See “Liquidity and Capital Resources” below and Note 15 of the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report for more information regarding the convertible notes.

We reorganized our internal organizational structure and the management of our business upon the MEN Acquisition, and as described in Note 19 of the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report, presents is results of operations based upon the following operating segments: (i) Packet-Optical Transport; (ii) Packet-Optical Switching; (iii) Carrier Ethernet Service Delivery; and (iv) Software and Services.

*Private Placement of $375 Million in Convertible Notes to Fund Purchase Price*

On March 15, 2010, we completed a private offering of $375.0 million in aggregate principal amount of 4.0% Convertible Senior Notes due March 15, 2015. The net proceeds from the offering were $364.3 million after deducting the placement agents’ fees and other fees and expenses. We used $243.8 million of the net proceeds to replace the contractual obligation to issue convertible notes to Nortel as part of the purchase price for the MEN Acquisition. The remaining proceeds were used to reduce the cash on hand required to fund the aggregate purchase price of the MEN Acquisition. See Note 15 of the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report for more information regarding the convertible notes.

*Restructuring Activities*

In April 2010, we took action to effect a headcount reduction of approximately 70 employees, with reductions principally affecting our Global Product Group and Global Field Organization outside of the Europe, Middle East and Africa (EMEA) region. This action resulted in a restructuring charge of $1.9 in the second quarter of fiscal 2010. In May 2010, following the end of our fiscal second quarter, we informed employees of our proposal to reorganize and restructure portions of Ciena’s business and operations in the EMEA region. We anticipate reductions to our workforce in EMEA of approximately 120 to 140 positions in the near term with reductions expected to principally affect employees in Ciena’s Global Field Organization and Global Supply Chain organization. Execution of any specific reorganization is subject to local legal requirements, including notification and consultation processes with employees and employee representatives. We estimate completing the reorganization by August 31, 2010. These actions are intended to reduce operating expense and better align Ciena’s workforce and operating costs with market and business opportunities following the completion of our MEN Acquisition. As we look to manage operating expense and complete integration activities for the combined operations, we will continue to assess the allocation of our headcount and other resources toward key growth opportunities for our business and evaluate additional cost reduction measures.

*Effect of Global Market Conditions and Competitive Landscape*

While we continue to experience cautious spending among our customers as a result of the recent period of economic weakness, we have started to see indications from our business that market conditions in North America are steadily improving. We are seeing similar indications of improvement in the Asia-Pacific and Caribbean and Latin American regions, albeit at a slower rate of recovery. We continue to experience depressed demand and lower customer spending in Europe, however, as economic uncertainty and volatile macroeconomic conditions persist. We remain uncertain as to how long these macroeconomic and industry conditions will continue, the pace of any recovery, and the magnitude of the effect of recent market conditions on our business and results of operations.

Coupled with weaker macroeconomic conditions, in recent years we have encountered an increasingly competitive marketplace with a heightened customer focus on pricing and return on network investment. Pricing pressure has been most severe in connection with our Packet-Optical Transport platforms, which we expect to comprise a greater percentage of our revenue as a result of the MEN Acquisition. Competition is particularly intense in attracting large carrier customers and securing new sales opportunities with existing carrier customers. We have encountered increased competition from larger vendors, including Chinese manufacturers, as well as smaller companies seeking to capture market share. As a result of this competitive landscape, and an effort to retain or secure customers and capture market share, in the past we have and in the future may agree to pricing or other terms that result in negative gross margins on a particular order or group of orders. These arrangements would adversely affect our gross margins and result of operations. We expect that our increased market share, technology leadership and global presence following the MEN Acquisition will only increase the level of competition that we face as competitors seek to secure market share and gain an incumbent position with network operators.

*Financial Results*

Our results of operations for the second quarter and six-month period ended April 30, 2010 reflect the operations of the MEN Business beginning on the March 19, 2010 acquisition date.

Revenue for the second quarter of fiscal 2010 was $253.5 million, representing a 44.1% sequential increase from $175.9 million in the first quarter of fiscal 2010. This increase reflects $53.5 million in revenue from the MEN Business and an increase of $24.1 million related to Ciena's pre-acquisition portfolio. Additional sequential revenue-related details include:

- Product revenue for the second quarter of fiscal 2010 increased by $57.4 million. This increase reflects $37.8 million in initial sales of products from the MEN Business and an increase of $19.6 million in sales of Ciena's pre-acquisition products. Carrier Ethernet Service Delivery revenue increased by $34.4 million, principally related to sales of switching and aggregation products in support of wireless backhaul deployments. Packet-Optical Transport revenue increased by $14.2 million, reflecting $35.4 million in initial sales of products from the MEN Business, partially offset by a decrease of $21.2 million in Ciena's pre-acquisition Packet-Optical Transport products. Sales of Packet-Optical Switching products increased by $9.0 million.
- Service revenue for the second quarter of fiscal 2010 increased by $20.2 million, reflecting $15.7 million in service revenue from the MEN Business and a $4.5 million increase in sales of Ciena's pre-acquisition service offerings.
- Revenue from the U.S. for the second quarter of fiscal 2010 was $180.5 million, an increase from $123.9 million in the first quarter of fiscal 2010. This increase reflects $27.1 million in sales of products and services from the MEN Business and an increase of $29.5 million in sales of Ciena's pre-acquisition portfolio.
- International revenue for the second quarter of fiscal 2010 was $73.0 million, an increase from $52.0 million in the first quarter of fiscal 2010. This increase reflects $26.4 million in sales of products and services from the MEN Business and partially offset by a decrease of $5.4 million in sales of Ciena's pre-acquisition portfolio.
- As a percentage of revenue, international revenue was 28.8% during the second quarter of fiscal 2010, roughly flat with 29.6% in the first quarter of fiscal 2010. As a percentage of Ciena's pre-acquisition portfolio revenue, the portion attributable to international revenue comprised 23.3%.
- For the second quarter of fiscal 2010, two customers each accounted for greater than 10% of revenue and 42.3% in the aggregate. This compares to one customer that accounted for 24.2% of revenue in the first quarter of fiscal 2010.

Gross margin for the second quarter of fiscal 2010 was 41.4%, down from 45.6% in the first quarter of fiscal 2010. Gross margin for the second quarter was adversely affected by a number items relating to the MEN Acquisition that increased costs of goods sold. These items include the revaluation of inventory described above, higher than typical excess and obsolete inventory charges and excess purchase commitment losses relating to Ciena's pre-acquisition inventory and stemming from product rationalization decisions, and increased amortization of intangible assets. We expect gross margin to decline further during the third quarter of fiscal 2010, as a result of some of these items above and expectations as to product and customer mix including the effect of a full quarter of product revenue for the MEN Business, which has carried a somewhat lower gross margin than Ciena's pre-acquisition portfolio. Going forward, we also expect gross margin to be negatively affected by our increased percentage of Packet-Optical Transport product revenue as a result of the MEN Acquisition.

Reflecting the completion of the MEN Acquisition, operating expense was $196.2 million for the second quarter of fiscal 2010, an increase from $130.0 million in the first quarter of fiscal 2010. Operating expense for our first and second quarters of fiscal 2010 include $27.0 million and $39.2 million, respectively, in acquisition and integration-related costs associated with the MEN Acquisition.

Our loss from operations for the second quarter of fiscal 2010 was $91.2 million. This compares to a $49.9 million loss from operations during the first quarter of fiscal 2010. Our net loss for the second quarter of fiscal 2010 was $90.0 million, or $0.97 per share. This compares to a net loss of $53.3 million, or $0.58 per share, for the first quarter of fiscal 2010.

We used $77.7 million in cash from operations during the second quarter of fiscal 2010, consisting of a use of cash of $41.8 million from net losses (adjusted for non-cash charges) and a use of cash of $35.9 million from changes in working capital. Use of cash above reflects cash payments of $38.0 million associated with acquisition and integration-related expense. This compares with cash generated from operations of $4.5 million in the first quarter of fiscal 2010, consisting of a use of cash of $26.7 million in cash from net losses (adjusted for non-cash charges) and cash generated of $31.2 million from changes in working capital.

At April 30, 2010, we had $584.2 million in cash and cash equivalents and $29.5 million of short-term investments in marketable debt securities.

As of April 30, 2010, headcount was 4,157, an increase from 2,197 at January 31, 2010 and 2,104 at April 30, 2009.

**Consolidated Results of Operations**

Our results of operations for the second quarter and six-month period ended April 30, 2010 reflect the operations of the MEN Business beginning on the March 19, 2010 acquisition date.

*Revenue*

Revenue is discussed in the following product and service groupings:

1. *Packet-Optical Transport*. This product grouping, aligned with our Packet-Optical Transport operating segment, reflects sales of our optical transport products including the following products acquired from the MEN Business: Optical Multiservice Edge 6500 (OME 6500); Optical Multiservice Edge 6110 (OME 6110); Optical Metro 5200 (OM5200); Optical Multiservice Edge 1000 series; and Optical Metro 3500 (OM 3500). It includes sales of our CN 4200™ FlexSelect™ Advanced Services Platform and our Corestream® Agility Optical Transport System. This group also includes sales from legacy SONET/SDH products and legacy data networking products, as well as certain enterprise-oriented transport solutions that support storage and LAN extension, interconnection of data centers, and virtual private networks. Revenue for this grouping also includes the operating system software and enhanced software features embedded in each of the products above.
2. *Packet-Optical Switching.* This product grouping, aligned with our Packet-Optical Switching operating segment, reflects sales of our CoreDirector® Multiservice Optical Switch; CoreDirector-FS, an expansion of our CoreDirector platform that delivers substantial new hardware and software features; and our 5430 Reconfigurable Switching System. Revenue for this grouping also includes the operating system software and enhanced software features embedded in each of the products above.
3. *Carrier Ethernet Service Delivery*. This product grouping, aligned with our Carrier Ethernet Service Delivery operating segment, reflects sales of our service delivery and aggregation switches, metro Ethernet routing switch (MERS) product line broadband access products, and the operating system software and enhanced software features embedded in these products.
4. *Unified Service and Network Management Software*. This product grouping, aligned with our Software and Services operating segment, reflects sales of ON-Center® Network & Service Management Suite, our integrated network and service management software designed to simplify network management and operation across our portfolio. It also includes revenue from the Preside and OMEA software platforms acquired from the MEN Business.
5. *Services*. This service grouping, aligned with our Software and Services operating segment, includes sales of installation and deployment services, maintenance support, consulting services and training activities.

A sizable portion of our revenue comes from sales to a small number of communications service providers. While the MEN Acquisition may reduce our concentration of revenue somewhat, our revenue remains closely tied to the prospects, performance, and financial condition of our largest customers. As a result, our results are significantly affected by market-wide changes, including reductions in enterprise and consumer spending and adoption of broadband services, which affect the businesses and level of network infrastructure-related spending by communications service providers. Our contracts do not have terms that obligate these customers to purchase any minimum or specific amounts of equipment or services. Because customer spending may be unpredictable and sporadic, and their purchases may result in the recognition or deferral of significant amounts of revenue in a given quarter, our revenue can fluctuate on a quarterly basis.

Our concentration of revenue increases the risk of quarterly fluctuations in revenue and operating results and can exacerbate our exposure to reductions in spending or changes in network strategy involving one or more of our significant customers. Our concentration of revenue can be adversely affected by consolidation activity among our large customers. In addition, some of our customers are pursuing efforts to outsource the management and operation of their networks, or have indicated a procurement strategy to reduce the number of vendors from which they purchase equipment. In April 2010, we were selected as a domain network equipment supplier by AT&T for its optical transport network and metro and core transport domains. AT&T represented approximately 19.6% of our revenue in fiscal 2009 and was a major customer of the

MEN Business. There can be no assurance that this program, intended to facilitate a more collaborative technology relationship with vendors like Ciena, will not adversely affect our concentration of revenue.

*Cost of Goods Sold*

Product cost of goods sold consists primarily of amounts paid to third-party contract manufacturers, component costs, direct compensation costs and overhead, shipping and logistics costs associated with manufacturing-related operations, warranty and other contractual obligations, royalties, license fees, amortization of intangible assets and the cost of excess and obsolete inventory.

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

*Gross Margin*

Gross margin continues to be susceptible to quarterly fluctuation due to a number of factors. Product gross margin can vary significantly depending upon the mix of products and customers in a given fiscal quarter. Gross margin can also be affected by volume of orders, geographic mix, the competitive environment and level of pricing pressure we encounter, our introduction of new products, charges for excess and obsolete inventory and changes in warranty costs. Our gross margins have also been adversely affected in the past due to estimated losses on committed customer contracts when entering a new market or securing a new customer and may be affected by future efforts to capture market share. Gross margins, in the near term, will be adversely affected by the revaluation of the acquired MEN Business inventory described above. Gross margins will also be affected by our level of success in driving cost reductions and rationalizing our supply chain and third party contract manufacturers as part of the integration following the MEN Acquisition.

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.

*Operating Expense*

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.

Sales 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.

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

***Quarter ended April 30, 2009 compared to the quarter ended April 30, 2010***

*Revenue, cost of goods sold and gross profit*

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

| | Quarter Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Revenue: | | | | | | |
| Products | $ 118,849 | 82.4 | $ 206,420 | 81.4 | $ 87,571 | 73.7 |
| Services | 25,352 | 17.6 | 47,051 | 18.6 | 21,699 | 85.6 |
| Total revenue | 144,201 | 100.0 | 253,471 | 100.0 | 109,270 | 75.8 |
| Costs: | | | | | | |
| Products | 65,419 | 45.4 | 118,221 | 46.6 | 52,802 | 80.7 |
| Services | 18,062 | 12.5 | 30,308 | 12.0 | 12,246 | 67.8 |
| Total cost of goods sold | 83,481 | 57.9 | 148,529 | 58.6 | 65,048 | 77.9 |
| Gross profit | $ 60,720 | 42.1 | $ 104,942 | 41.4 | $ 44,222 | 72.8 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

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

| | Quarter Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Product revenue | $ 118,849 | 100.0 | $ 206,420 | 100.0 | $ 87,571 | 73.7 |
| Product cost of goods sold | 65,419 | 55.0 | 118,221 | 57.3 | 52,802 | 80.7 |
| Product gross profit | $ 53,430 | 45.0 | $ 88,199 | 42.7 | $ 34,769 | 65.1 |

* Denotes % of product revenue

** Denotes % change from 2009 to 2010

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

| | Quarter Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Services revenue | $ 25,352 | 100.0 | $ 47,051 | 100.0 | $ 21,699 | 85.6 |
| Services cost of goods sold | 18,062 | 71.2 | 30,308 | 64.4 | 12,246 | 67.8 |
| Services gross profit | $ 7,290 | 28.8 | $ 16,743 | 35.6 | $ 9,453 | 129.7 |

* Denotes % of services revenue

** Denotes % change from 2009 to 2010

Revenue from sales to customers based outside of the United States is reflected as “International” in the geographic distribution of revenue below. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

| | Quarter Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| United States | $ 91,700 | 63.6 | $ 180,523 | 71.2 | $ 88,823 | 96.9 |
| International | 52,501 | 36.4 | 72,948 | 28.8 | 20,447 | 38.9 |
| Total | $ 144,201 | 100.0 | $ 253,471 | 100.0 | $ 109,270 | 75.8 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

Certain customers each accounted for at least 10% of our revenue for the periods indicated (in thousands, except percentage data) as follows:

| | Quarter Ended April 30, | | | |
|---|---|---|---|---|
| | 2009 | %* | 2010 | %* |
| Company A | $ 40,105 | 27.8 | $ 70,808 | 27.9 |
| Company B | n/a | — | 36,531 | 14.4 |
| Total | $ 40,105 | 27.8 | $ 107,339 | 42.3 |

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

* Denotes % of total revenue

*Revenue*

- **Product revenue** increased due to a $61.4 million increase in sales of our Carrier Ethernet Service Delivery products, principally related to sales of switching and aggregation products in support of wireless backhaul deployments, and a $37.3 million increase of Packet-Optical Transport revenue. The increase in Packet-Optical Transport revenue reflects the addition of $16.2 million related to our OME 6500 and $14.2 million related to OM 5200 from the MEN Business, as well as an $11.0 million increase in sales of CN 4200. These increases offset a $10.2 million decrease in Packet-Optical Switching revenue.
- **Services revenue** increased primarily due to the addition of $13.6 million in maintenance support revenue from the MEN Business, a $4.4 million increase in installation and deployment services and a $3.1 million increase in professional services.
- **United States revenue** increased primarily due to a $60.2 million increase in sales of Carrier Ethernet Service Delivery products and a $21.5 million increase in Packet-Optical Transport revenue. These increases offset an $8.2 million decrease in Packet-Optical Switching revenue.
- **International revenue** increased primarily due to a $15.8 million increase in Packet-Optical Transport revenue, primarily reflecting the addition of sales of Packet-Optical Transport products of the MEN Business.

*Gross profit*

- **Gross profit as a percentage of revenue** decreased due to lower product gross margins described below, partially offset by improved service gross margin.
- **Gross profit on products as a percentage of product revenue** decreased due to a number of items relating to the MEN Acquisition that increased costs of goods sold. These items include the revaluation of inventory described in “Overview” above, higher than typical excess and obsolete inventory charges and excess purchase commitment losses on Ciena’s pre-acquisition inventory relating to product rationalization decisions, and increased amortization of intangible assets. Gross margin for the second quarter of fiscal 2009 was negatively affected by charges of approximately $5.8 million related to two committed customer sales contracts that result in a negative gross margin on the initial phases of the customers’ deployment.
- **Gross profit on services as a percentage of services revenue** increased due to higher concentration of maintenance support and professional services as a percentage of revenue.

*Operating expense*

Increased operating expenses for the second quarter of fiscal 2010 reflect, principally, the acquisition of the MEN Business on March 19, 2010. The table below (in thousands, except percentage data) sets forth the changes in operating expense for the periods indicated:

| | Quarter Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Research and development | $ 49,482 | 34.3 | $ 71,142 | 28.1 | $ 21,660 | 43.8 |
| Selling and marketing | 33,295 | 23.1 | 45,328 | 17.9 | 12,033 | 36.1 |
| General and administrative | 12,615 | 8.7 | 21,503 | 8.5 | 8,888 | 70.5 |
| Acquisition and integration costs | — | 0.0 | 39,221 | 15.5 | 39,221 | 100.0 |
| Amortization of intangible assets | 6,224 | 4.3 | 17,121 | 6.8 | 10,897 | 175.1 |
| Restructuring costs | 6,399 | 4.4 | 1,849 | 0.7 | (4,550) | (71.1) |
| Goodwill impairment | 455,673 | 316.0 | — | 0.0 | (455,673) | (100.0) |
| Total operating expense | $563,688 | 390.8 | $196,164 | 77.5 | $(367,524) | (65.2) |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Research and development** expense was negatively affected by $5.2 million in foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The resulting $21.7 million change primarily reflects increases of $12.6 million in employee compensation and related costs, $4.6 million in professional services and fees, $3.0 million in facilities and information systems and $1.1 million in depreciation expense.
- **Selling and marketing** expense benefitted by $0.7 million in foreign exchange rates primarily due to the strengthening of the U.S. dollar in relation to the Euro. The resulting $12.0 million change primarily reflects increases of $9.5 million in employee compensation, and related costs, $1.2 million in travel-related expenditures, and $0.5 million in facilities and information systems expenses.
- **General and administrative** expense was negatively affected by $0.1 million in foreign exchange rates primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The resulting $8.9 million net change primarily reflects increases of $4.2 million in consulting service expense, $2.1 million in employee compensation and related costs and $2.0 million in facilities and information systems expenses.
- **Acquisition and integration costs** associated with the MEN Acquisition reflect consulting and third party service fees, which were expensed in the Condensed Consolidated Statement of Operations. We also purchased $0.1 million in capitalized equipment, primarily related to information technology, which is included in the Condensed Consolidated Balance Sheet. See Note 3 to our Condensed Consolidated Financial Statements in Item 1 of Part I of this report.
- **Amortization of intangible assets** increased due to the acquisition of additional intangible assets as a result of the MEN Acquisition. See Note 3 to our Condensed Consolidated Financial Statements in Item 1 of Part I of this report.
- **Restructuring costs** for fiscal 2010 reflect the headcount reductions during the second quarter of fiscal 2010 described in the "Overview — Restructuring Activities" above.
- **Goodwill impairment costs** reflect the impairment of goodwill and resulting charge described in Note 4 to our Condensed Consolidated Financial Statements in Item 1 of Part I of this report.

*Other items*

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

| | Quarter Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Interest and other income (loss), net | $3,508 | 2.4 | $ 3,748 | 1.5 | $ 240 | 6.8 |
| Interest expense | $1,852 | 1.3 | $ 4,113 | 1.6 | $ 2,261 | 122.1 |
| Loss on cost method investments | $2,570 | 1.8 | $ — | — | $(2,570) | (100.0) |
| Benefit for income taxes | $ (672) | (0.5) | $(1,578) | (0.6) | $ (906) | 134.8 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Interest and other income (loss), net** increased as the result of a $6.6 million non-cash gain related to the fair value of the redemption feature associated with our 4.0% Convertible Senior Notes due March 15, 2015. See Notes 7 and 15 to the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report for more information regarding the issuance of these convertible notes and the fair value of the redemption feature contained therein. This gain was partially offset by a $3.3 million decrease in interest income due to lower interest rates and invested balances and a $1.1 million increase of other losses related to foreign currency re-measurements. Increased interest and other income, net also reflects a $2.0 million charge relating to the termination of an indemnification asset upon the expiration of the statute of limitations applicable to one of the uncertain tax contingencies acquired as part of the MEN Acquisition.

- **Interest expense** increased due our private placement of $375.0 million in aggregate principal amount of 4.0% Convertible Senior Notes due March 15, 2015. See Note 15 to the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report.
- **Loss on cost method investments** for fiscal 2009 was primarily due to a decline in value of our investment in a privately held technology company that was determined to be other-than-temporary.
- **Benefit for income taxes** increased primarily due to the expiration of the statute of limitations applicable to the acquired, uncertain tax contingency noted above, partially offset by increased foreign tax obligations.

***Six months ended April 30, 2009 compared to the six months ended April 30, 2010***

*Revenue, cost of goods sold and gross profit*

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

| | Six Months Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Revenue: | | | | | | |
| Products | $ 258,566 | 83.0 | $ 355,474 | 82.8 | $ 96,908 | 37.5 |
| Services | 53,035 | 17.0 | 73,873 | 17.2 | 20,838 | 39.3 |
| Total revenue | 311,601 | 100.0 | 429,347 | 100.0 | 117,746 | 37.8 |
| Costs: | | | | | | |
| Products | 141,786 | 45.5 | 194,890 | 45.4 | 53,104 | 37.5 |
| Services | 37,252 | 12.0 | 49,355 | 11.5 | 12,103 | 32.5 |
| Total cost of goods sold | 179,038 | 57.5 | 244,245 | 56.9 | 65,207 | 36.4 |
| Gross profit | $ 132,563 | 42.5 | $ 185,102 | 43.1 | $ 52,539 | 39.6 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

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

| | Six Months Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Product revenue | $ 258,566 | 100.0 | $ 355,474 | 100.0 | $ 96,908 | 37.5 |
| Product cost of goods sold | 141,786 | 54.8 | 194,890 | 54.8 | 53,104 | 37.5 |
| Product gross profit | $ 116,780 | 45.2 | $ 160,584 | 45.2 | $ 43,804 | 37.5 |

* Denotes % of product revenue

** Denotes % change from 2009 to 2010

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

| | Six Months Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| Services revenue | $ 53,035 | 100.0 | $ 73,873 | 100.0 | $ 20,838 | 39.3 |
| Services cost of goods sold | 37,252 | 70.2 | 49,355 | 66.8 | 12,103 | 32.5 |
| Services gross profit | $ 15,783 | 29.8 | $ 24,518 | 33.2 | $ 8,735 | 55.3 |

* Denotes % of services revenue

** Denotes % change from 2009 to 2010

Revenue from sales to customers based outside of the United States is reflected as “International” in the geographic distribution of revenue below. The table below (in thousands, except percentage data) sets forth the changes in geographic distribution of revenue for the periods indicated:

| | Six Months Ended April 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | Increase (decrease) | %** |
| United States | $ 190,647 | 61.2 | $ 304,435 | 70.9 | $ 113,788 | 59.7 |
| International | 120,954 | 38.8 | 124,912 | 29.1 | 3,958 | 3.3 |
| Total | $ 311,601 | 100.0 | $ 429,347 | 100.0 | $ 117,746 | 37.8 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

Certain customers each accounted for at least 10% of our revenue for the periods indicated (in thousands, except percentage data) as follows:

| | Six Months Ended April 30, | | | |
|---|---|---|---|---|
| | 2009 | %* | 2010 | %* |
| Company A | $ 72,661 | 23.3 | $ 113,323 | 26.4 |
| Company B | n/a | — | 51,867 | 12.1 |
| Company C | 33,239 | 10.7 | n/a | — |
| Total | $ 105,900 | 34.0 | $ 165,190 | 38.5 |

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

* Denotes % of total revenue

*Revenue*

- **Product revenue** increased due to a $92.4 million increase in sales of our Carrier Ethernet Service Delivery products, principally related to sales of switching and aggregation products in support of wireless backhaul deployments, and a $37.5 million increase of Packet-Optical Transport revenue. These increases offset a $31.5 million decrease in Packet-Optical Switching revenue.
- **Services revenue** increased primarily due to a $14.7 million increase in maintenance support revenue, a $3.6 million increase in professional services and a $2.5 million increase in installation and deployment services.
- **United States revenue** increased primarily due to a $90.4 million increase in sales of Carrier Ethernet Service Delivery products, a $30.9 million increase in Packet-Optical Transport revenue and a $17.0 million increase in services revenue. These increases offset a $24.2 million decrease in decrease in Packet-Optical Switching revenue.
- **International revenue** increased primarily due to a $6.7 million increase in Packet-Optical Transport revenue, a $3.8 million increase in services revenue and a $2.0 million increase in sales of Carrier Ethernet Service Delivery products. These increases offset a $7.4 million decrease in Packet-Optical Switching revenue.

*Gross profit*

- **Gross profit as a percentage of revenue** increased due to improved service gross margin.
- **Gross profit on products as a percentage of product revenue** was unchanged. Fiscal 2010 gross profit was

adversely affected by a lower concentration of Packet-Optical Switching sales as well as increased costs resulting from the revaluation of MEN Business inventory described above and increased amortization of intangible assets resulting from the MEN Acquisition. These additional costs were offset by lower warranty and excess and obsolete inventory charges as compared to fiscal 2009. Gross margin for the second quarter of fiscal 2009 was negatively affected by a $5.8 million charge related to two loss contracts described above.

- **Gross profit on services as a percentage of services revenue** increased due to higher concentration of maintenance support and professional services as a percentage of revenue.

*Operating expense*

Increased operating expenses for the six months of fiscal 2010 principally reflect the acquisition of the MEN Business on March 19, 2010. The table below (in thousands, except percentage data) sets forth the changes in operating expense for the periods indicated:

| | Six Months Ended April 30, | | | | Increase (decrease) | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | | %** |
| Research and development | $ 96,182 | 30.9 | $ 121,175 | 28.2 | $ 24,993 | 26.0 |
| Selling and marketing | 67,114 | 21.5 | 79,565 | 18.5 | 12,451 | 18.6 |
| General and administrative | 24,200 | 7.8 | 34,266 | 8.0 | 10,066 | 41.6 |
| Acquisition and integration costs | — | 0.0 | 66,252 | 15.4 | 66,252 | 100.0 |
| Amortization of intangible assets | 12,628 | 4.1 | 23,102 | 5.4 | 10,474 | 82.9 |
| Restructuring costs | 6,475 | 2.1 | 1,828 | 0.4 | (4,647) | (71.8) |
| Goodwill impairment | 455,673 | 146.2 | — | 0.0 | (455,673) | (100.0) |
| Total operating expense | $ 662,272 | 212.6 | $ 326,188 | 75.9 | $ (336,084) | (50.7) |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Research and development** expense was negatively affected by $6.4 million in foreign exchange rates, primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The resulting $25.0 million change primarily reflects increases of $12.1 million in employee compensation and related costs, $5.4 million in professional services and fees, $3.2 million in facilities and information systems, $2.4 million in prototype expense related to the development initiatives described above, and $1.4 million in depreciation expense.
- **Selling and marketing** expense was negatively affected by $0.2 million in foreign exchange rates primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The resulting $12.5 million change primarily reflects increases of $10.5 million in employee compensation and related costs, and $1.5 million in travel-related expenditures.
- **General and administrative** expense was negatively affected by $0.2 million in foreign exchange rates primarily due to the weakening of the U.S. dollar in relation to the Canadian dollar. The resulting $10.1 million change primarily reflects increases of $4.8 million in consulting service expense, $2.5 million in employee compensation and related costs, and $1.8 million in facilities and information systems expenses.
- **Acquisition and integration costs** related to the MEN Acquisition. As of April 30, 2010, we have incurred $66.3 million in transaction, consulting and third party service fees, which were expensed in the Condensed Consolidated Statement of Operations.
- **Amortization of intangible assets** increased due to the acquisition of additional intangible assets as a result of the MEN Acquisition.
- **Restructuring costs** for fiscal 2010 primarily reflect the headcount reductions taken during the second quarter of fiscal 2010 described in the “Overview — Restructuring Activities” above.
- **Goodwill impairment costs** reflect the impairment of goodwill and resulting charge described in Note 4 to our Condensed Consolidated Financial Statements in Item 1 of Part I of this report

*Other items*

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

| | Six Months Ended April 30, | | | | Increase (decrease) | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | | %** |
| Interest and other income (loss), net | $8,168 | 2.6 | $2,975 | 0.7 | $(5,193) | (63.6) |
| Interest expense | $3,696 | 1.2 | $5,941 | 1.4 | $ 2,245 | 60.7 |
| Loss on cost method investments | $3,135 | 1.0 | $ — | — | $(3,135) | (100.0) |
| Benefit for income taxes | $ (331) | (0.1) | $ (710) | (0.2) | $ (379) | 114.5 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Interest and other income (loss), net** decreased as a result of an $8.2 million decrease in interest income due to lower interest rates and lower invested balances and a $1.5 million increase of other losses related to foreign currency re-measurements. Decreased interest and other income, net also reflects a $2.0 million charge relating to the termination of an indemnification asset upon the expiration of the statute of limitations applicable to one of the uncertain tax contingencies acquired as part of the MEN Acquisitions. These items were partially offset by a $6.6 million non-cash gain related to the fair value of the redemption feature associated with our 4.0% Convertible Senior Notes due March 15, 2015. See Notes 7 and 15 to the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report for more information regarding the issuance of these convertible notes and the fair value of the redemption feature contained therein.
- **Interest expense** increased due our private placement of $375.0 million in aggregate principal amount of 4.0% Convertible Senior Notes due March 15, 2015. See Note 15 to the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report.
- **Loss on cost method investments** for fiscal 2009 was primarily due to a decline in value of our investment in two privately held technology companies that was determined to be other-than-temporary.
- **Benefit for income taxes** increased primarily due to the expiration of the statute of limitations applicable to the acquired, uncertain tax contingency noted above, partially offset by increased foreign tax obligations.

**Results of Operating Segments**

Upon the completion of the MEN Acquisition, we reorganized our internal organizational structure and the management of our business into the following operating segments: Packet-Optical Transport; Packet-Optical Switching; Carrier Ethernet Service Delivery; and Software and Services. See Note 19 to the Condensed Consolidated Financial Statements found under Item 1 of Part I of this report. The table below (in thousands, except percentage data) sets forth the changes in our operating segment revenue, including the presentation of prior periods to reflect the change in reportable segments, for the periods indicated:

| | Quarter Ended April 30, | | | | Increase (decrease) | |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | | %** |
| Revenue: | | | | | | |
| Packet Optical Transport | $ 60,353 | 41.8 | $ 97,689 | 38.5 | $ 37,336 | 61.9 |
| Packet Optical Switching | 42,681 | 29.6 | 32,434 | 12.8 | (10,247) | (24.0) |
| Carrier Ethernet Service Delivery | 13,357 | 9.3 | 74,806 | 29.5 | 61,449 | 460.1 |
| Software and Services | 27,810 | 19.3 | 48,542 | 19.2 | 20,732 | 74.5 |
| Consolidated revenue | $ 144,201 | 100.0 | $ 253,471 | 100.0 | $ 109,270 | 75.8 |

* Denotes % of total revenue

** Denotes % change from 2009 to 2010

- **Packet-Optical Transport revenue** for fiscal 2010 reflects the addition of $35.4 million in revenue from the MEN Business and an increase of $1.9 million related to Ciena’s pre-acquisition portfolio. Revenue reflects the addition of $16.2 million related to OME 6500 and $14.2 million related to OM 5200, as well as an $11.0 million increase in sales of CN 4200. These increases offset a $9.5 million decrease in CoreStream revenue, reflecting in part, the long life cycle of this platform and the ongoing platform transition resulting from the MEN Acquisition.
- **Packet-Optical Switching revenue** decreased reflecting a decline in CoreDirector revenue. Sales of Packet-Optical Switching products reflect principally our CoreDirector platform, which has a concentrated customer base and few significant purchasers. As a result, revenue can fluctuate considerably depending upon individual customer purchasing decisions.

- **Carrier Ethernet Service Delivery revenue** increased significantly, reflecting sales of switching and aggregation products in support of wireless backhaul deployments.
- **Software and Services revenue** increased primarily due to the addition of $13.6 million in maintenance support revenue from the MEN Business, a $4.4 million increase in installation and deployment services and a $3.1 million increase in professional services.

The table below (in thousands, except percentage data) sets forth the changes in our operating segment revenue for the periods indicated, including the presentation of prior periods to reflect the change in reportable segments:

| | Six Months Ended April 30, | | | | Increase (decrease) | %** |
|---|---|---|---|---|---|---|
| | 2009 | %* | 2010 | %* | | |
| Revenue: | | | | | | |
| Packet Optical Transport | $ 143,636 | 46.2 | $ 181,159 | 42.2 | $ 37,523 | 26.1 |
| Packet Optical Switching | 87,338 | 28.0 | 55,832 | 13.0 | (31,506) | (36.1) |
| Carrier Ethernet Service Delivery | 22,884 | 7.3 | 115,245 | 26.8 | 92,361 | 403.6 |
| Software and Services | 57,743 | 18.5 | 77,111 | 18.0 | 19,368 | 33.5 |
| Consolidated revenue | $ 311,601 | 100.0 | $ 429,347 | 100.0 | $ 117,746 | 37.8 |

* Denotes % of total revenue

** Denotes % change from fiscal 2009 to fiscal 2010

- **Packet-Optical Transport revenue** for fiscal 2010 reflects the addition of $35.4 million in revenue from the MEN Business and an increase of $2.1 million related to Ciena's pre-acquisition portfolio. Revenue reflects the addition of $16.2 million related to OME 6500 and $14.2 million related to OM 5200, as well as a $15.6 million increase in sales of CN 4200. These increases offset a $12.3 million decrease in CoreStream revenue, reflecting in part, the long life cycle of this platform and the ongoing platform transition resulting from the MEN Acquisition.
- **Packet-Optical Switching revenue** decreased reflecting a decline in CoreDirector revenue. Sales of Packet-Optical Switching products reflect principally our CoreDirector platform, which has a concentrated customer base and few significant purchasers. As a result, revenue can fluctuate considerably depending upon individual customer purchasing decisions.
- **Carrier Ethernet Service Delivery revenue** increased significantly, reflecting sales of switching and aggregation products in support of wireless backhaul deployments.
- **Software and Services revenue** increased primarily due to a $14.7 million increase in maintenance support revenue, a $3.6 million increase in professional services and a $2.5 million increase installation and deployment services.

*Segment Profit (Loss)*

The table below (in thousands, except percentage data) sets forth the changes in our segment profit (loss), including the presentation of prior periods to reflect the change in reportable segments, for the respective periods:

| | Quarter Ended April 30, | | Increase (decrease) | %** |
|---|---|---|---|---|
| | 2009 | 2010 | | |
| Segment profit (loss): | | | | |
| Packet-Optical Transport | $ (3,548) | $ (6,595) | $ (3,047) | 85.9 |
| Packet-Optical Switching | 14,559 | 5,467 | (9,092) | (62.4) |
| Carrier Ethernet Service Delivery | (4,295) | 25,972 | 30,267 | (704.7) |
| Software and Services | 4,522 | 8,956 | 4,434 | 98.1 |

** Denotes % change from 2009 to 2010

- **Packet-Optical Transport segment loss** increased due to higher research and development costs, in part due to the MEN Acquisition, partially offset by increased sales volume and gross margin.

- **Packet-Optical Switching segment profit** decreased due to lower sales volume and increased research and development costs.
- **Carrier Ethernet Service Delivery segment profit** increased due to significantly higher sales volume and improved gross margin, partially offset by increased research and development costs.
- **Software and Services segment profit** increased due to increased sales volume and improved gross margin, partially offset by increased research and development costs.

The table below (in thousands, except percentage data) sets forth the changes in our segment profit (loss), including the presentation of prior periods to reflect the change in reportable segments, for the respective periods:

| | Six Months Ended April 30, | | | |
|---|---|---|---|---|
| | 2009 | 2010 | Increase (decrease) | %** |
| Segment profit (loss): | | | | |
| Packet-Optical Transport | $ 7,474 | $ 13,528 | $ 6,054 | 81.0 |
| Packet-Optical Switching | 32,882 | 3,429 | (29,453) | (89.6) |
| Carrier Ethernert Service Delivery | (14,898) | 34,854 | 49,752 | (334.0) |
| Software and Services | 10,923 | 12,116 | 1,193 | 10.9 |

** Denotes % change from 2009 to 2010

- **Packet-Optical Transport segment profit** increased due to higher sales volume and improved gross margin, partially offset by higher research and development costs, in part due to the MEN Acquisition.
- **Packet-Optical Switching segment profit** decreased due to lower sales volume and increased research and development costs.
- **Carrier Ethernet Service Delivery segment profit** increased due to significantly higher sales volume and improved gross margin.
- **Software and Services segment profit** increased due to higher sales volume and improved gross margin, partially offset by increased research and development costs.

**Liquidity and Capital Resources**

At April 30, 2010, our principal sources of liquidity were cash and cash equivalents and short-term investments, which principally represent U.S. treasuries. The following table summarizes our cash and cash equivalents and investments (in thousands):

| | October 31, 2009 | April 30, 2010 | Increase (decrease) |
|---|---|---|---|
| Cash and cash equivalents | $ 485,705 | $ 584,229 | $ 98,524 |
| Short-term investments in marketable debt securities | 563,183 | 29,537 | (533,646) |
| Long-term investments in marketable debt securities | 8,031 | — | (8,031) |
| Total cash and cash equivalents and investments in marketable debt securities | $ 1,056,919 | $ 613,766 | $ (443,153) |

The decrease in total cash and cash equivalents and investments during the first six months of fiscal 2010 was primarily related to our payment of $711.9 million related to the purchase price for the MEN Acquisition, partially offset by our receipt of $369.7 million in net proceeds from the private placement of $375.0 million in aggregate principal amount of 4.0% Convertible Senior Notes due March 15, 2015. As described in “Operating Activities” below, $73.2 million of cash was used in operating activities, reflecting payments of approximately $54.5 million related to acquisition and integration activities. See Notes 3 and 15 to the Condensed Consolidated Financial Statements under Item 1 of Part I of this report for more information regarding the MEN Acquisition and our convertible notes offering.

Based on past performance and current expectations, we believe that our cash and cash equivalents, investments and cash generated from operations will satisfy our working capital needs, capital expenditures, and other liquidity requirements associated with our existing operations through at least the next 12 months.

The following sections review the significant activities that had an impact on our cash during the first six months of fiscal 2010.

***Operating Activities***

The following tables set forth (in thousands) components of our cash generated from operating activities during the period:

*Net loss*

| | Six Months Ended April 30, 2010 |
|---|---|
| Net loss | $ (143,342) |

Our net loss during the first six months of fiscal 2010 included the significant non-cash items summarized in the following table (in thousands):

| | Six Months Ended April 30, 2010 |
|---|---|
| Depreciation of equipment, furniture and fixtures, and amortization of leasehold improvements | $ 13,543 |
| Share-based compensation costs | 16,799 |
| Amortization of intangible assets | 33,618 |
| Provision for inventory excess and obsolescence | 7,100 |
| Provision for warranty | 8,847 |
| Total significant non-cash charges | $ 79,907 |

*Accounts Receivable, Net*

Excluding the addition of $7.5 million of accounts receivable recorded in connection with the MEN Acquisition, cash used by accounts receivable, net of allowance for doubtful accounts, during the first six months of fiscal 2010 was $53.3 million. Our days sales outstanding (DSOs) increased from 67 days for the first six months of fiscal 2009 to 75 days for the first six months of fiscal 2010. Our DSOs increased due to a larger proportion of shipments occurring later in our second quarter of fiscal 2010.

The following table sets forth (in thousands) changes to our accounts receivable, net of allowance for doubtful accounts, from the end of fiscal 2009 through the end of the second quarter of fiscal 2010:

| | October 31, 2009 | April 30, 2010 | Increase (decrease) |
|---|---|---|---|
| Accounts receivable, net | $ 118,251 | $ 178,959 | $ 60,708 |

*Inventory*

Excluding the addition of $114.2 million of inventory recorded in connection with the MEN Acquisition, cash consumed by inventory during the first six months of fiscal 2010 was $38.3 million. Our inventory turns decreased from 3.1 turns during the first six months of fiscal 2009 to 1.7 turns for the first six months of fiscal 2010. This reduction relates principally to the significant additional inventory from the MEN Acquisition, as compared to the product cost of goods sold for that portion of the second quarter following the completion of this transaction and is not indicative of our expectation for a full quarter's results or the business going forward.

During the first six months of fiscal 2010, changes in inventory reflect a $7.1 million reduction related to a non-cash provision for excess and obsolescence. The following table sets forth (in thousands) changes to the components of our inventory from the end of fiscal 2009 through the end of the second quarter of fiscal 2010:

| | October 31, 2009 | April 30, 2010 | Increase (decrease) |
|---|---|---|---|
| Raw materials | $ 19,694 | $ 21,309 | $ 1,615 |
| Work-in-process | 1,480 | 3,958 | 2,478 |
| Finished goods | 90,914 | 236,135 | 145,221 |
| Gross inventory | 112,088 | 261,402 | 149,314 |
| Provision for inventory excess and obsolescence | (24,002) | (27,997) | (3,995) |
| Inventory | $ 88,086 | $ 233,405 | $ 145,319 |

*Accounts payable, accruals and other obligations*

Excluding the addition of $39.0 million of accounts payable, accruals and other obligations recorded in connection with the MEN Acquisition, cash generated in operations related to accounts payable, accruals and other obligations during the first six months of fiscal 2010 was $83.5 million.

During the first six months of fiscal 2010, we had non-operating cash accounts payable decreases of $0.8 million related to equipment purchases and an increase of $5.0 million related to debt issuance costs. Changes in accrued liabilities reflect non-cash provisions of $8.8 million related to warranties. The following table sets forth (in thousands) changes in our accounts payable, accruals and other obligations from the end of fiscal 2009 through the end of the second quarter of fiscal 2010:

| | October 31, 2009 | April 30, 2010 | Increase (decrease) |
|---|---|---|---|
| Accounts payable | $ 53,104 | $ 105,138 | $ 52,034 |
| Accrued liabilities | 103,349 | 185,808 | 82,459 |
| Restructuring liabilities | 9,605 | 9,807 | 202 |
| Other long-term obligations | 8,554 | 9,413 | 859 |
| Accounts payable, accruals and other obligations | $ 174,612 | $ 310,166 | $ 135,554 |

*Interest Payable on Convertible Notes*

Interest on our outstanding 0.25% convertible senior notes, due May 1, 2013, is payable on May 1 and November 1 of each year. We paid $0.4 million in interest on these convertible notes during the first six months of fiscal 2010.

Interest on our outstanding 4.0% convertible senior notes, due March 15, 2015, is payable on March 15 and September 15 of each year. Our initial interest payment on these notes will be due on September 15, 2010.

Interest on our outstanding 0.875% convertible senior notes, due June 15, 2017, is payable on June 15 and December 15 of each year. We paid $2.2 million in interest on these convertible notes during the first six months of fiscal 2010.

The indentures governing our outstanding convertible notes do not contain any financial covenants. The indentures provide for customary events of default, including payment defaults, breaches of covenants, failure to pay certain judgments and certain events of bankruptcy, insolvency and reorganization. If an event of default occurs and is continuing, the principal amount of the notes, plus accrued and unpaid interest, if any, may be declared immediately due and payable. These amounts automatically become due and payable if an event of default relating to certain events of bankruptcy, insolvency or reorganization occurs. See Note 15 to the Condensed Consolidated Financial Statements under Item 1 of Part I of this report for more information regarding our outstanding convertible notes.

The following table reflects (in thousands) the balance of interest payable and the change in this balance from the end of fiscal 2009 through the end of the second quarter of fiscal 2010:

| | October 31, 2009 | April 30, 2010 | Increase (decrease) |
|---|---|---|---|
| Accrued interest payable | $ 2,045 | $ 3,965 | $ 1,920 |

*Deferred revenue*

Excluding the addition of $18.8 million of deferred revenue recorded in connection with the MEN Acquisition, deferred revenue decreased by $3.0 million during the first six months of fiscal 2010. Product deferred revenue represents payments received in advance of shipment

and payments received in advance of our ability to recognize revenue. Services deferred revenue is related to payment for service contracts that will be recognized over the contract term. The following table reflects (in thousands) the balance of deferred revenue and the change in this balance from the end of fiscal 2009 through the end of the second quarter of fiscal 2010:

| | October 31, 2009 | April 30, 2010 | Increase (decrease) |
|---|---|---|---|
| Products | $ 11,998 | $ 13,265 | $ 1,267 |
| Services | 63,935 | 78,426 | 14,491 |
| Total deferred revenue | $ 75,933 | $ 91,691 | $ 15,758 |

***Investing Activities***

During the first six months of fiscal 2010, we had net sales and maturities of approximately $604.2 million of available for sale securities. Investing activities also include our payment of the $711.9 million purchase price related to the MEN Acquisition. Investing activities also included the purchase of $63.6 million in marketable debt securities and the payment of approximately $18.3 million in equipment purchases. We also purchased an additional $0.6 million of equipment that was included in accounts payable. Purchases of equipment in accounts payable decreased by $0.8 million from the end of fiscal 2009.

***Financing Activities***

On March 15, 2010, we completed a private placement of 4.0% Convertible Senior Notes due March 15, 2015 in aggregate principal amount of $375.0 million. The net proceeds from this offering during second quarter of fiscal 2010 were $369.7 million; however, we estimate that the final net proceeds from the offering will be approximately $364.3 million, after deducting the remaining payment of fees to one of the placement agents.

**Contractual Obligations**

Significant changes to contractual obligations during the first six months of fiscal 2010 relate to purchase obligations and operating leases, principally for additional facilities, associated with the MEN Acquisition. Changes to interest and principal due on convertible notes relate to our private placement, during the second quarter of fiscal 2010, of 4.0% Convertible Senior Notes due March 15, 2015 in aggregate principal amount of $375.0 million. The following is a summary of our future minimum payments under contractual obligations as of April 30, 2010 (in thousands):

| | Total | Less than one year | One to three years | Three to five years | Thereafter |
|---|---|---|---|---|---|
| Interest due on convertible notes | $ 110,420 | $ 20,120 | $ 40,240 | $ 39,123 | $ 10,937 |
| Principal due at maturity on convertible notes | 1,173,000 | — | — | 673,000 | 500,000 |
| Operating leases (1) | 104,681 | 24,798 | 32,465 | 22,199 | 25,219 |
| Purchase obligations (2) | 168,321 | 168,321 | — | — | — |
| Transition service obligations (3) | 23,392 | 23,392 | — | — | — |
| Total (4) | $ 1,579,814 | $ 236,631 | $ 72,705 | $ 734,322 | $ 536,156 |

(1) The amount for operating leases above does not include insurance, taxes, maintenance and other costs required by the applicable operating lease. These costs are variable and are not expected to have a material impact.

(2) 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.

(3) Transition service obligations represent the non-cancelable portion of fees under the transition service agreement. See “Overview — Integration Activities and Expense.”

(4) As of April 30, 2010, we also had approximately $6.8 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 periods of cash settlement with the respective tax authority cannot be reasonably estimated.

Some of our commercial commitments, including some of the future minimum payments set forth above, are secured by standby letters of credit. The following is a summary of our commercial commitments secured by standby letters of credit by commitment expiration date as of April 30, 2010 (in thousands):

| | Total | Less than one year | One to three years | Three to five years |
|---|---|---|---|---|
| Standby letters of credit | $ 31,899 | $ 28,006 | $ 3,189 | $ 704 |

**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 bad debts, inventories, investments, intangible 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 it is realized or realizable and earned. We consider revenue to be realized or realizable and earned 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 customer acceptance, when applicable, are used to verify delivery. 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 generally deferred and recognized ratably over the period during which the services are to be performed.

We apply the percentage of completion method to long term arrangements where we are required to undertake significant production customizations or modification, and reasonable and reliable estimates of revenue and cost are available. Utilizing the percentage of completion method, we recognize revenue based on the ratio of actual costs incurred to date to total estimated costs expected to be incurred. In instances that do not meet the percentage of completion method criteria, recognition of revenue is deferred until there are no uncertainties regarding customer acceptance. If circumstances arise that change the original estimates of revenue, costs, or extent of progress toward completion, revisions to the estimates are made. These revisions may result in increases or decreases in estimated revenue or costs, and such revisions are reflected in income in the period in which the circumstances that gave rise to the revision become known by management.

Some of our communications networking equipment is integrated with software that is essential to the functionality of the equipment. 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 of the product is specified by the customer, revenue is deferred until there are no uncertainties regarding customer acceptance.

Arrangements with customers may include multiple deliverables, including any combination of equipment, services and software. If multiple element arrangements include software or software-related elements that are essential to the equipment, we allocate the arrangement fee to those separate units of accounting. Multiple element arrangements that include software are separated into more than one unit of accounting if the functionality of the delivered element(s) is not dependent on the undelivered element(s), there is vendor-specific objective evidence of the fair value of the undelivered element(s), and general revenue recognition criteria related to the delivered element(s) have been met. The amount of product and services

revenue recognized is affected by our judgments as to whether an arrangement includes multiple elements and, if so, whether vendor-specific objective evidence of fair value exists. Changes to the elements in an arrangement and our ability to establish vendor-specific objective evidence for those elements could affect the timing of revenue recognition. For all other deliverables, we separate the elements into more than one unit of accounting if the delivered element(s) have value to the customer on a stand-alone basis, objective and reliable evidence of fair value exists for the undelivered element(s), and delivery of the undelivered element(s) is probable and substantially within our control. Revenue is allocated to each unit of accounting based on the relative fair value of each accounting unit or using the residual method if objective evidence of fair value does not exist for the delivered element(s). The revenue recognition criteria described above are applied to each separate unit of accounting. If these criteria are not met, revenue is deferred until the criteria are met or the last element has been delivered.

Our total deferred revenue for products was $12.0 million and $13.3 million as of October 31, 2009 and April 30, 2010, 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 $63.9 million and $78.4 million as of October 31, 2009 and April 30, 2010, respectively.

***Share-Based Compensation***

We measure and recognize compensation expense for share-based awards based on estimated fair values on the date of grant. We estimate the fair value of each option-based award on the date of grant using the Black-Scholes option-pricing model. This option pricing model requires that we make several estimates, including the option's expected life and the price volatility of the underlying stock. The expected life of employee stock options represents the weighted-average period the stock options are expected to remain outstanding. Because we considered our options to be "plain vanilla," we calculated the expected term using the simplified method for fiscal 2007. Options are considered to be "plain vanilla" if they have the following basic characteristics: they are granted "at-the-money;" exercisability is conditioned upon service through the vesting date; termination of service prior to vesting results in forfeiture; there is a limited exercise period following termination of service; and the options are non-transferable and non-hedgeable. Beginning in fiscal 2008 we gathered more detailed historical information about specific exercise behavior of our grantees, which we used to determine expected term. We considered the implied volatility and historical volatility of our stock price in determining our expected volatility, and, finding both to be equally reliable, determined that a combination of both measures would result in the best estimate of expected volatility. We recognize the estimated fair value of option-based awards, net of estimated forfeitures, as share-based compensation expense on a straight-line basis over the requisite service period.

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 each reporting period, we reassess the probability of achieving the performance targets and the performance period required to meet those targets. 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, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Changes in these estimates and assumptions can materially affect the measure of estimated fair value of our share-based compensation. See Note 17 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 April 30, 2010, total unrecognized compensation expense was: (i) $8.5 million, which relates to unvested stock options and is expected to be recognized over a weighted-average period of 1.0 year; and (ii) $69.9 million, which relates to unvested restricted stock units and is expected to be recognized over a weighted-average period of 1.7 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 tax law "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.

***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. We recorded charges for excess and obsolete inventory of $8.8 million and $7.1 million in the first six months of fiscal 2009 and 2010, respectively. During fiscal 2009, these charges were primarily related to excess inventory due to a change in forecasted product sales. For the first six months of fiscal 2010, these charges were primarily related to excess and obsolete inventory charges relating to product rationalization decisions in connection with the MEN Acquisition. 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 strategic direction, discontinuance of a product and declines in market conditions. If actual market conditions worsen or differ from those we have assumed, if there is a sudden and significant decrease in demand for our products, or if there is a higher incidence of inventory obsolescence due to a rapid change in technology, we may be required to take additional inventory write-downs, and our gross margin could be adversely affected. Our inventory net of allowance for excess and obsolescence was $88.1 million and $233.4 million as of October 31, 2009 and April 30, 2010, respectively.

***Restructuring***

As part of our restructuring costs, we provide for the estimated cost of the net lease expense for facilities that are no longer being used. The provision is equal to the fair value of the minimum future lease payments under our contracted lease obligations, offset by the fair value of the estimated sublease payments that we may receive. As of April 30, 2010, our accrued restructuring liability related to net lease expense and other related charges was $9.8 million. The total minimum remaining lease payments for these restructured facilities are $12.2 million. These lease payments will be made over the remaining lives of our leases, which range from nine months to nine years. If actual market conditions are different than those we have projected, we will be required to recognize additional restructuring costs or benefits associated with these facilities.

***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 $118.3 million and $179.0 million as of October 31, 2009 and April 30, 2010, respectively. Our allowance for doubtful accounts as of October 31, 2009 and April 30, 2010 was $0.1 million.

***Goodwill***

Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from our acquisitions. 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 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 is required to compare the implied fair value of the reporting unit's goodwill with the carrying amount of the reporting unit's goodwill. A non-cash goodwill impairment charge 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. At April 30, 2010, we had $40.0 million in goodwill, assigned to our Packet-Optical Transport reporting unit. All of the goodwill on our Condensed Consolidated Balance Sheet as of April 30, 2010 is a result of the acquisition of the MEN Business. See Note 4 to the Condensed Consolidated Financial Statements in Item 1 of Part I of this report for information relating to our interim impairment assessment during fiscal 2009.

***Long-lived Assets***

Our long-lived assets include: equipment, furniture and fixtures; finite-lived intangible assets; indefinite-lived intangible assets; and maintenance spares. As of October 31, 2009 and April 30, 2010 these assets totaled $154.7 million and $682.4 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 our reporting units which represents the lowest level for which we identify cash flows.

***Investments***

We have an investment portfolio comprised of marketable debt securities which are comprised of U.S. government obligations. The value of these securities is subject to market volatility for the period we hold these investments and until their sale or maturity. We recognize losses when we determine that declines in the fair value of our investments, below their cost basis, are other-than-temporary. In determining whether a decline in fair value is other-than-temporary, we consider 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 our cost basis, and our 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. We make significant judgments in considering these factors. If we judge that a decline in fair value is other-than-temporary, the investment is valued at the current fair value, and we would incur a loss equal to the decline, which could materially adversely affect our profitability and results of operations.

***Derivatives***

Our 4% convertible senior notes include a redemption feature that is accounted for as a separate embedded derivative. The embedded redemption feature is bifurcated from these notes using the "with-and-without" approach. As such, the total value of the embedded redemption feature is calculated as the difference between the value of these notes (the "Hybrid Instrument") and the value of an identical instrument without the embedded redemption feature (the "Host Instrument"). Both the Host Instrument and the Hybrid Instrument are valued using a modified binomial model. The modified binomial model utilizes, a risk free interest rate, an implied volatility of Ciena's stock, the recovery rates of bonds, and the implied default intensity of the 4.0% convertible senior notes. The embedded redemption feature is recorded at fair value on a recurring basis and these changes are included in interest and other income (expense), net on the Condensed Consolidated Statement of Operations.

***Deferred Tax Valuation Allowance***

As of April 30, 2010, we have recorded a valuation allowance offsetting nearly all our net deferred tax assets of $1.3 billion. When measuring the need for a valuation allowance, we assess both positive and negative evidence regarding the realizability of these deferred tax assets. We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. In determining net deferred tax assets and valuation allowances, management is required to make judgments and estimates related to projections of profitability, the timing and extent of the utilization of net operating loss carryforwards, applicable tax rates, transfer pricing methodologies and tax planning strategies. The valuation allowance is reviewed quarterly and is maintained until sufficient positive evidence exists to support a reversal. Because evidence such as our operating results during the most recent three-year period is afforded more weight than forecasted results for future periods, our cumulative loss during this three-year period represents sufficient negative evidence regarding the need for nearly a full valuation allowance. We will release this valuation allowance when management determines that it is more likely than not that our deferred tax assets will be realized. 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.

***Warranty***

Our liability for product warranties, included in other accrued liabilities, was $40.2 million and $64.7 million as of October 31, 2009 and April 30, 2010, 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 $9.2 million and $8.8 million for the first six months of fiscal 2009 and 2010, respectively. 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 these warranty obligations could increase our cost of sales and negatively affect our gross margin.

***Uncertain Tax Positions***

We account for uncertainty in income tax positions using a two-step approach. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made. As of April 30, 2010, we had $1.3 million and $6.8 million recorded as current and long-term obligations, respectively, related to uncertain tax positions. The provision for income taxes includes the effect of reserve provisions and changes to reserves that are considered appropriate, as well as the related net interest.

***Loss Contingencies***

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

***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 maintain a short-term and long-term investment portfolio. See Notes 6 and 7 to the Condensed Consolidated Financial Statements in Item 1 of Part I of this report for information relating to these investments and their fair value. These available-for-sale securities are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10 percentage points from current levels, the fair value of the portfolio would decline by approximately $0.2 million.

*Foreign Currency Exchange Risk.* As a global concern, we face exposure to adverse movements in foreign currency exchange rates. Historically, our sales have primarily been denominated in U.S. dollars and the impact of foreign currency fluctuations on revenue has not been material. As a result of our increased global presence from the MEN Acquisition, we expect that a larger percentage of our revenue will be non-U.S. dollar denominated, with increased sales denominated in Canadian Dollars and Euros. As a result, if the U.S. dollar strengthens against these currencies, our revenues could be adversely affected in our non-U.S. dollar denominated sales. For our U.S. dollar denominated sales, an increase in the value of the U.S. dollar would increase the real cost to our customers of our products in markets outside the United States.

With regard to operating expense, our primary exposures to foreign currency exchange risk are related to non-U.S. dollar denominated operating expense in Canadian Dollars, British Pounds, Euros and Indian Rupees. During the first six months of fiscal 2010, approximately 75.2% of our operating expense was U.S. dollar denominated.

To reduce variability in non-U.S. dollar denominated operating expense, we have previously entered into foreign currency forward contracts and may do so in the future. We utilize these derivatives to partially offset our market exposure to fluctuations in certain foreign currencies. These derivatives are designated as cash flow hedges and typically have maturities of less than one year. Ciena’s foreign currency forward contracts were fully matured as of October 31, 2009. We do not enter into foreign exchange forward or option contracts for trading purposes.

For the six months of fiscal 2010, research and development, sales and marketing, and general and administrative expenses, were negatively affected by approximately $6.4 million, $0.2 million, and $0.2 million, respectively, due to unfavorable foreign exchange rates related to the weakening of the U.S. dollar in relation to the Canadian Dollar, partially offset by favorable foreign exchange rates related to the strengthening of the U.S. dollar in relation to the Euro.

As of April 30, 2010, our assets and liabilities related to non-dollar denominated currencies were primarily related to intercompany payables and receivables.

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

**Disclosure Controls and Procedures**

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

As described above, we acquired the MEN Business on March 19, 2010. We have not fully evaluated the internal control over financial reporting of the acquired MEN Business and, as permitted by SEC rules and regulations, will exclude the MEN Business from our evaluation of the effectiveness of the internal control over financial reporting from our Annual Report on Form 10-K for fiscal 2010. The MEN Business will be part of our evaluation of the effectiveness of internal control over financial reporting in our Annual Report on Form 10-K for our fiscal year ending October 31, 2011, in which report we will be initially required to include the acquired business in our annual assessment.

**Changes in Internal Control over Financial Reporting**

There were no changes in Ciena's 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, Ciena's internal control over financial reporting.

## PART II — OTHER INFORMATION

***Item 1. Legal Proceedings***

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, which seeks injunctive relief and damages, was served upon Ciena on January 20, 2009. Ciena filed an answer to the complaint and counterclaims against Graywire on March 26, 2009, and an amended answer and counterclaims on April 17, 2009. On April 27, 2009, Ciena and certain other defendants filed an application for inter partes reexamination of the '673 Patent with the U.S. Patent and Trademark Office (the "PTO"). On the same date, Ciena and the other defendants filed a motion to stay the case pending reexamination of all of the patents-in-suit. On July 17, 2009, the district court granted the defendants' motion to stay the case. On July 23, 2009, the PTO granted the defendants' application for reexamination with respect to certain claims of the '673 Patent. We believe that we have valid defenses to the lawsuit and intend to defend it vigorously in the event the stay of the case is lifted.

As a result of our June 2002 merger with ONI Systems Corp., Ciena became a defendant in a securities class action lawsuit filed in the United States District Court for the Southern District of New York in August 2001. The complaint named ONI, certain former ONI officers, and certain underwriters of ONI's initial public offering (IPO) as defendants, and alleges, among other things, that the underwriter defendants violated the securities laws by failing to disclose alleged compensation arrangements in ONI's registration statement and by engaging in manipulative practices to artificially inflate ONI's stock price after the IPO. The complaint also alleges that ONI and the named former officers violated the securities laws by failing to disclose the underwriters' alleged compensation arrangements and manipulative practices. The former ONI officers have been dismissed from the action without prejudice. Similar complaints have been filed against more than 300 other issuers that have had initial public offerings since 1998, and all of these actions have been included in a single coordinated proceeding. On October 6, 2009, the Court entered an opinion granting final approval to a settlement among the plaintiffs, issuer defendants and underwriter defendants, and directing that the Clerk of the Court close these actions. Notices of appeal of the opinion granting final approval have been filed. A description of this litigation and the history of the proceedings can be found in "Item 3. Legal Proceedings" of Part I of Ciena's Annual Report on Form 10-K filed with the Securities and Exchange Commission on December 22, 2009. No specific amount of damages has been claimed in this action. Due to the inherent uncertainties of litigation and because the settlement remains subject to appeal, the ultimate outcome of the matter is uncertain.

In addition to the matters described above, we are subject to various legal proceedings, claims and litigation arising in the ordinary course of business. 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*

***Risks relating to our Acquisition of the Nortel Metro Ethernet Networks (MEN) Business***

During the second quarter of fiscal 2010, we completed our acquisition of the MEN Business. Business combinations of the scale and complexity of this transaction involve a high degree of risk. You should consider the following risk factors before investing in our securities.

**We may fail to realize the anticipated benefits and operating synergies expected from the MEN Acquisition, which could adversely affect our operating results and the market price of our common stock.**

The success of the MEN Acquisition will depend, in significant part, on our ability to successfully integrate the acquired business, grow the combined business's revenue and realize the anticipated strategic benefits and operating synergies from the combination. We believe that the addition of the MEN Business will accelerate the execution of our corporate and product development strategy, enable us to compete with larger equipment providers and provide opportunities to optimize our product development investment. Achieving these goals requires growth of the revenue of the MEN Business and realization of the targeted sales synergies from our combined customer bases and solutions offerings. This growth and the anticipated benefits of the transaction may not be realized fully or at all, or may take longer to realize than we expect. Actual operating, technological, strategic and sales synergies, if achieved at all, may be less significant than we expect or may take longer to achieve than anticipated. If we are not able to achieve these objectives and realize the anticipated benefits and operating synergies of the MEN Acquisition within a reasonable time following the closing, our results of operations and the value of Ciena's common stock may be adversely affected.

**The MEN Acquisition will result in significant integration costs and any material delays or unanticipated additional expense may harm our business and results of operations.**

The complexity and magnitude of the integration effort associated with the MEN Acquisition will be significant and will require that Ciena fund significant capital and operating expense to support the integration of the combined operations. We currently expect that integration expense associated with equipment and information technology, transaction expense, and consulting and third party service fees associated with integration, will be approximately $180.0 million over a two-year period, with a significant portion of such costs anticipated to be incurred during fiscal 2010. We expect to incur additional costs as we build up internal resources, including headcount, facilities and information systems, or engage third party providers, while we continue to rely upon and transition away from support services provided by an affiliate of Nortel during a transition period. In addition to these transition costs, we also expect to incur expense relating to, among other things, restructuring and increased amortization of intangibles and inventory obsolescence charges. Any material delays or unanticipated additional expense associated with integration activities may harm our business and results of operations.

**The integration of the MEN Business is a complex undertaking, involving a number of operational risks, and disruptions or delays could significantly harm our business and results of operations.**

Because of the structure of the transaction as an asset carve out from Nortel, we will not be integrating an entire enterprise, with the back-office systems and processes that support the operation of the business. We will be required to add resources and build new organizational capacity, grow Ciena's existing infrastructure, or retain third party services to ensure business continuity and to support and scale our business. As noted below, we are currently relying upon an affiliate of Nortel to provide critical business support services for a transition period and will ultimately have to transfer these activities to internal or other third party resources. As a result, integrating the operations of the MEN Business will be extremely complex and we could encounter material disruptions, delays or unanticipated costs. Successful integration involves numerous risks, including:

- assimilating product offerings and sales and marketing operations;
- coordinating research and development efforts;
- retaining and attracting customers following a period of significant uncertainty associated with the acquired business;
- diversion of management attention from business and operational matters;
- identifying and retaining key personnel;
- maintaining and transitioning relationships with key vendors, including component providers, manufacturers and service providers;
- integrating accounting, information technology, enterprise management and administrative systems which may be difficult or costly;

- making significant cash expenditures that may be required to retain personnel or eliminate unnecessary resources;
- managing tax costs or liabilities;
- coordinating a broader and more geographically dispersed organization;
- maintaining uniform standards, procedures and policies to ensure efficient and compliant administration of the organization; and
- making any necessary modifications to internal control to comply with the Sarbanes-Oxley Act of 2002 and related rules and regulations.

Disruptions or delays associated with these and other risks encountered in the integration process could have a material adverse effect on our business and results of operations.

**We rely upon an affiliate of Nortel to perform certain critical business support services and there can be no assurance that such services will be performed timely and effectively.**

We currently rely upon an affiliate of Nortel for certain key business support services related to the operation and continuity of the MEN Business. These services will be transferred to and taken over by our organization over time as we build up the capability and capability to do so. These services include key finance and accounting functions, supply chain and logistics management, maintenance and product support services, order management and fulfillment, trade compliance, and information technology services. These transition services are costly and we could incur approximately $94.0 million per year, if all of the transition services are used for a full year. Relying upon the transition services provider to perform critical operations and services raises a number of significant business and operational risks. The transition service provider also performs services on behalf of other purchasers of the businesses that Nortel has recently divested. There is no assurance the provider will serve as an effective support partner for all of the Nortel purchasers and we face risks associated with the provider's ability to retain experienced and knowledgeable personnel as Ciena and other purchasers wind down support services. Ciena's administration and oversight of these transition services is complex, requires significant resources and presents issues related to the segregation of duties and information among the purchasers. In particular, the wind down and transfer to Ciena or other third parties of these critical services is a complex undertaking and may be disruptive to our business and operations. Significant disruption in business support services, the transfer of these activities to Ciena or unanticipated costs related to such services could adversely affect our business and results of operations.

**The MEN Acquisition may expose us to significant unanticipated liabilities that could adversely affect our business and results of operations.**

Our purchase of the MEN Business may expose us to significant unanticipated liabilities relating to the operation of the Nortel business. These liabilities could include employment, retirement or severance-related obligations under applicable law or other benefits arrangements, legal claims, warranty or similar liabilities to customers, and claims by or amounts owed to vendors, including as a result of any contracts assigned to Ciena. We may also incur liabilities or claims associated with our acquisition or licensing of Nortel's technology and intellectual property including claims of infringement. Particularly in international jurisdictions, our acquisition of the MEN Business, or our decision to independently enter new international markets where Nortel previously conducted business, could also expose us to tax liabilities and other amounts owed by Nortel. The incurrence of such unforeseen or unanticipated liabilities, should they be significant, could have a material adverse affect on our business, results of operations and financial condition.

**The MEN Acquisition may cause dilution to our earnings per share, which may harm the market price of our common stock.**

A number of factors, including lower than anticipated revenue and gross margin of the MEN Business, or fewer operating synergies of the combined operations, could cause dilution to our earnings per share or decrease or delay the accretive effect of the MEN Acquisition. We could also encounter unanticipated or additional integration-related costs or fail to realize all of the benefits of the MEN Acquisition that underlie our financial model and expectations for future growth and profitability. These and other factors could cause dilution to our earnings per share or decrease or delay the expected financial benefits of the MEN Acquisition and cause a decrease in the price of our common stock.

**The complexity of the integration and transition associated with the MEN Acquisition, together with Ciena's increased scale and global presence, may affect our internal control over financial reporting and our ability to effectively and timely report our financial results.**

We currently rely upon a combination of Ciena information systems and critical transition services provided by an

affiliate of Nortel to accurately and effectively compile and report our financial results. The additional scale of our operations, together with the complexity of the integration effort, including changes to or implementation of critical information technology systems and reliance upon third party transition services, may adversely affect our ability to report our financial results on a timely basis. In addition, we have had to train new employees and third party providers, and assume operations in jurisdictions where we have not previously had operations. We expect that the MEN Acquisition may necessitate significant modifications to our internal control systems, processes and information systems, both on a transition basis, and over the longer-term as we fully integrate the combined company. We cannot be certain that changes to our design for internal control over financial reporting, or the controls utilized by other third parties, will be sufficient to enable management or our independent registered public accounting firm to determine that our internal controls are effective for any period, or on an ongoing basis. If we are unable to accurately and timely report our financial results, or are unable to assert that our internal controls over financial reporting are effective, our business and market perception of our financial condition may be harmed and the trading price of our stock may be adversely affected.

***Risks related to our current business and operations***

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 business and operating results could be adversely affected by unfavorable macroeconomic and market conditions and reductions in the level of capital expenditure by our largest customers in response to these conditions.**

Broad macroeconomic weakness has previously resulted in sustained periods of decreased demand for our products and services that have adversely affected our operating results. In response to these conditions, many of our customers significantly reduced their network infrastructure expenditures as they sought to conserve capital, reduce debt or address uncertainties or changes in their own business models brought on by broader market challenges. While we have seen some signs of recovering market conditions in North America, we continue to experienced depressed demand and lower customer spending in Europe as economic uncertainty and volatile macroeconomic conditions persist. Continuing or increased challenging economic and market conditions could result in:

- difficulty forecasting, budgeting and planning due to limited visibility into the spending plans of current or prospective customers;
- increased competition for fewer network projects and sales opportunities;
- increased pricing pressure, that may adversely affect revenue and gross margin;
- higher overhead costs as a percentage of revenue;
- increased risk of charges relating to excess and obsolete inventories and the write off of other intangible assets; and
- customer financial difficulty and increased difficulty in collecting accounts receivable.

Our business and operating results could be materially affected by periods of unfavorable macroeconomic and market conditions, globally or specific to a particular region where we operate, and any resulting reductions in the level of capital expenditure by our customers.

**A small number of 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, would have a material adverse effect on our business and results of operations.**

A significant portion of our revenue is concentrated among a relatively small number of communications service providers. Eight customers accounted for greater than 60% of our revenue in fiscal 2009, including AT&T, which represented approximately 19.6% of fiscal 2009 revenue. Consequently, our financial results are closely correlated with the spending of a relatively small number of service providers and are significantly affected by market or industry changes that affect their businesses. The terms of our frame contracts generally do not obligate these customers to purchase any minimum or specific amounts of equipment or services. Because their spending may be unpredictable and sporadic, our revenue and operating results can fluctuate on a quarterly basis. Reliance upon a relatively small number of customers increases our exposure to changes in their network and purchasing strategies. Some of our customers are pursuing efforts to outsource the management and operation of their networks, or have indicated a procurement strategy to reduce or rationalize the number of vendors from which they purchase equipment. These strategies may present challenges to our business and could benefit our larger competitors. Our concentration in revenue has increased in recent years, in part, as a result of consolidations among a number of our largest customers. Consolidations may increase the likelihood of temporary or indefinite reductions in

customer spending or changes in network strategy that could harm our business and operating results. The loss of one or more large service provider customers, or a significant reduction in their spending, as a result of the factors above or otherwise, would have a material adverse effect on our business, financial condition and results of operations.

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

Our revenue and results of operations can fluctuate unpredictably from quarter to quarter. Our budgeted expense levels depend in part on our expectations of long-term future revenue and gross margin, and substantial reductions in expense are difficult and can take time to implement. Uncertainty or lack of visibility into customer spending, and changes in economic or market conditions, can make it difficult to prepare reliable estimates of future revenue and corresponding expense levels. Consequently, our level of operating expense or inventory may be high relative to our revenue, which could harm our ability to achieve or maintain profitability. Given market conditions and the effect of cautious spending in recent quarters, lower levels of backlog orders and an increase in the percentage of quarterly revenue relating to orders placed in that quarter could result in more variability and less predictability in our quarterly results.

Additional factors that contribute to fluctuations in our revenue and operating results include:

- broader economic and market conditions affecting us and our customers;
- changes in capital spending by large communications service providers;
- the timing and size of orders, including our ability to recognize revenue under customer contracts;
- variations in the mix between higher and lower margin products and services; and
- the level of pricing pressure we encounter, particularly for our Packet-Optical Transport platforms.

Many factors affecting our results of operations are beyond our control, particularly in the case of large service provider orders and multi-vendor or multi-technology network infrastructure builds where the achievement of certain thresholds for acceptance is subject to the readiness and performance of the customer or other providers, and changes in customer requirements or installation plans. As a consequence, our results for a particular quarter may be difficult to predict, and our prior results are not necessarily indicative of results likely in future periods. The factors above may cause our revenue and operating results to fluctuate unpredictably from quarter to quarter. These fluctuations may cause our operating results to be below the expectations of securities analysts or investors, which may cause our stock price to decline.

**We face intense competition that could hurt our sales and results of operations.**

The markets in which we compete for sales of networking equipment, software and services are extremely competitive. Competition is particularly intense in attracting large carrier customers and securing new market opportunities with existing carrier customers. In an effort to secure new or long-term customers and capture market share, in the past we have and in the future we may agree to pricing or other terms that result in negative gross margins on a particular order or group of orders. The level of competition and pricing pressure that we face increases substantially during periods of macroeconomic weakness, constrained spending or fewer network projects. As a result of recent market conditions, we have experienced significant competition and increased pricing pressure, particularly for our Packet-Optical Transport products, as we and other vendors have sought to retain or grow market share.

Competition in our markets, generally, is based on any one or a combination of the following factors: price, product features, functionality and performance, introduction of innovative network solutions, manufacturing capability and lead-times, incumbency and existing business relationships, scalability and the flexibility of products to meet the immediate and future network requirements of customers. A small number of very large companies have historically dominated our industry. These competitors have substantially greater financial and marketing resources, greater manufacturing capacity, broader product offerings and more established relationships with service providers and other potential customers than we do. Because of their scale and resources, they may be perceived to be better positioned to offer network operating or management service for large carrier customers. We expect that the acquired products and technologies, increased market share and global presence resulting from the MEN Acquisition will only intensify the level of competition that we face, particularly from larger vendors. 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.

Increased competition in our markets has resulted in aggressive business tactics, including:

- significant price competition, particularly for our Packet-Optical Transport platforms;

- customer financing assistance;
- early announcements of competing products and extensive marketing efforts;
- competitors offering equity ownership positions to customers;
- competitors offering to repurchase our equipment from existing customers;
- marketing and advertising assistance; and
- intellectual property assertions and disputes.

The tactics described above can be particularly effective in an increasingly concentrated base of potential customers such as communications service providers. If competitive pressures increase or we fail to compete successfully in our markets, our sales and profitability would suffer.

**Our reliance upon third party manufacturers exposes us to risks that could negatively affect our business and operations.**

We rely upon third party contract manufacturers to perform the majority of the manufacturing of our products and components. We do not have contracts in place with some of our manufacturers, do not have guaranteed supply of components or manufacturing capacity and in some cases are utilizing temporary or transitional commercial arrangements intended to facilitate the integration of the MEN Business. Our reliance upon third party manufacturers could expose us to increased risks related to lead times, continued supply, on-time delivery, quality assurance and compliance with environmental standards and other regulations. Reliance upon third parties manufacturers exposes us to risks related to their operations, financial position, business continuity and continued viability, which may be adversely affected by broader macroeconomic conditions and difficulties in the credit markets. In an effort to drive cost reductions, we anticipate rationalizing our supply chain and third party contract manufacturers as part of the integration of the MEN Business into Ciena's operations. There can be no assurance that these efforts, including any consolidation or reallocation the third party sourcing and manufacturing, will not ultimately result in additional costs or disruptions in our operations and business.

We may also experience difficulties as a result of geopolitical events, military actions or health pandemics in the countries where our products or critical components are manufactured. Our product manufacturing principally takes place in Mexico, Canada, Thailand and China. Thailand is undergoing a period of instability and we have in the past experienced product shipment delays associated with political turmoil in Thailand, including a blockade of its main international airport. Significant disruptions in these countries affecting supply and manufacturing capacity, or other difficulties with our contract manufacturers would negatively affect our business and results of operations.

**Investment of research and development resources in technologies for which there is not a 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 equipment is characterized by rapidly evolving technologies and changes in market demand. We continually invest in research and development to sustain or enhance our existing products and develop or acquire new products technologies. Our current development efforts are focused upon the evolution of our CoreDirector Multiservice Optical Switch family, the expansion of our Carrier Ethernet Service Delivery and aggregation products, and 40G and 100G coherent technologies and capabilities for our Packet-Optical Transport platforms. There is often a lengthy period between commencing these development initiatives and bringing a new or improved product to market. During this time, technology preferences, customer demand and the market for our products may move in directions we had not anticipated. There is no guarantee that new products or enhancements will achieve market acceptance or that the timing of market adoption will be as predicted. There is a significant possibility, therefore, that some of our development decisions, including significant expenditures on acquisitions, research and development costs, or investments in technologies, will not turn out as anticipated, 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. 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. These product development risks can be compounded in the context of a significant acquisition such as the MEN Business and decision making regarding our product portfolio and the significant development work required to integrate the combined product and software offerings. 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 harmed.

**Product performance problems could damage our business reputation and negatively affect our results of operations.**

The development and production of highly technical and complex communications network equipment is complicated. Some of our products can be fully tested only when deployed in communications networks or when carrying traffic with other equipment. As a result, product performance problems are often more acute for initial deployments of new products and product enhancements. Our products have contained and may contain undetected hardware or software errors or defects. These defects have resulted in warranty claims and additional costs to remediate. Unanticipated problems can relate to the design, manufacturing, installation or integration of our products. Performance problems and product malfunctions can also relate to defects in components, software or manufacturing services supplied by third parties. Product performance, reliability and quality problems can negatively affect our business, including:

- increased costs to remediate software or hardware defects or replace products;
- payment of liquidated damages or similar claims for performance failures or delays;
- increased inventory obsolescence;
- increased warranty expense or estimates resulting from higher failure rates, additional field service obligations or other rework costs related to defects;
- delays in recognizing revenue or collecting accounts receivable; and
- declining sales to existing customers and order cancellations.

Product performance problems could also damage our business reputation and harm our prospects with potential customers. These consequences of product defects or quality problems, including any significant costs to remediate, could negatively affect our business and results of operations.

**Network equipment sales to large communications service providers often involve lengthy sales cycles and protracted contract negotiations and may require us to assume terms or conditions that negatively affect our pricing, payment terms and the timing of revenue recognition.**

Our future success will depend in large part on our ability to maintain and expand our sales to large communications service providers. These sales typically involve lengthy sales cycles, protracted and sometimes difficult contract negotiations, and sales to service providers often involve extensive product testing and network certification, including network-specific or region-specific processes. We are sometimes required to agree to contract terms or conditions that negatively affect pricing, payment terms and the timing of revenue recognition in order to consummate a sale. During periods of macroeconomic or market weakness, these customers may request extended payment terms, vendor or third-party financing and other alternative purchase structures. These terms may, in turn, negatively affect our revenue and results of operations and increase our risk and susceptibility to quarterly fluctuations in our results. Service providers may ultimately insist upon terms and conditions that we deem too onerous or not in our best interest. Moreover, our purchase agreements generally do not require that a customer guarantee any minimum purchase level and customers often have the right to modify, delay, reduce or cancel previous orders. As a result, we may incur substantial expense and devote time and resources to potential relationships that never materialize or result in lower than anticipated sales.

**Difficulties with third party component suppliers, including sole and limited source suppliers, could increase our costs and harm our business and customer relationships.**

We depend on third party suppliers for our product components and subsystems, as well as for equipment used to manufacture and test our products. Our products include key optical and electronic components for which reliable, high-volume supply is often available only from sole or limited sources. Increases in market demand or periods of economic weakness have previously resulted in shortages in availability for important components. Unfavorable economic conditions can affect our suppliers' liquidity level and ability to continue to invest in their business and to stock components in sufficient quantity. We have experienced increased lead times and a higher incidence of component discontinuation. These difficulties with suppliers could result in lost revenue, additional product costs and deployment delays that could harm our business and customer relationships. We do not have any guarantee of supply from these third parties, and in many cases relating to the MEN Business, are relying upon temporary or transitional commercial arrangements intended to facilitate the integration. 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 on reasonable terms. 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, each of which could increase our 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 of difficulties with key suppliers affecting the price, quality, availability or timely delivery of required components.

**We may not be successful in selling our products into new markets and developing and managing new sales channels.**

We expanded our geographic presence significantly as a result of the MEN Acquisition, and we continue to take steps to sell our products into new geographic markets outside of our traditional markets and to a broader customer base, including other large communications service providers, enterprises, cable operators, wireless operators and federal, state and local governments. In many cases, we have less experience in these markets and customers have less familiarity with our company. To succeed in some of these markets we believe we must develop and manage new sales channels and distribution arrangements. We expect these relationships to be an important part of our business internationally as well as for sales to federal, state and local governments. Failure to manage additional sales channels effectively would limit our ability to succeed in these new markets and could adversely affect our ability to expand our customer base and grow our business.

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

Our products are based on complex technology, and we can experience unanticipated delays in developing, manufacturing or deploying them. Each step in the development life cycle of our products presents serious risks of failure, rework or delay, any one of which could affect the cost-effective and timely development of our products. The development of our products, including the integration of the products acquired from the MEN Business into our portfolio and the development of an integrated software tool to manage the combined portfolio, present significant complexity. In addition, intellectual property disputes, failure of critical design elements, and other execution risks may delay or even prevent the release of these products. Delays in product development may affect our reputation with customers and the timing and level of demand for our products. If we do not develop and successfully introduce products in a timely manner, our competitive position may suffer and our business, financial condition and results of operations would be harmed.

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

To avoid delays and meet customer demand for shorter delivery terms, we place orders with our contract manufacturers and suppliers to manufacture components and complete assemblies based on forecasts of customer demand. As a result, our inventory purchases expose us to the risk that our customers either will not order the products we have forecasted or will purchase fewer products than forecasted. Unfavorable market or industry conditions can limit visibility into customer spending plans and compound the difficulty of forecasting inventory at appropriate levels. Moreover, our customer purchase agreements generally do not guarantee any minimum purchase level, and customers often have the right to modify, reduce or cancel purchase quantities. As a result, we may purchase inventory in anticipation of sales that do not occur. Historically, our inventory write-offs have resulted from the circumstances above. As features and functionalities converge across our product lines, and we introduce new products, however, we face an additional risk that customers may forego purchases of one product we have inventoried in favor of another product with similar functionality. If we are required to write off or write down a significant amount of inventory, our results of operations for the period would be materially adversely affected.

**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 and to better match our resources with market opportunities. We may take similar steps in the future, particularly as we seek to realize operating synergies and cost reductions associated with our recent acquisition of the MEN Business. These changes could be disruptive to our business and may 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 in the period in which we take such a charge.

**Our failure to manage effectively our relationships with third party service partners 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 maintenance and support functions, as well as the installation of our equipment in some large network builds. In order to ensure the proper installation and maintenance of our products, we must identify, train and certify qualified service partners. Certification can be costly and time-consuming, and our partners often provide similar services for other companies, including our competitors. We may not be able to manage effectively our relationships with our service partners and cannot be certain that they will be able to deliver services in the manner or time required. If our service partners are unsuccessful in delivering services:

- we may suffer delays in recognizing revenue;
- our services revenue and gross margin may be adversely affected; and
- our relationship with customers could suffer.

Difficulties with service partners could cause us to transition a larger share of deployment and other services from third parties to internal resources, thereby increasing our services overhead costs and negatively affecting our services gross margin and results of operations.

**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 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. 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, despite our efforts, 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. These assertions have increased over time due to our growth, the increased number of products and competitors in the communications network equipment industry and the corresponding overlaps, and the general increase in the rate of patent claims assertions, particularly in the United States. Asserted claims, litigation or other proceedings can include claims against us or our manufacturers, suppliers or customers, alleging infringement of third party proprietary rights with respect our existing or future products and technology or components of those products. 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, can 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 pursuant to contractual obligations and pay 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 be increased as a result of acquisitions, as we have a lower level of visibility into the development process with respect to such technology or the steps taken to safeguard against the risks of infringing the rights of third parties.

**Our international scale could expose our business to additional risks and expense and adversely affect our results of operations.**

We market, sell and service our products globally and rely upon a global supply chain for sourcing of important components and manufacturing of our products. International operations are subject to inherent risks, including:

- effects of changes in currency exchange rates;
- greater difficulty in collecting accounts receivable and longer collection periods;
- difficulties and costs of staffing and managing foreign operations;
- the impact of economic conditions in countries outside the United States;
- less protection for intellectual property rights in some countries;
- adverse tax and customs consequences, particularly as related to transfer-pricing issues;

- social, political and economic instability;
- higher incidence of corruption;
- trade protection measures, export compliance, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements; and
- natural disasters, epidemics and acts of war or terrorism.

We expect that we may enter new markets and withdraw from or reduce operations in others. In some countries, our success will depend in part on our ability to form relationships with local partners. Our inability to identify appropriate partners or reach mutually satisfactory arrangements could adversely affect our business and operations. Our global operations may result in increased risk and expense to our business and could give rise to unanticipated liabilities or difficulties that could adversely affect our operations and financial results.

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

We have a significant development center in India and, in recent years, have increased headcount and development activity at this facility. There is no assurance that our reliance upon development resources in India will enable us to achieve meaningful cost reductions or greater resource efficiency. Further, our development efforts and other operations in India involve significant risks, including:

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

Difficulties resulting from the factors above and other risks related to our operations in India could expose us to increased expense, impair our development efforts, harm our competitive position and damage our reputation.

**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 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 arrangements in the future, including in support of our selection as a domain supply partner with AT&T. 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 and viability 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 greater than the commitments, if any, made to us by our technology partners. Some of our strategic 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 the risks above could harm our reputation with key customers and 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, we may have difficulty collecting receivables and could be exposed to risks associated with uncollectible accounts. We may be exposed to similar risks relating to third party resellers and other sales channel partners. Lack of liquidity in the capital markets or a sustained period of unfavorable economic conditions may increase our exposure to credit risks. While we monitor these situations carefully and attempt to take appropriate measures to protect ourselves, it is possible that we may have to write down or write off doubtful accounts. 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.

**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. We may experience difficulty retaining and motivating existing

employees and attracting qualified personnel to fill key positions. As a result of the MEN Acquisition, employees may experience uncertainty, real or perceived, about their role with Ciena as strategies and initiatives relating to combined operations are announced or executed. 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. It may be difficult to replace members of our management team or other key personnel, and the loss of such individuals could be disruptive to our business. In addition, none of our executive officers is bound by an employment agreement for any specific term. If we are unable to attract and retain qualified personnel, we may be unable to manage our business effectively and our operations and results of operations could suffer.

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

As a global concern, we face exposure to adverse movements in foreign currency exchange rates. Historically, our sales have primarily been denominated in U.S. dollars. As a result of our increased global presence from the MEN Acquisition, we expect that a larger percentage of our revenue will be non-U.S. dollar denominated and therefore subject to foreign currency fluctuation. In addition, we face exposure to currency exchange rates as a result of our non-U.S. dollar denominated operating expense in Europe, Asia, Latin America and Canada. We have previously hedged against currency exposure associated with anticipated foreign currency cash flows and may do so in the future. There can be no assurance that these hedging instruments will be effective and losses associated with these instruments or fluctuations and the adverse effect of foreign currency exchange rate fluctuation may negatively affect our results of operations.

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

We integrate third-party software and other technology into our embedded operating system, network management system tools and other products. Licenses for this technology may not be available or 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. Difficulties with third party technology licensors could result in termination of such licenses, which may result in significant costs and require us to obtain or develop a substitute technology. Difficulty obtaining and maintaining third-party technology licenses may disrupt development of our products and increase our costs, which could harm our business.

**Our business is dependent upon the proper functioning of our internal business processes and information systems and modifications to integrate the MEN Business or support future growth may disrupt our business, operating processes and internal controls.**

The successful operation of various internal business processes and information systems is critical to the efficient operation of our business. If these systems fail or are interrupted, our operations may be adversely affected and operating results could be harmed. Our business processes and information systems need to be sufficiently scalable to support the integration of the MEN Business and future growth of our business. The integration of the MEN Business and transfer of business support services being performed under the transition services agreement will require significant modifications relating to our internal business processes and information systems. Significant changes to our processes and systems expose us to a number of operational risks. These changes may be costly and disruptive, and could impose substantial demands on management time. These changes may also require the modification of a number of internal control procedures and significant training of employees. Any material disruption, malfunction or similar problems with our business processes or information systems, or the transition to new processes and systems, could have a negative effect on the operation of our business and our results of operations.

**Strategic acquisitions and investments may expose us to increased costs and unexpected liabilities.**

We may acquire, invest in or enter in other strategic technology relationships with other companies 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, incur debt or assume indebtedness or issue equity that would dilute our current stockholders' ownership. These transactions involve numerous risks, including:

- significant integration costs;
- integration and rationalization of operations, products, technologies and personnel;
- diversion of management's attention;
- difficulty completing projects of the acquired company and costs related to in-process projects;

- the loss of key employees;
- ineffective internal controls over financial reporting;
- dependence on unfamiliar suppliers or manufacturers;
- exposure to unanticipated liabilities, including intellectual property infringement claims; and
- adverse tax or accounting effects including amortization expense related to intangible assets and charges associated with impairment of goodwill.

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

**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 are subject to the rules and regulations of these agencies. Changes in regulatory requirements in the United States or other countries could inhibit service providers from investing in their communications network infrastructures or introducing new services. These changes could adversely affect the sale of our products and services. 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.

**Governmental regulations affecting the use, import or export of products could negatively affect our revenue.**

The United States and various foreign governments have imposed controls, license requirements and other restrictions on the usage, import or export of some of the technologies that we sell. Governmental regulation of usage, import or export of 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 or penalties and 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. For example, India’s government has recently implemented certain rules applicable to non-Indian network equipment vendors and is considering further restrictions that may limit or prohibit sales of certain communications equipment manufactured in China, where certain of our products are assembled.

**Governmental regulations related to the environment and potential climate change, 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. We could incur fines, costs related to damage to property or personal injury, and costs related to investigation or remediation activities, if we were to violate or become liable under these laws or regulations. 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. These regulations may also make it difficult to obtain supply of compliant components or require us to write off non-compliant inventory, which could have an adverse effect our business and operating results.

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

As of April 30, 2010, our balance sheet includes $40.0 million of goodwill and $682.4 million in long-lived assets, which includes $517.2 million of intangible assets. Goodwill relates to the excess of the total purchase price of the MEN Acquisition over the fair value of the net acquired assets. We have incurred significant charges in the past relating to impairment of goodwill that we have acquired from business combinations. 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. Given the significant uncertainty and instability of macroeconomic conditions in recent periods, forecasting future business is difficult and subject to modification. If actual market conditions differ or our forecasts

change, we may be required to reassess long-lived assets and 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 could 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. Changes in our business, including the MEN Acquisition, will necessitate modifications to our internal control systems, processes and information systems. Our increase global operations and expansion into new regions could pose additional challenges to our internal control systems. We cannot be certain that our current design for internal control over financial reporting will be sufficient to enable management or our independent registered public accounting firm to determine that our internal controls are effective for any period, or on an ongoing basis. If we or our independent registered public accounting firms are unable to assert that our internal controls over financial reporting are effective, our business may be harmed. 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 outstanding indebtedness on our convertible notes and lower cash balance may adversely affect our business.**

At April 30, 2010, indebtedness on our outstanding convertible notes totaled $1.2 billion in aggregate principal. Our use of cash to acquire the MEN Business, together with our private placement of $375.0 million in aggregate principal amount of additional convertible notes in March 2010 to fund in part the purchase price, resulted in significant additional indebtedness and materially reduced our existing cash balance.

Our indebtedness and lower cash balance could have important negative consequences, including:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing, particularly in light of unfavorable conditions in the credit markets;
- reducing the availability of cash resources for other purposes, including capital expenditures;
- limiting our flexibility in planning for, or reacting to, changes in our business and the markets in which we compete; and
- placing us at a possible competitive disadvantage to competitors that have better access to capital resources.

We may also add additional indebtedness such as equipment loans, working capital lines of credit and other long-term debt.

**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 2009, our stock price ranged from a high of $16.64 per share to a low of $4.98 per share. The stock market has experienced extreme price and volume fluctuations that have 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 can cause significant swings in our stock price. Our stock price can also be affected by announcements that we, our competitors, or our customers may make, particularly announcements related to acquisitions or other significant transactions. Our common stock is included in a number of market indices and any change in the composition of these indices to exclude our company would adversely affect our stock price. On December 18, 2009, we were removed from the S&P 500, a widely-followed index. These factors, as well as conditions affecting the general economy 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. Removed and Reserved***

***Item 5. Other Information***

Not applicable.

***Item 6. Exhibits***

2.1 Amendment No. 3 dated March 15, 2010 to that certain Amended & Restated Asset Sale Agreement by and among Nortel Networks Corporation, Nortel Networks Limited, Nortel Networks, Inc. and certain other entities identified therein as sellers and Ciena Corporation, dated as of November 24, 2009, as amended ("Nortel MEN ASA")+

2.2 Amendment No. 4 dated March 15, 2010 to the Nortel MEN ASA+

2.3 Amendment No. 5 dated March 19, 2010 to the Nortel MEN ASA+

2.4 Deed of Amendment (Amendment No. 5) dated March 19, 2010 to that certain Asset Sale Agreement (relating to the sale and purchase of certain Nortel assets in Europe, the Middle East and Africa) by and among the Nortel affiliates, Joint Administrators and Joint Israeli Administrators named therein and Ciena Corporation, dated as of October 7, 2009, as amended +

10.1 Lease Agreement dated as of March 19, 2010 between Ciena Canada, Inc. and Nortel Networks Technology Corp.*

10.2 Transition Services Agreement, dated as of March 19, 2010 between Ciena Corporation and Nortel Networks Corporation and certain affiliated entities*

10.3 Intellectual Property License Agreement dated as of March 19, 2010 between Ciena Luxembourg S.a.r.l. and Nortel Networks Limited*

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

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+ Pursuant to Item 601(b)(2) of Regulation S-K (i) certain schedules and exhibits referenced in this agreement or amendment have been omitted. Ciena hereby agrees to furnish supplementally a copy of any omitted exhibit or schedule to the SEC upon request. In addition, representations and warranties included in these asset sale agreements, as amended, were made by the parties to one another in connection with a negotiated transaction. These representations and warranties were made as of specific dates, only for purposes of these agreements and for the benefit of the parties thereto. These representations and warranties were subject to important exceptions and limitations agreed upon by the parties, including being qualified by confidential disclosures, made for the purposes of allocating contractual risk between the parties rather than establishing these matters as facts. These agreements are filed with Ciena's periodic reports only to provide investors with information regarding its terms and conditions, and not to provide any other factual information regarding Ciena or any other party thereto. Accordingly, investors should not rely on the representations and warranties contained in these agreements or any description thereof as characterizations of the actual state of facts or condition of any party, its subsidiaries or affiliates. The information in these agreements should be considered together with Ciena's public reports filed with the SEC.

* Certain portions of these documents have been omitted based on a request for confidential treatment submitted to the SEC. The non-public information that has been omitted from these documents has been separately filed with the SEC. Each redacted portion of these documents is indicated by a "[*]" and is subject to the request for confidential treatment submitted to the SEC. The redacted information is confidential information of the Registrant.

**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: June 10, 2010

By: /s/ Gary B. Smith
Gary B. Smith
President, Chief Executive Officer
and Director
(Duly Authorized Officer)

Date: June 10, 2010

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

**Exhibit 2.1**

**Execution Copy**

**Amendment No. 3 to the Amended and Restated Asset Sale Agreement**

This Amendment No. 3 ("Amendment No. 3"), dated as of the 15th day of March 2010, to the Amended and Restated Asset Sale Agreement (the "Agreement"), dated as of November 24, 2009, as amended from time to time, by and among Nortel Networks Corporation, a corporation organized under the laws of Canada ("NNC"), Nortel Networks Limited, a corporation organized under the laws of Canada ("NNL"), Nortel Networks Inc., a corporation organized under the laws of Delaware ("NNI" and, together with NNC and NNL, the "Main Sellers"), and the other entities identified therein as Sellers, and Ciena Corporation, a corporation organized under the laws of Delaware (the "Purchaser"). Unless otherwise specified, capitalized terms used herein and not defined shall have the meaning set forth in the Agreement.

WHEREAS, pursuant to the Agreement, among other things, the Main Sellers and the Purchaser have agreed in Section 5.28 of the Agreement to certain covenants in respect of Transition Services (as defined in Section 5.28 of the Sellers Disclosure Schedule) to be provided under the Transition Services Agreement;

WHEREAS, Section 5.28 of the Sellers Disclosure Schedule sets out certain milestones to be achieved by the TSA Sellers and the Purchaser in connection with the provision of such Transition Services;

WHEREAS, each of the TSA Sellers and the Purchaser agree that additional time is appropriate and that the deadlines to achieve certain of the above-mentioned milestones should be extended;

WHEREAS, Exhibit Y to the Agreement (Real Estate Terms and Conditions) ("RETC") sets forth the terms by which real property leases and licenses will be entered into between the Parties on Closing and includes certain deadlines in connection therewith and a list of properties subject only to short term licenses;

WHEREAS, the Sellers and the Purchaser agree that the Closing will occur no earlier than March 19, 2010;

WHEREAS, the Sellers and the Purchaser agree that additional time is appropriate in respect of certain deadlines set out in the RETC and desire to amend the list of properties subject only to short term licenses;

WHEREAS, the Sellers and the Purchaser agree that additional time is appropriate in respect of certain other pre-Closing deliverable deadlines set out in the Agreement;

WHEREAS, Section 5.25 of the Agreement contemplates the negotiation and execution of certain Ancillary Agreements in connection with the Closing;

WHEREAS, the Sellers and the Purchaser agree that no further work remains to be completed under the EFA Development Agreement and, as such, negotiation and execution of such agreement should not be a covenant or Closing condition;

WHEREAS, the Agreement provides that the Sellers shall use commercially reasonable efforts to prepare and furnish the Purchaser with the Unaudited September 30, 2008 Financial Statements, if required, and that delivery of same shall be a Closing condition;

WHEREAS, the Parties agree that the Unaudited September 30, 2008 Financial Statements are not required and the Purchaser agrees to waive delivery of the Unaudited September 30, 2008 Financial Statements as a Closing condition;

WHEREAS, so long as (x) the Closing Date occurs on or prior to March 31, 2010 and (y) the Sellers deliver to the Purchaser the Audited Financial Statements as of, and for the nine (9) month period ended September 30, 2009 (the "September Audited Financial Statements") at least five (5) days prior to the Closing Date, the Purchaser agrees to waive the condition to Closing that Sellers shall have delivered the Audited Financial Statements as of, and for the twelve (12) month period ended, December 31, 2009 (collectively, the "FY09 Audited Financial Statements"), and the Sellers agree (i) to provide the FY09 Audited Financial Statements as promptly as practicable following the Closing, and (ii) that an amount shall be held in escrow pursuant to the terms of this Amendment No. 3 and the Escrow Agreement to secure the delivery of the FY09 Audited Financial Statements;

WHEREAS, Section 6.5(b) of the Agreement addresses the treatment of Restricted Technical Records on or prior to Closing;

WHEREAS, the Sellers and the Purchaser agree that such treatment shall not be mandatory but will be voluntary at the option of the Sellers;

WHEREAS, the Sellers and the Purchaser agree to amend certain other provisions of the Agreement as set forth herein; and

WHEREAS, pursuant to Section 11.4 of the Agreement, the Parties desire to amend certain provisions of the Agreement, including Exhibits P and Y to the Agreement and Section 5.28 of the Sellers Disclosure Schedule, as set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein and for other good, valuable and binding consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. Section 5.28(l)(i) of the Sellers Disclosure Schedule is hereby deleted in its entirety and replaced with the following:

> "On or before March 12, 2010, the Parties will jointly conduct the test procedures outlined in the Testing Protocols (the "**Test**"), and the TSA Sellers shall provide the Purchaser with such access as is reasonably required to determine whether First Day Ready has been achieved. As promptly as reasonably practicable but in no event later than March 12, 2010, the Purchaser, acting reasonably and with good faith, shall either (i)

make a determination that First Day Ready has been achieved in which event it shall so certify in writing; or (ii) advise the TSA Sellers in writing that it disagrees that First Day Ready has been achieved and provide the TSA Sellers with the Deficiency List showing a First Day Default."

2. In Section 5.28(l)(iv) of the Sellers Disclosure Schedule, all references to "March 22, 2010" are hereby deleted and replaced with "March 29, 2010", all references to "April 8, 2010" are hereby deleted and replaced with "April 15, 2010", all references to "April 9, 2010" are hereby deleted and replaced with "April 16, 2010", and all references to "April 12, 2010" are hereby deleted and replaced with "April 19, 2010".

3. In Section 5.28(l)(v) of the Sellers Disclosure Schedule, all references to "April 30, 2010" are hereby deleted and replaced with "May 7, 2010".

4. In Section 2.3.1 of the Agreement, the reference to "(i) February 1, 2010" is hereby deleted and replaced with "(i) March 19, 2010" and the reference to "April 30, 2010" is hereby deleted and replaced with "May 7, 2010".

5. In Section 10.1(b)(i) of the Agreement, the reference to "April 30, 2010" is hereby deleted and replaced with "May 7, 2010".

6. In Section 5.28(m)(ii)(B) of the Sellers Disclosure Schedule, reference to "January 6, 2010" is hereby deleted and replaced with "on or before the date of Amendment No. 3, or such later date as agreed in writing (including by e-mail exchanged between authorized representatives of the Parties)" effective as of November 24, 2009.

7. In Annex B to Section 5.28 of the Sellers Disclosure Schedule, all references to "January 6, 2010" are hereby deleted and replaced with "on or before the date of Amendment No. 3, or such later date as determined in accordance with Section 5.28(m)(ii)(B) of the Sellers Disclosure Schedule" effective as of November 24, 2009.

8. Annex E to Section 5.28 of the Sellers Disclosure Schedule is hereby deleted and replaced with Annex E attached hereto as Exhibit 1.

9. In the RETC, the time frames for the identification of the consolidated and segregated areas that will constitute the demised premises for the applicable sublease or lease pursuant to Section I.A(1) of the article entitled General Provisions and Section III.A.1(ii) of the RETC are hereby extended from "the date which is thirty (30) days after the Auction" and "thirty (30) days prior to the Closing", respectively, to "on or before the Closing Date," effective as of November 24, 2009.

10. In the RETC:

    (a) the time frame for the Parties to identify the consolidated and segregated areas for purposes of the lab consolidation strategy within the Carling Property and the Montreal Premises pursuant to Section I.A(1) of the article entitled General Provisions is hereby extended from "the date which is sixty (60) days after the Auction" to "on or before the Closing Date," effective as of November 24, 2009;

(b) the time frame for the settlement of the terms, final demise plans and definitive documentation respecting the applicable Real Estate Agreement pursuant to Section I.A(2) of the article entitled General Provisions is hereby extended from "the date which is sixty (60) days after the Auction" to "on or before the Closing Date," effective as of November 24, 2009; and

(c) the time frame for the settlement of all plans for equipment separation and configurations for lab space; identification and settlement of plans respecting the replication of power and network infrastructure and for synchronizing all real estate and IT dependencies respecting the applicable Real Property pursuant to Section I.A(2) of the article entitled General Provisions is hereby extended from "the date which is sixty (60) days after the Auction" to "on or before the Closing Date," effective as of November 24, 2009.

11. In the RETC, in respect of the "Properties to be Short Term Licensed" listed in Section IV.A of the RETC, the Main Sellers have advised the Purchaser effective as of December 12, 2009 that the Melbourne, Australia, Beijing, China and Engelwood, Colorado locations (listed under items (1), (3) and (5) on the list) are no longer available for short term license by the Purchaser as the head leases for those locations have been repudiated by the Main Sellers and, as such, the list of locations in Section IV.A of the RETC is deleted and replaced with the following, and in the case of the Hong Kong location the term is extended as set out below:

(1) #07-01/02 & #06-01/06, United Square, 101 Thomson Road, Singapore **(90 days from Closing Date; Rentable Area: 990 sq ft, Gross Rent PSF: $90.15)**; and

(2) **4-7/F City Plaza Four, 12 Taikoo Wan Road, Hong Kong, China (December 31, 2010; Rentable Area: 2,673 sq ft, Gross Rent PSF: $79.13)**.

12. All references to the EFA Development Agreement are removed from the Agreement and, as such:

(a) The last Recital to the Agreement is hereby deleted and replaced with:

"**WHEREAS**, in addition, at the Closing, the Purchaser, certain Sellers (or affiliates of the Sellers) and certain EMEA Sellers will enter into the following ancillary agreements (together, the "**Ancillary Agreements**") (i) the Local Sale Agreements, (ii) the Real Estate Agreements, (iii) the Intellectual Property License Agreement, (iv) the Transition Services Agreement, (v) the Trademark License Agreement, (vi) the Loaned Employee Agreement; (vii) the Subcontract Agreement, (viii) the Contract Manufacturing Inventory Agreements, (ix) the Carling Property Lease Agreements, (x) the Patent Assignments, (xi) the Trademark Assignments, (xii) the Indenture (unless the Cash Replacement Election has been exercised in full), (xiii) if requested by the

Purchaser in accordance with the terms hereof, the Flextronics Back-to-Back Supply Agreement and (xiv) such other back-to-back supply agreements as are requested by the Purchaser in accordance with the terms hereof, and, subject to the negotiation prior to Closing of each such agreement to the mutual satisfaction of each party thereto, in their sole and absolute discretion, will enter into the Mutual Development Agreement, the Seller Supply Agreement, the LGN/Korea Distribution Agreement, the NETAS Distribution Agreement and the NGS Distribution Agreement (each as defined below)."

(b) The definition "EFA Development Agreement" in Section 1.1 of the Agreement is hereby deleted.

(c) Section 5.25(d) is hereby deleted and replaced with "negotiate in good faith with the relevant counterparties with respect to the NGS Distribution Agreement;" effective as of November 24, 2009.

(d) Section 5.25(f) is hereby deleted and replaced with:

"on or before the Closing and subject to the completion prior to Closing of the negotiation of each such agreement to the mutual satisfaction of each party thereto, enter into the Contract Manufacturing Inventory Agreements, the Mutual Development Agreement, the Seller Supply Agreement, the LGN/Korea Distribution Agreement, the NETAS Distribution Agreement and the NGS Distribution Agreement, each as negotiated and finalized pursuant to this Section 5.25; and"

effective as of November 24, 2009.

13. All references to the Unaudited September 30, 2008 Financial Statements are removed from the Agreement and, as such:

(a) The definition of "Unaudited September 30, 2008 Financial Statements" in Section 1.1 of the Agreement is hereby deleted.

(b) Section 5.26 is hereby deleted and replaced with:

(a) "**Additional Financial Statements.** The Sellers shall use commercially reasonable efforts to cause KPMG (as their independent accountants) to complete the audit of the combined carve-out (A) balance sheets for the Business at December 31, 2007 and 2008, (B) related statements of earnings and cash flows of the Business for the fiscal years ended December 31, 2007 and 2008, and (C) balance sheet for the Business at September 30, 2009, and (D) the related statements of earnings and cash flows of the Business for the nine (9) month period

ending on September 30, 2009 and (E) the FY09 Audited Financial Statements (any such balance sheets and statements of earnings and cash flows, collectively, the "**Audited Financial Statements**") and to deliver to the Purchaser any such Audited Financial Statements as promptly as practicable, and in any event within three (3) Business Days of receipt of such Audited Financial Statements. The Sellers shall provide the Purchaser and its representatives with such cooperation and financial or other information as they may reasonably request, including without limitation any such information required in connection with the Purchaser's compliance with its obligations under Section 8.1(a) hereof, in order for the Purchaser to comply with its obligations as established by the SEC under the Securities Act and the Exchange Act."

(b) "**FY09 Financial Statements Escrow Amount.** Upon delivery of the FY09 Audited Financial Statements (including an unqualified audit report by KMPG thereon) by the Sellers to the Purchaser, the Purchaser and the Main Sellers shall deliver to the Escrow Agent joint written instructions to release to the Distribution Agent, on behalf of the Sellers and the EMEA Sellers, the FY09 Financial Statements Escrow Amount."

(c) The first paragraph of Section 8.1(a) is hereby deleted and replaced with:

"In the event that, at issuance, the Convertible Notes and all Shares issuable upon conversion thereof (the "**Registrable Securities**") are not freely transferable by the Distribution Agent without restrictions under the Securities Act, provided that the Sellers have complied with their obligations to deliver the information, including the FY09 Audited Financial Statements and the other Audited Financial Statements, as may be required by and within the time periods specified in Section 5.26, on or prior to the later of (x) the 30th calendar day following the Closing and (y) sixty (60) days following the receipt of such information and financial statements from the Sellers as are required by the rules and regulations promulgated under the Securities Act in connection with the filing and effectiveness of the Shelf Registration Statement referred to below, the Purchaser shall prepare and file an automatic shelf registration statement on Form S-3 (or other applicable form) (together with any amendments or supplements thereto, the "**Initial Shelf Registration Statement**"), to permit the immediate resale of the Registrable Securities under the Securities Act by the Sellers and shall use its commercially reasonable efforts to cause the Initial Shelf Registration Statement or any shelf registration statement filed to replace the Initial Registration Statement to permit the resale of the Registrable Securities should

the Initial Shelf Registration Statement no longer be effective (together with any amendments or supplements thereto, and collectively with the Initial Shelf Registration Statement, the "**Shelf Registration Statement**") to remain continuously effective until the later of (i) one year after the Closing and (ii) when the sale by the Sellers of the Registrable Securities are no longer subject to the volume limitations set forth in Rule 144(e) under the Securities Act (such period, the "**Effective Period**"); provided that the Purchaser may by written notice to the Distribution Agent immediately suspend the use of the Shelf Registration Statement for:"

(d) Section 9.3(b) is hereby deleted and replaced with:

"*No breach of Covenants*. The material covenants, obligations and agreements contained in this Agreement to be complied with by the Sellers on or before the Closing shall not have been breached in any material respect, provided that a failure by the Sellers (i) to achieve First Day Ready (as defined in Section 5.28 of the Sellers Disclosure Schedule) on or before May 7, 2010; or (ii) to deliver the FY09 Audited Financial Statements prior to the Closing Date in accordance with Section 5.26, shall not fall within the scope of this condition."

(e) Section 9.3(d) is hereby deleted and replaced with:

"*Financial Statements*. The Sellers shall have delivered to the Purchaser at least five (5) days prior to the Closing Date, the Audited Financial Statements as required by and pursuant to Section 5.26 hereof and the Audited Financial Statements so delivered shall be consistent in all material respects with the Financial Statements for such periods that are included in the Financial Statements (other than to the extent such differences arise from the differences between the carve-out accounting guidelines promulgated by the SEC and the principles used to allocate corporate overhead used by the Sellers in preparing the Financial Statements); provided, however, in the event that the Closing occurs on or before March 31, 2010, the condition set forth in this Section 9.3(d) shall be deemed satisfied if the Sellers shall have delivered on or before the date that is at least five (5) days prior to the Closing Date all of the Audited Financial Statements other than the FY09 Audited Financial Statements and the condition to Closing set forth in this Section 9.3(d) is otherwise satisfied with respect to such Audited Financial Statements."

14. In Section 1.1 of the Agreement:

(a) The definition of “Audited Financial Statements” is hereby deleted and replaced with:

> ““**Audited Financial Statements**” has the meaning set forth in Section 5.26(a).”

(b) The definition of “Confidentiality Agreement” is hereby deleted and replaced with:

> ““**Confidentiality Agreement**” means collectively, the confidentiality agreement between the Purchaser, NNC and its subsidiaries and the Joint Administrators dated March 27, 2009, the clean team confidentiality agreement between the Purchaser and its subsidiaries and NNL and its subsidiaries, dated April 15, 2009, the second clean team confidentiality agreement between the Purchaser and its subsidiaries and NNL and its subsidiaries, dated May 8, 2009, the third clean team confidentiality agreement between the Purchaser and its subsidiaries and NNL and its subsidiaries, dated June 19, 2009, and the fourth clean team confidentiality agreement between the Purchaser and its subsidiaries and NNL and its subsidiaries, dated December 18, 2009, as amended on January 26, 2010.”

(c) The definition of “Escrow Amount” is hereby deleted and replaced with:

> ““**Escrow Amount**” means the portion of the Cash Purchase Price to be paid to the Escrow Agent on the Closing Date in accordance with Section 2.3.2(b) and, subject to adjustment in accordance with Section 2.1.7(b) of the Sellers Disclosure Schedule, such amount will consist of (i) the Working Capital Escrow Amount, (ii) the Carling Property Escrow Amount, (iii) the Tax Escrow Amount, (iv) the EMEA Tax Escrow Amount, (v) the Italian Tax Escrow Amount, and (vi) the FY09 Financial Statements Escrow Amount.”

(d) The following definition of “**FY09 Audited Financial Statements**” is hereby added in alpha-order:

> ““**FY09 Audited Financial Statements**” means a balance sheet for the Business at December 31, 2009 and related statements of earnings and cash flows of the Business for the fiscal year ended December 31, 2009.”

(e) The following definition of “**FY09 Financial Statements Escrow Amount**” is hereby added in alpha-order:

> ““**FY09 Financial Statements Escrow Amount**” means the amount required to be paid by the Sellers to KPMG (as their independent accountants) to complete the FY09 Audited Financial

Statements, which such amount shall: (i) secure the delivery of the FY09 Audited Financial Statements; and (ii) be agreed upon by the Sellers and KPMG and communicated in writing by the Sellers and KPMG to the Purchaser five (5) days prior to the Closing Date."

15. Section 2.2.5(a) is hereby deleted and replaced with:

"At the Closing, each of the Main Sellers, the EMEA Sellers or an authorized representative of the EMEA Sellers and the Purchaser shall enter into the Escrow Agreement with the Escrow Agent in respect of the Working Capital Escrow Amount, the Transition Services Escrow Amount, the Carling Property Escrow Amount, the Tax Escrow Amount, the EMEA Tax Escrow Amount, the Italian Tax Escrow Amount, the FY09 Financial Statements Escrow Amount and the matters set forth on Section 2.1.7(b) of the Sellers Disclosure Schedule."

16. Section 2.2.5(b) is hereby deleted and replaced with:

"Each of the Main Sellers, the EMEA Sellers or an authorized representative of the EMEA Sellers and the Purchaser hereby undertake to promptly execute and deliver to the Escrow Agent, in accordance with the Escrow Agreement, instructions to pay to the Sellers or the Purchaser, as applicable, funds from the escrow account established pursuant to the Escrow Agreement any time that such Person becomes entitled to such payment from the escrow account pursuant to the terms of the Escrow Agreement and (i) Section 2.2.4.2 in respect of the Working Capital Escrow Amount, (ii) the terms of the Transition Services Agreement in respect of the Transition Services Escrow Amount, (iii) the terms of the Carling Property Lease Agreements in respect of the Carling Property Escrow Amount, (iv) Section 6.7 in respect of the Tax Escrow Amount, (v) Section 6.8 in respect of the EMEA Tax Escrow Amount, (vi) Section 6.9 in respect of the Italian Tax Escrow Amount, (vii) Section 5.26(b) in respect of the FY09 Financial Statements Escrow Amount, and (viii) the terms of Section 2.1.7(b) of the Sellers Disclosure Schedule."

17. In the definition of "Distribution Agent" in Section 1.l of the Agreement, reference to "January 25, 2010" is hereby deleted and replaced with "the date that is five (5) Business Days prior to the Closing Date".

18. In Section 2.1.5(a) of the Agreement, reference to "Any time prior to January 15, 2010" is hereby deleted and replaced with "Any time prior to the date of Amendment No. 3 or such later date as agreed in writing (including by e-mail exchanged between authorized representatives of the Parties)" effective as of November 24, 2009.

19. In Section 2.1.6(a) of the Agreement, references to “On or before December 31, 2009” and “On or before January 15, 2010” are hereby deleted and replaced with “On or before the date of Amendment No. 3 or such later date as agreed in writing (including by e-mail exchanged between authorized representatives of the Parties)” effective as of November 24, 2009.

20. In Section 2.1.6(b) of the Agreement, references to “On or before December 31, 2009” and “On or before January 15, 2010” are hereby deleted and replaced with “On or before the date of Amendment No. 3 or such later date as agreed in writing (including by e-mail exchanged between authorized representatives of the Parties)” effective as of November 24, 2009.

21. In Section 2.1.6(g) of the Agreement, reference to “January 25, 2010” is hereby deleted and replaced with “the date that is five (5) Business Days prior to the Closing Date”.

22. In Section 5.15(d) of the Agreement, reference to “by January 25, 2010 or such later date as the Parties may mutually agree” is hereby deleted and replaced with “on or before the date that is five (5) Business Days prior to the Closing Date” effective as of November 24, 2009.

23. In Section 5.32 of the Agreement, all references to “Excluded Seller” are hereby deleted and replaced with “Excluded Other Seller” and reference to “Excluded Sellers” is hereby deleted and replaced with “Excluded Other Sellers”.

24. Section 6.5(b) of the Agreement is hereby amended and restated in its entirety as follows:

> “At any time within the ten (10) years immediately following the Closing, the Sellers may cause copies of Restricted Technical Records to be placed into escrow with the Records Custodian, who shall hold such Restricted Technical Records for a term ending no later than ten (10) years after the Closing Date in accordance with an escrow agreement between the Purchaser, the Sellers and the Records Custodian, in form satisfactory to the Purchaser and the Main Sellers. The escrow agreement will provide for access to the copies of the Restricted Technical Records only by the relevant Canadian Tax Authority or by Tax advisors of any purchaser (“**Tax Credit Purchaser**”) relating to the scientific research and experimental development tax credits of the Sellers under the Income Tax Act (Canada), and only if such advisors have executed an appropriate confidentiality agreement in form satisfactory to the Purchaser. The access permitted by the escrow agreement shall be only for the limited purpose of defending any audit, claim or action by any Canadian Tax Authority in respect of the characterization of expenditures by NNL or Nortel Networks Technology Corporation (“**NNTC**”) as qualified expenditures on scientific research and experimental development for purposes of the applicable provisions of the Income Tax Act (Canada) (“**Qualified Expenditures**”).”

25. Section 7.4(f) of the Agreement is hereby amended and restated in its entirety as follows:

> "During the Non-Solicitation Period, the Purchaser and the Designated Purchasers shall not, without the Sellers' advance written consent, either directly or indirectly solicit for employment any of the employees of the Sellers who are not Employees, unless the employment of such employee is involuntarily terminated by the Sellers prior to such action by the Purchaser or the Designated Purchasers; provided, however, that nothing in this Section 7.4(f) shall prevent the Purchaser or the Designated Purchasers from (A) conducting generalized employment searches, including placing *bona fide* public advertisements, that are not specifically targeted at such employees or former employees of the Sellers, or (B) hiring such employees or former employees identified through such generalized employment searches; provided, further, that, with respect to any Employees (i) who have rejected their Offer or objected to their transfer of employment to the Purchaser or Designated Purchasers pursuant to this Agreement, or (ii) any Employees to whom the Purchaser or any Designated Purchaser have not made an Offer, who becomes employed with the Purchaser or a Designated Purchaser (other than by operation of Law) during the ninety-day period following the Closing Date, the Purchaser and the Designated Purchasers shall be required to reimburse the Sellers, if applicable, for any pay in lieu of notice (including WARN Act notice) and/or severance payments to the extent paid by the Sellers to such Employee.".

26. In Section 11.17 of the Agreement, reference to "as promptly as practicable but in no event later than the day that is sixty (60) days after the date hereof" is hereby deleted and replaced with "on or before the Closing Date" effective as of November 24, 2009.

27. In Section 7(c)(i) of Schedule D to the Transition Services Agreement, the reference to "June 30, 2010" is hereby deleted and replaced with "July 31, 2010".

28. Neither Party shall have any liability to the extent arising in connection with, as a result of, or arising out of the failure of the Parties (or any Party) prior to the execution of this Amendment No. 3 to meet any milestone or deadline that is revised pursuant to this Amendment No. 3 and if any liability has accrued to a Party (the "**First Party**"), each other Party hereby irrevocably waives any recourse and rights that would have otherwise been available to it against the First Party. For the avoidance of doubt, this Section 28 shall not waive any liability or recourse of the Parties (or any Party) for any failure to meet any milestone or deadline as revised by this Amendment No. 3 (including any failure resulting from any action or failure to act prior to the date hereof).

29. This Amendment No. 3 shall not constitute a modification of any provision, term or condition of the Agreement or any other Transaction Document except solely to the extent and solely for the purposes described herein. Except to the extent that provisions of the Agreement are hereby expressly modified as set forth herein, the Agreement and the other Transaction Documents shall remain unchanged and in full force and effect. By

execution of this Amendment No. 3 as set forth on the signature pages hereto, the EMEA Sellers, the Joint Administrators and the Joint Israeli Administrators acknowledge and agree to any revision, amendment or alteration of any Third Party Provision as set forth herein.

30. The recitals to this Amendment No. 3 form an integral part hereof.

31. This Amendment No. 3 may be executed in multiple counterparts (including by facsimile or other electronic means), each of which shall constitute one and the same document.

32. This Amendment No. 3 shall be binding upon the parties hereto and their respective successors and assigns.

33. Any term or provision of this Amendment No. 3 that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions hereof or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction.

34. This Amendment No. 3 shall be governed by and construed in all respects by the Laws of the State of New York without regard to the rules of conflict of laws of the State of New York or any other jurisdiction. Any Action arising out of or relating to this Amendment No. 3 shall be resolved in accordance with Section 11.6 of the Agreement.

*[Signature Page Follows]*

IN WITNESS WHEREOF, the parties hereto have signed, or caused this Amendment No. 3 to be signed by their respective officers thereunto duly authorized, as of the date first written above.

**NORTEL NETWORKS CORPORATION,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(i) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS LIMITED,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(ii) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS INC.,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(iii) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: Chief Legal Officer

**CIENA CORPORATION**

By: /s/ David M. Rothenstein
Name: David M. Rothenstein
Title: Senior Vice President, General Counsel and Secretary

*Signature Page to Amendment No. 3*

**Acknowledged and Agreed:**

| | | |
|---|---|---|
| **SIGNED** for and on behalf of **Nortel Networks UK Limited** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH | ) | /s/ Christopher Hill<br>Christopher Hill |
| **SIGNED** for and on behalf of **Nortel GmbH** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH | ) | /s/ Christopher Hill<br>Christopher Hill |
| **SIGNED** for and on behalf of **Nortel Networks SpA** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH | ) | /s/ Christopher Hill<br>Christopher Hill |
| **SIGNED** for and on behalf of **Nortel Networks Hispania S.A.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH | ) | /s/ Christopher Hill<br>Christopher Hill |
| **SIGNED** for and on behalf of **Nortel Networks B.V.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH | ) | /s/ Christopher Hill<br>Christopher Hill |

**SIGNED** for and on behalf of **Nortel Networks AB** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH

) /s/ Christopher Hill
) Christopher Hill
)
)

**SIGNED** for and on behalf of **Nortel Networks N.V.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH

) /s/ Christopher Hill
) Christopher Hill
)
)

**SIGNED** for and on behalf of **Nortel Networks (Austria) GmbH** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH

) /s/ Christopher Hill
) Christopher Hill
)
)

**SIGNED** for and on behalf of **Nortel Networks Polska Sp. z.o.o.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH

) /s/ Christopher Hill
) Christopher Hill
)
)

**SIGNED** for and on behalf of **Nortel Networks Portugal S.A.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH

) /s/ Christopher Hill
) Christopher Hill
)
)

**SIGNED** for and on behalf of **Nortel Networks s.r.o.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of: Brenda Dandridge; Dorney House, Maidenhead Office Park, Maidenhead SL6 3PH

) /s/ Christopher Hill
) Christopher Hill
)
)

**SIGNED** for and on behalf of **Nortel Networks France S.A.S.** (in administration) by Kerry Trigg acting as authorised representative for Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
SHARON PERMUTTER
ERNST & YOUNG LLP
1 More London Place
London
SE1 2AF

) /s/ Kerry Trigg
) Kerry Trigg

**SIGNED** outside of the Republic of Ireland for and on behalf of **Nortel Networks (Ireland) Limited** (in administration) by ALAN BLOOM Joint Administrator (acting as agent and without personal liability) in the presence of:
Wilma Graham
Ernst & Young LLP
1 MORE LONDON PLACE
LONDON
SE 1 2AF

) /s/ ALAN BLOOM
) ALAN BLOOM
) Location: LONDON

**SIGNED** by John Freebairn duly authorised for and on behalf of **Nortel Networks (Northern Ireland) Limited** in the presence of:
Bernice a. Percy

) /s/ John Freebairn
) John Freebairn

**SIGNED** by Maria Stanko duly authorised for and on behalf of **o.o.o. Nortel Networks** in the presence of:
Richard J. Banbury
Novinski BLVR R/5
MOSCOW

) /s/ Maria Stanko
) Maria Stanko

**SIGNED** by Sharon Rolstan duly authorised for and on behalf of **Nortel Networks AG** in the presence of:
B. SCHERWATH
C/O NORTEL NETWORKS U.K.Ltd.
WESTA COTT WAY
MAIDENHEAD
SL6 3QH
UK

) /s/ Sharon Rolstan
) Sharon Rolstan

**SIGNED** for and on behalf of **Nortel Networks Israel (Sales and Marketing) Limited** (in administration) by Yaron Har-Zvi and Avi D. Pelossof as Joint Israeli Administrators (acting jointly and without personal liability) in connection with the Israeli Assets and Liabilities:

) /s/ Yaron Har-Zvi
) Yaron Har-Zvi
)
) /s/ Avi D. Pelossof
) Avi D. Pelossof
)

)
)

**SIGNED** by Yaron Har-Zvi

in his own capacity and on behalf of the Joint Israeli Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Israeli Administrators:

) /s/ Yaron Har-Zvi
) Yaron Har-Zvi
)

**SIGNED** by Avi D. Pelossof

in his own capacity and on behalf of the Joint Israeli Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Israeli Administrators:

) /s/ Avi D. Pelossof
) Avi D. Pelossof
)

**SIGNED** by ALAN BLOOM

in his own capacity and on behalf of the Joint Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Administrators:

) /s/ ALAN BLOOM
) ALAN BLOOM
)

**Exhibit 2.2**

**Amendment No. 4 to the Amended and Restated Asset Sale Agreement**

This Amendment No. 4 ("Amendment No. 4"), dated as of the 15th day of March 2010, to the Amended and Restated Asset Sale Agreement (the "Agreement"), dated as of November 24, 2009, as amended from time to time, by and among Nortel Networks Corporation, a corporation organized under the laws of Canada ("NNC"), Nortel Networks Limited, a corporation organized under the laws of Canada ("NNL"), Nortel Networks Inc., a corporation organized under the laws of Delaware ("NNI" and, together with NNC and NNL, the "Main Sellers"), and the other entities identified therein as Sellers, and Ciena Corporation, a corporation organized under the laws of Delaware (the "Purchaser"). Unless otherwise specified, capitalized terms used herein and not defined shall have the meaning set forth in the Agreement.

WHEREAS, pursuant to the Agreement, the Sellers (as defined in the Agreement) have agreed to transfer to the Purchaser and/or the Designated Purchasers (as defined in the Agreement) the Assets and Assumed Liabilities (each as defined in the Agreement) from the Sellers;

WHEREAS, the Parties have determined that certain Affiliates of the Main Sellers that are the owners of record of three (3) patents listed in Section 1.1(k) of the Sellers Disclosure Schedule, which patents are to be transferred to the Purchaser upon Closing, are not currently party to the Agreement;

WHEREAS, pursuant to Section 11.4 of the Agreement, the Parties desire to amend certain provisions of the Agreement, including Exhibit A and Exhibit C to the Agreement and Section 11.15 of the Sellers Disclosure Schedule, as set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein and for other good, valuable and binding consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. The following entities are hereby added to Exhibit A to the Agreement:

   (a) CoreTek, Inc.;

   (b) Qtera Corporation; and

   (c) Xros, Inc.

2. The following entities are hereby added to Part 2 of Exhibit C to the Agreement:

| | |
|---|---|
| CoreTek, Inc. | Delaware |
| Qtera Corporation | Delaware |
| Xros, Inc. | Delaware |

3. In Section 1.1 of the Agreement the definition of "TSA Sellers" is hereby deleted and replaced with:

""**TSA Sellers**" means the Main Sellers, Nortel Networks UK Limited, Nortel Networks (Ireland) Limited and the Other Sellers (other than CoreTek, Inc., Qtera Corporation and Xros, Inc.)."

4. In Section 11.15(c) of the Agreement, the reference to "all the other U.S. Debtors and" is hereby deleted.

5. Section 11.16 of the Agreement is hereby deleted and replaced with:

"**Obligations of Sellers.** When references are made in this Agreement to certain Sellers causing Other Sellers to undertake (or to not undertake) certain actions, or agreements are being made on behalf of certain Other Sellers or other Affiliates, "Sellers" for purposes of such clause shall be deemed to mean the representative appointed pursuant to Section 11.15 for such Other Seller."

6. Section 11.15(a)(i) of the Sellers Disclosure Schedule is hereby deleted and replaced with:

| Entity Name | Jurisdiction |
|---|---|
| CoreTek, Inc. | Delaware |
| Xros, Inc. | Delaware |

7. The following row is hereby added to the table in Section 11.15(a)(iii) of the Sellers Disclosure Schedule:

| | |
|---|---|
| Qtera Corporation | Delaware |

8. This Amendment No. 4 shall not constitute a modification of any provision, term or condition of the Agreement or any other Transaction Document except solely to the extent and solely for the purposes described herein. Except to the extent that provisions of the Agreement are hereby expressly modified as set forth herein, the Agreement and the other Transaction Documents shall remain unchanged and in full force and effect.

9. The recitals to this Amendment No. 4 form an integral part hereof.

10. This Amendment No. 4 may be executed in multiple counterparts (including by facsimile or other electronic means), each of which shall constitute one and the same document.

11. This Amendment No. 4 shall be binding upon the parties hereto and their respective successors and assigns.

12. Any term or provision of this Amendment No. 4 that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining

terms and provisions hereof or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction.

13. This Amendment No. 4 shall be governed by and construed in all respects by the Laws of the State of New York without regard to the rules of conflict of laws of the State of New York or any other jurisdiction. Any Action arising out of or relating to this Amendment No. 4 shall be resolved in accordance with Section 11.6 of the Agreement.

*[Signature Page Follows]*

IN WITNESS WHEREOF, the parties hereto have signed, or caused this Amendment No. 4 to be signed by their respective officers thereunto duly authorized, as of the date first written above.

**NORTEL NETWORKS CORPORATION,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(i) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS LIMITED,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(ii) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS INC.,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(iii) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: Chief Legal Officer

*[Signature page to Amendment No. 4 to the ASA]*

**CIENA CORPORATION**

By: /s/ David M. Rothenstein
Name: David M. Rothenstein
Title: Senior Vice-President, General Counsel and Secretary

*Signature Page to Amendment No. 4*

**Exhibit 2.3**

**Amendment No. 5 to the Amended and Restated Asset Sale Agreement**

This Amendment No. 5 ("Amendment No. 5"), dated as of the 19th day of March 2010, to the Amended and Restated Asset Sale Agreement (the "Agreement"), dated as of November 24, 2009, as amended from time to time, by and among Nortel Networks Corporation, a corporation organized under the laws of Canada ("NNC"), Nortel Networks Limited, a corporation organized under the laws of Canada ("NNL"), Nortel Networks Inc., a corporation organized under the laws of Delaware ("NNI" and, together with NNC and NNL, the "Main Sellers"), and the other entities identified therein as Sellers, and Ciena Corporation, a corporation organized under the laws of Delaware (the "Purchaser"). Unless otherwise specified, capitalized terms used herein and not defined shall have the meaning set forth in the Agreement.

WHEREAS, the Parties agree that no Employee Records shall be transferred or assigned by the Sellers to the Purchaser or any Designated Purchaser pursuant to Section 2.1.1 of the Agreement;

WHEREAS, the Parties agree that the Sellers and the Purchaser shall cooperate following the Closing to identify and convey to the Purchaser those Employee Records of Transferred Employees which the Purchaser determines, in its sole discretion, it requires for any business or legal purposes as provided in Section 5.23(b);

WHEREAS, Section 2.2.1 of the Agreement provides for, among other things, the payment of the Purchase Price by the Purchaser, on its own behalf and as agent for the relevant Designated Purchasers;

WHEREAS, the Parties agree that in order to comply with applicable local Laws, a portion of the Purchase Price shall be paid directly to Nortel Networks de Colombia S.A.S.;

WHEREAS, the Parties agree that Nortel Networks Telecommunications Equipment (Shanghai) Co. Limited, Nortel Networks (China) Limited and Nortel Networks (Asia) Limited shall not transfer their respective right, title or interest in any Owned Inventory held by them respectively, on the Closing Date and the Purchaser shall have the right at any time after the Closing Date to designate one or more third parties (whether or not affiliated with the Purchaser) to which the Sellers shall transfer such Owned Inventory;

WHEREAS, Section 2.3.1 of the Agreement deals with the Closing Date and the transfer of legal title, equitable title and risk of loss with respect to the Assets and the Assumed Liabilities;

WHEREAS, Section 2.2.4 of the Agreement provides for an adjustment to the Purchase Price based upon the actual Net Working Capital Transferred as of the Closing Date;

WHEREAS, the Parties wish to clarify (i) the effective time of the transfer of legal title, equitable title and risk of loss with respect to the Assets and the Assumed Liabilities and (ii) the time as of which the actual Net Working Capital Transferred is calculated;

WHEREAS, the Parties agree that certain Affiliates of the Main Sellers that are not party to the Agreement should be made a party thereto;

WHEREAS, the Sellers and the Purchaser agree to amend the form of the Intellectual Property License Agreement as further set forth herein;

WHEREAS, the Sellers and the Purchaser agree to amend the form of the Trademark License Agreement as further set forth herein;

WHEREAS, pursuant to Section 11.4 of the Agreement, the Parties desire to amend certain provisions of the Agreement, including certain Exhibits and Sections of the Sellers Disclosure Schedule, as set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein and for other good, valuable and binding consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. The following definitions shall be added in alpha-order to Section 1.1 of the Agreement:

““**Additional Colombian Assets**” has the meaning set forth in Section 2.2.8.”

““**Additional Colombian Payment**” has the meaning set forth in Section 2.2.8.”

““**Chinese Owned Inventory**” has the meaning set forth in Section 2.1.11(a).”

““**Ciena Colombia**” means together, Ciena International, Inc., a company organized under the laws of Florida, and Ciena Communications, Inc., a company organized under the laws of Delaware.”

““**Colombia Allocation**” has the meaning set forth in Section 2.2.1(a).”

““**COP**” means Colombian Pesos.”

““**Designated Inventory Purchaser**” has the meaning set forth in Section 2.1.11(a).”

““**Employer Tax**” has the meaning set forth in Section 7.4(h)(iii).”

““**Inventory Designation Notice**” has the meaning set forth in Section 2.1.11(a).”

““**Italian Social Security Documentation**” has the meaning set forth in Section 6.9(e).”

““**Italian Social Security Ruling**” has the meaning set forth in Section 6.9(e).”

““**Italian Social Security Tax**” shall mean any Tax under the administration of INPS (*Istituto Nazionale di Previdenza Sociale*) or INAIL (*Istituto nazionale per le Assicurazioni e gli Infortuni sul lavoro*) or the jurisdiction or supervision of the Italian Ministry of Labour (*Ministero del Lavoro e delle Politiche Sociali*), including its relevant local bodies (*e.g.*, *Direzioni Provinciali del Lavoro*, *Direzioni Regionali del Lavoro*), including social security taxes, social security contributions and the unpaid portion of any employee contribution for such taxes.”

““**New Assigned Patents**” has the meaning set forth in Section 5.38.”

““**NNAL**” has the meaning set forth in Section 2.1.11(a).”

““**NNCL**” has the meaning set forth in Section 2.1.11(a).”

““**NNTE**” has the meaning set forth in Section 2.1.11(a).”

““**Non-EMEA Transferred Sales Employees**” has the meaning set forth in Section 7.4(h).”

““**Non-Transferred Sales Employees**” has the meaning set forth in Section 7.4(h).”

““**Nortel Colombia**” means Nortel Networks de Colombia S.A.S., a company organized under the laws of Colombia.”

““**Nortel Poland**” means Nortel Networks Polska Sp.z.o.o.”

““**Polish Excluded Taxes**” has the meaning set forth in Section 6.10(a).”

““**Polish Purchaser Party**” has the meaning set forth in Section 6.10(a).”

““**Polish Tax Claim**” has the meaning set forth in Section 6.10(b).”

““**Polish Tax Claim Notice**” has the meaning set forth in Section 6.10(b).”

““**Polish Tax Escrow Amount**” means $1,000,000, as such amount is adjusted in accordance with Section 6.10, which amount shall secure Nortel Poland’s obligations under Section 6.10.”

““**Post-Closing Sales Compensation Amount**” has the meaning set forth in Section 7.4(h)(iii).”

““**Pre-Closing Sales Compensation Amount**” has the meaning set forth in Section 7.4(h)(ii).”

““**ReMan Owned Equipment**” has the meaning set forth in Section 5.39.

““**SIC Plan**” has the meaning set forth in Section 7.4(h).”

““**Total Post-Closing Payment**” has the meaning set forth in Section 7.4(h)(iii).”

2. The definition of “Closing Inventory Amount” in Section 1.1 of the Agreement is hereby deleted and replaced with:

> ““**Closing Inventory Amount**” means, as of the Closing Date, the book value of the Owned Inventory (including, for the avoidance of doubt, the Chinese Owned Inventory) and the EMEA Owned Inventory, net of applicable provisions, that would be required to be reflected on a balance sheet of the Business as of such

date prepared in accordance with GAAP applied in a manner consistent with the Nortel Accounting Principles (to the extent consistent with GAAP)."

3. The definition of "Escrow Amount" in Section 1.1 of the Agreement is hereby deleted and replaced with:

   ""**Escrow Amount**" means the portion of the Purchase Price to be paid to the Escrow Agent on the Closing Date in accordance with Section 2.3.2(b) and, subject to adjustment in accordance with Section 2.1.7(b) of the Sellers Disclosure Schedule, such amount will consist of (i) the Working Capital Escrow Amount, (ii) the Carling Property Escrow Amount, (iii) the Tax Escrow Amount, (iv) the EMEA Tax Escrow Amount, (v) the Italian Tax Escrow Amount, (vi) the Polish Tax Escrow Amount and (vii) the FY09 Financial Statements Escrow Amount."

4. The definition of "Italian Tax Escrow Amount" in Section 1.1 of the Agreement is hereby deleted and replaced with:

   ""**Italian Tax Escrow Amount**" means $750,000, as such amount is adjusted in accordance with Section 6.9, which amount shall secure Nortel Italy's obligations under Section 6.9."

5. The definition of "Transferred Intellectual Property" in Section 1.1 of the Agreement is hereby deleted and replaced with:

   ""**Transferred Intellectual Property**" means (i) the Patents listed in Section 1.1(k) of the Sellers Disclosure Schedule and the New Assigned Patents, (ii) the Trademarks set forth in Section 1.1(l) of the Sellers Disclosure Schedule, and (iii) the Intellectual Property (other than Patents and Trademarks) owned by any of the Sellers that is exclusively used in connection with the Business as of the Closing Date, including the Software (including previous versions being utilized or supported as of the date hereof and versions in development) exclusively used in the Business."

6. Section 2.1.1(h) of the Agreement is hereby deleted and replaced with "the Employee Records of Transferred Employees identified by the Purchaser after the Closing Date in accordance with Section 5.23(b);".

7. Section 2.1.2(g) of the Agreement is hereby deleted and replaced with:

   "(g) (i) any books, records, files, documentation or sales literature other than the Business Information, (ii) any Employee Records of Transferred Employees other than those identified by Purchaser after the Closing Date in accordance with Section 5.23(b), and (iii) such portion of the Business Information that the Sellers are required by Law (including Laws relating to privilege or privacy) to retain (provided that copies of such information shall be provided to the Purchaser to the extent permitted by applicable Law or such agreement) and/or not to disclose;"

8. Section 5.23 of the Agreement is hereby deleted and replaced with:

"(a) After the Closing, the Purchaser shall have the right to reasonably request from the Main Sellers copies of all books, records, files, documentation and sales literature (other than Tax records and Employee Records, each of which are governed by other provisions of this Agreement) in the possession or under control of the Sellers and held or used in the Business (other than records to the extent prohibited by applicable Law), to which the Purchaser in good faith determines it needs access for *bona fide* business or legal purposes. The Sellers shall use commercially reasonable efforts to, or cause their Respective Affiliates to use commercially reasonable efforts to, provide such copies to the Purchaser (at the Purchaser's expense) as soon as reasonably practicable; provided, that the Sellers shall be allowed to redact any such requested document in order to delete any information and data relating to business segments of any such Seller and its Respective Affiliates not included in the Business; provided, further, that nothing herein shall require the Sellers to (i) disclose any information to the Purchaser if such information disclosure would jeopardize any attorney-client or legal privilege or (ii) contravene any applicable Law, fiduciary duty or agreement (including any confidentiality agreement to which the Sellers or any of their Affiliates is a party); it being understood, that the Sellers shall cooperate in any reasonable efforts and requests for waivers that would enable otherwise required disclosure to the Purchaser to occur without so jeopardizing privilege or contravening such Law, duty or agreement).

(b) After the Closing and only for so long as the Transition Services Agreement remains in effect, the Sellers shall cooperate with the Purchaser so that the Purchaser can identify those Employee Records of Transferred Employees which it determines in good faith are necessary or useful for any *bona fide* business or legal purpose and, upon written notice by the Purchaser, the Sellers shall provide to the Purchaser such Employee Records (or copies thereof) except to the extent prohibited by applicable data privacy Laws and subject to consent by such employee obtained or to be obtained by the Purchaser or the Designated Purchaser (including any consent, if required, to transfer Employee Records across geographical boundaries). Upon written request by the Purchaser to obtain copies of any additional individual Employee Records of Transferred Employees that are not obtained pursuant to the previous sentence that the Purchaser has determined in good faith that it needs for *bona fide* business or legal purpose, the Main Sellers shall, or shall cause their Respective Affiliates to, use commercially reasonable efforts to, provide the Purchaser with copies of such records as soon as reasonably practicable, except to the extent prohibited by applicable data privacy Laws and subject to (i) consent by such employee obtained or to be obtained by the Purchaser or the Designated Purchaser (including any consent, if required, to transfer Employee Records across geographical boundaries) and (ii) the applicable restrictions set forth in Section 5.23(a). Notwithstanding anything in this Agreement to the contrary, Employee Records shall not be transferred to the Purchaser or any Designated Purchaser except in accordance with this Section 5.23(b) or as required by applicable Law.

9. Section 7.4(d) of the Agreement is hereby deleted and replaced with "[Intentionally Omitted.]"

10. Section 2.2.1 of the Agreement is hereby deleted and replaced with:

> "Pursuant to the terms and subject to the conditions set forth in this Agreement, in consideration of the purchase, sale, assignment and conveyance of the Sellers' and EMEA Sellers' right, title and interest in, to and under the Assets and the EMEA Assets, respectively, pursuant to the terms hereof and pursuant to the terms of the EMEA Asset Sale Agreement, respectively, and of the rights granted by certain Sellers and the EMEA Sellers under the Intellectual Property License Agreement and the Trademark License Agreement, (A) the Purchaser, on its own behalf and as agent for the relevant Designated Purchasers, shall assume and become obligated to pay, perform and discharge, when due, the Assumed Liabilities and the EMEA Assumed Liabilities, (B) no later than Friday, March 26, 2010, Ciena Colombia shall pay to Nortel Colombia an aggregate amount of cash equal to COP221,506,740 (the "**Colombia Allocation**"), and (C) subject to adjustment following the Closing in accordance with Section 2.2.4.2, the Purchaser, on its own behalf and as agent for the relevant Designated Purchasers, shall pay to the Distribution Agent an amount of cash (the "**Purchase Price**") equal to Seven Hundred Seventy-Three Million Seven Hundred and Eighty Thousand dollars ($773,780,000) (the "**Base Cash Purchase Price**") less (X) the Escrow Amount and as adjusted pursuant to Sections 2.2.2 and 2.2.4 and Section 5.28 of the Sellers Disclosure Schedule or as otherwise expressly provided herein, in the Real Estate Terms and Conditions or in the EMEA Asset Sale Agreement, and (Y) one hundred and seventeen thousand dollars ($117,000) (in respect of the Colombia Allocation)."

11. The definition of "Cash Purchase Price" in Section 1.1 of the Agreement is hereby deleted and all references thereto in the Agreement shall be replaced with "Purchase Price".

12. A new Section 11.18 of the Agreement and shall read as follows:

> "**SECTION 11.18. Acknowledgement of Cash Replacement Election.** The Parties hereby acknowledge that prior to the date hereof, the Purchaser exercised the Cash Replacement Election (as defined in the Agreement, as amended, prior to the date hereof) in respect of the full principal amount of the Convertible Notes (as defined in the Agreement, as amended, prior to the date hereof) in accordance with the terms hereof and is paying the Purchase Price fully in cash. The Parties further acknowledge that any and all defined terms, representations, warranties, covenants, Closing conditions, Sections, Articles, or Appendices in or to the Agreement relating to the "Convertible Notes" (including without limitation, Sections 3.7, 4.15, 5.27, 5.33, 5.36 and 9.2(c) and Article VIII) are hereby deleted and the Agreement shall be read and interpreted accordingly."

13. Section 2.1.1(a) of the Agreement is hereby deleted and replaced with "the Owned Inventory as of the Closing Date other than the Chinese Owned Inventory;"

14. The following new Section 2.1.11 is hereby added to the Agreement:

"**2.1.11. Assets Not Assigned at Closing.**

(a) Notwithstanding anything in this Agreement, Nortel Networks Telecommunications Equipment (Shanghai) Co. Limited ("**NNTE**"), Nortel Networks (China) Limited ("**NNCL**") and Nortel Networks (Asia) Limited ("**NNAL**") shall not transfer their respective right, title or interest in any Owned Inventory that has been imported into the People's Republic of China (the "**Chinese Owned Inventory**") to the Purchaser or any Designated Purchaser at the Closing, provided, however, that as at and from the Closing Date, the Purchaser shall be responsible and liable for all risk of loss, theft, damage or destruction to the Chinese Owned Inventory. Following the Closing Date and no later than six (6) months from the Closing Date, the Purchaser or any Designated Purchaser shall provide written notice (the "**Inventory Designation Notice**") to the Main Sellers designating one or more Persons (each a "**Designated Inventory Purchaser**") to purchase the Chinese Owned Inventory (as specified in the Inventory Designation Notice) pursuant to a local asset transfer agreement or such similar document as required by applicable local Law. No later than five (5) Business Days following the receipt of an Inventory Designation Notice, NNTE, NNCL, and/or NNAL, as the case may be, shall execute such instruments of transfer and take such other actions as are required to sell and convey all of its right, title or interest in the Chinese Owned Inventory specified in the Inventory Designation Notice to the Designated Inventory Purchaser specified therein in consideration for the payment of a nominal purchase price payable in Chinese Renminbi equal to One (1) U.S. dollar ($1.00), plus all applicable Taxes, including VAT, on the value of the Chinese Owned Inventory. Notwithstanding the foregoing, in the event that NNCL, NNTE or NNAL are liquidating or in the event that they are closing the facility at which the Chinese Owned Inventory is located, NNCL, NNTE or NNAL, as the case may be, may by written notice to the Purchaser terminate such six (6) month period on the date that is the later of (x) three (3) months after Closing and (y) ten (10) Business Days after the date of such written notice.

(b) During the period following the Closing Date, NNTE, NNCL and NNAL shall hold the Chinese Owned Inventory in accordance with the terms of the Transition Services Agreement as if it had been transferred to the Purchaser or a Designated Purchaser at Closing. The Purchaser shall pay any and all amounts due in connection with the storage, handling and shipment of the Chinese Owned Inventory by the Sellers in accordance with the Transition Services Agreement. For up to six (6) months from the Closing Date (or until such earlier date as is specified in the last sentence of 2.1.11(a)), none of NNTE, NNCL or NNAL shall transfer its respective right, title or interest in the Chinese Owned Inventory to any Person other than a Designated Inventory Purchaser.

(c) If the Chinese Owned Inventory has not been transferred to a Designated Inventory Purchaser by the sixth (6th) month anniversary date of the Closing Date, the Purchaser shall notify NNTE, NNCL and NNAL in writing on or before such date to either (x) at the sole expense of the Purchaser or any Designated Purchaser, ship the Chinese Owned Inventory to the Purchaser or such Designated Purchaser at the Monkstown location unless the Purchaser otherwise provides the Main Sellers with reasonable advance written notice to the contrary, or (y) destroy the Chinese Owned Inventory at the Purchaser's sole cost or expense; provided, however, in the event that the Purchaser fails to deliver such notice, NNTE, NNCL and NNAL may take either such action at its sole discretion.

(d) The Purchaser acknowledges that any Chinese Owned Inventory that is consumed in the course of repair and return work conducted pursuant to the Transition Services Agreement shall not be replenished by NNTE, NNCL or NNAL, as the case may be."

15. Section 2.2.5 of the Agreement is hereby deleted and replaced with the following:

(a) "At the Closing, each of the Main Sellers, the EMEA Sellers or an authorized representative of the EMEA Sellers and the Purchaser shall enter into the Escrow Agreement with the Escrow Agent in respect of the Working Capital Escrow Amount, the Transition Services Escrow Amount, the Carling Property Escrow Amount, the Tax Escrow Amount, the EMEA Tax Escrow Amount, the Italian Tax Escrow Amount, the Polish Tax Escrow Amount, the FY09 Financial Statements Escrow Amount and the matters set forth on Section 2.1.7(b) of the Sellers Disclosure Schedule.

(b) Each of the Main Sellers, the EMEA Sellers or an authorized representative of the EMEA Sellers and the Purchaser hereby undertake to promptly execute and deliver to the Escrow Agent, in accordance with the Escrow Agreement, instructions to pay to the Sellers, the EMEA Sellers or the Purchaser, as applicable, funds from the escrow account established pursuant to the Escrow Agreement at any time that such Person becomes entitled to such payment from the escrow account pursuant to the terms of the Escrow Agreement and (i) Section 2.2.4.2 in respect of the Working Capital Escrow Amount, (ii) the terms of the Transition Services Agreement in respect of the Transition Services Escrow Amount, (iii) the terms of the Carling Property Lease Agreements in respect of the Carling Property Escrow Amount, (iv) Section 6.7 in respect of the Tax Escrow Amount, (v) Section 6.8 in respect of the EMEA Tax Escrow Amount, (vi) Section 6.9 in respect of the Italian Tax Escrow Amount, (vii) Section 6.10 in respect of the Polish Tax Escrow Amount, (vi) Section 5.26(b) in respect of the FY09 Financial Statements Escrow Amount and (viii) the terms of Section 2.1.7(b) of the Sellers Disclosure Schedule."

16. Section 6.8 of the Agreement is hereby deleted and replaced with the following:

(a) "In the event that any Tax Authority shall make any claim against Purchaser or any EMEA Designated Purchaser or any of their Affiliates (an "**EMEA Purchaser Party**") for (A) any Taxes that are EMEA Excluded Liabilities of any EMEA Seller or (B) any Succession Tax Liabilities or (C) any Succession Tax Lien (any Taxes described in (A) and (B) and (C) above hereby are referred to collectively as "**EMEA Excluded Taxes**"), such EMEA Purchaser Party shall be entitled to recover all Losses arising out of or in connection with such EMEA Excluded Taxes promptly (in accordance with the following provisions) by obtaining cash from the EMEA Tax Escrow Amount in an amount equal to the aggregate amount of such Losses, provided that: (i) the aggregate amount to be recovered under this Section 6.8 in respect of such Losses shall not exceed the EMEA Tax Escrow Amount (plus any accrued interest on the EMEA Tax Escrow Amount); (ii) the only Losses recoverable under this Section 6.8 shall be Losses incurred by an EMEA Purchaser Party after a Tax Authority has made a claim described in (A), (B) or (C) above, as applicable; and (iii) no claim shall be allowed by any EMEA Purchaser Party in respect of Italian Excluded Taxes or Polish Excluded Taxes.

(b) If a claim for Losses under subsection (a) (an "**EMEA Tax Claim**") is to be made by an EMEA Purchaser Party, the Purchaser shall give written notice (an "**EMEA Tax Claim Notice**") on behalf of such EMEA Purchaser Party to the Joint Administrators promptly after such EMEA Purchaser Party becomes aware that a Tax Authority has made a claim against it for any EMEA Excluded Taxes or that such Taxes have given rise to any Succession Tax Lien for which recovery is sought under this Section 6.8, stating, with reasonable specificity, the basis for the EMEA Tax Claim and the amount of EMEA Excluded Taxes claimed, and including a copy of all relevant documents received from the relevant Tax Authority. In the event that any EMEA Purchaser Party is entitled to recover the amount of any such Losses from the EMEA Tax Escrow Amount, the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent authorizing distribution of the amount of such Loss to such EMEA Purchaser Party and such EMEA Purchaser Party shall be responsible for paying over to the relevant Tax Authority the amount of such EMEA Excluded Taxes distributed to it from the EMEA Tax Escrow Amount to the extent it has not already done so at the time of the distribution of such amount from such fund, and shall provide the Joint Administrators with such written evidence as is reasonably requested in writing to confirm that payment to the relevant Tax Authority has been duly made.

(c) On the date that is the first Business Day after the third anniversary of the Closing Date, the Purchaser and the Joint Administrators shall deliver to the Escrow Agent joint written instructions to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, any remaining portion of the EMEA Tax Escrow Amount (including any accrued interest thereon) in excess of an amount equal to the aggregate of all EMEA Tax Claims which have been asserted prior to such date evidenced by one or more EMEA Tax Claim

Notices and which remain pending and unresolved on such date. Thereafter, as soon as reasonably practicable after the final resolution of all such EMEA Tax Claim(s), the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, the remaining portion of the EMEA Tax Escrow Amount (including any accrued interest thereon).

(d) In the event that an EMEA Tax Claim Notice is served, the Purchaser shall take such steps as are commercially reasonable to mitigate or otherwise defend the assessment(s) made by the relevant Tax Authority. In the event that a payment is made to an EMEA Purchaser Party pursuant to this Section 6.8, and subsequently an EMEA Purchaser Party or any Affiliate becomes entitled to and receives a refund of amounts in respect of EMEA Excluded Taxes, then the Purchaser shall or shall procure that the relevant EMEA Purchaser Party shall promptly pay to Distribution Agent, on behalf of the Sellers and EMEA Sellers, an amount equal to such refund (including any interest paid in connection with such refund), net of reasonable out-of-pocket expenses incurred by the EMEA Purchaser Party in obtaining such refund, unless (i) such refund is received prior to the third anniversary of the Closing Date or (ii) at the time the refund is received, the EMEA Tax Escrow Amount is less than the sum of the EMEA Tax Claims that are evidenced by one or more EMEA Tax Claim Notices and which remain pending and unresolved on such date, then, in each case, the Purchaser Party shall pay the net amount of such refund to the Escrow Agent to be added to the EMEA Tax Escrow Amount."

17. Section 6.9 of the Agreement is hereby deleted and replaced with the following:

(a) "In the event that any Tax Authority in Italy shall make any claim against the Purchaser or any EMEA Designated Purchaser or any of their Affiliates (an "**Italian Purchaser Party**") for (A) any Taxes that are EMEA Excluded Liabilities of any EMEA Seller or (B) any Succession Tax Liabilities or (C) any Succession Tax Lien (any such Taxes are hereby are referred as "**Italian Excluded Taxes**"), such Italian Purchaser Party shall be entitled to recover all Losses arising out of or in connection with such Italian Excluded Taxes promptly (in accordance with the following provisions) by obtaining cash from the Italian Tax Escrow Amount in an amount equal to the aggregate amount of such Losses, provided that: (i) the aggregate amount to be recovered under this Section 6.9 in respect of such Losses shall not exceed the Italian Tax Escrow Amount (plus any accrued interest on the Italian Tax Escrow Amount); and (ii) the only Losses recoverable under this Section 6.9 shall be Losses incurred by an Italian Purchaser Party after a Tax Authority in Italy has made a claim.

(b) If a claim for Losses under subsection (a) (an "**Italian Tax Claim**") is to be made by an Italian Purchaser Party, the Purchaser shall give written notice (an "**Italian Tax Claim Notice**") on behalf of such Italian Purchaser Party to the

Joint Administrators promptly after such Italian Purchaser Party becomes aware that a Tax Authority in Italy has made a claim against it for Italian Excluded Taxes or that such Taxes have given rise to any Succession Tax Lien for which recovery is sought under this Section 6.9, stating, with reasonable specificity, the basis for the Italian Tax Claim and the amount of Italian Excluded Taxes claimed, and including a copy of all relevant documents received from the relevant Tax Authority. In the event that any Italian Purchaser Party is entitled to recover the amount of any such Losses from the Italian Tax Escrow Amount, the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent authorizing distribution of the amount of such Loss to such Italian Purchaser Party and such Italian Purchaser Party shall be responsible for paying over to the relevant Tax Authority the amount of such Italian Excluded Taxes distributed to it from the Italian Tax Escrow Amount to the extent it has not already done so at the time of the distribution of such amount from such fund, and shall provide the Joint Administrators with such written evidence as is reasonably requested in writing to confirm that payment to the relevant Tax Authority has been duly made.

(c) On the date that is the first Business Day after the third anniversary of the Closing Date, the Purchaser and the Joint Administrators shall deliver to the Escrow Agent joint written instructions to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, any remaining portion of the Italian Tax Escrow Amount (including any accrued interest thereon) in excess of an amount equal to the aggregate of all Italian Tax Claims which have been asserted prior to such date evidenced by one or more Italian Tax Claim Notices and which remain pending and unresolved on such date. Thereafter, as soon as reasonably practicable after the final resolution of all such Italian Tax Claim(s), the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, the remaining portion of the Italian Tax Escrow Amount (including any accrued interest thereon).

(d) In the event that an Italian Claim Notice is served, the Purchaser shall take such steps as are commercially reasonable to mitigate or otherwise defend the assessment(s) made by the relevant Tax Authority (including but not limited to disputing and opposing any assessment(s) in respect of Italian Excluded Taxes (other than Italian Social Security Taxes) on the basis of the ruling dated 2 December 2009 in response to the Interpellation addressed to the regional department of the Revenue Office of Lombardy as submitted by Nortel Italy on 4 August 2009). In the event that a payment is made to an Italian Purchaser Party pursuant to this Section 6.9, and subsequently an Italian Purchaser Party or any Affiliate becomes entitled to and receives a refund of amounts in respect of Italian Excluded Taxes, then the Purchaser shall or shall procure that the relevant Italian Purchaser Party shall promptly pay to Distribution Agent, on behalf of the Sellers and EMEA Sellers, an amount equal to such refund (including any interest paid in connection with

such refund), net of reasonable out-of-pocket expenses incurred by the Italian Purchaser Party in obtaining such refund, unless (i) such refund is received prior to the third anniversary of the Closing Date (other than where, prior to such refund being received, the provisions at Section 6.9(e) have applied) or (ii) at the time the refund is received, the Italian Tax Escrow Amount is less than the sum of the Italian Tax Claims that are evidenced by one or more Italian Tax Claim Notices and which remain pending and unresolved on such date, then, in each case, the Purchaser Party shall pay the net amount of such refund to the Escrow Agent to be added to the Italian Tax Escrow Amount.

(e) Upon delivery by Nortel Italy to the Purchaser after Closing of either:

(A) a ruling (so-called "*interpello*") issued by the Italian Ministry of Labour (*Ministero del Lavoro e delle Politiche Sociali*) (the "**Italian Social Security Ruling**"); or

(B) any other certificate, ruling, judgement or other written evidence issued by INPS (*Istituto Nazionale di Previdenza Sociale*) and/or INAIL (*Istituto nazionale per le Assicurazioni e gli Infortuni sul lavoro*) and/or the Italian Ministry of Labour (*Ministero del Lavoro e delle Politiche Sociali*), including its relevant local bodies (e.g. *Direzioni Provinciali del Lavoro, Direzioni Regionali del Lavoro*) (the "**Italian Social Security Documentation**"),

which in each case is reasonably satisfactory in form and content to the Purchaser (acting reasonably and in good faith at all times) and, if such certificate, ruling or other documentation does not address Succession Tax Liens, such other written evidence as is reasonably satisfactory in form and content to the Purchaser (acting reasonably and in good faith at all times) addressing Succession Tax Liens, together confirming either:

(i) that Nortel Italy does not have any liabilities for Italian Social Security Taxes that could become Succession Tax Liabilities or could give rise to Succession Tax Liens; or

(ii) that it is not possible (whether as a result of Bankruptcy Proceedings or otherwise) for liabilities for Italian Social Security Taxes of Nortel Italy to become Succession Tax Liabilities or give rise to Succession Tax Liens; or

(iii) that it is not possible (whether as a result of Bankruptcy Proceedings or otherwise) for liabilities for Italian Social Security Taxes of a company that is subject to an Insolvency Procedure governed by EC Regulation 1346/2000/EC to become Succession Tax Liabilities or give rise to Succession Tax Liens;

then the Purchaser and Joint Administrators shall deliver to the Escrow Agent joint written instructions to release to the Distribution Agent, on behalf of the Sellers and the EMEA Sellers, any remaining portion of the Italian Tax Escrow Amount (including any accrued

interest thereon) in excess of an amount equal to the aggregate of all Italian Tax Claims which have been asserted prior to such date evidenced by one or more Italian Tax Claim Notices and which remain pending and unresolved on such date, provided that as soon as reasonably practicable after the final resolution of each such Italian Tax Claim, the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, the remaining portion of the Italian Tax Escrow Amount referable to that Italian Tax Claim (including any accrued interest thereon).

(f) The Purchaser and/or any Italian Purchaser Party shall reasonably cooperate with the EMEA Sellers to obtain the Italian Social Security Ruling (including but not limited to (i) being included as an addressee of the Italian Social Security Ruling and (ii) on request by the EMEA Sellers, using good faith efforts to agree to the form and content of any request or application for the Italian Social Security Ruling in advance of such request or application being made; provided, for the avoidance of doubt, that agreeing to the form and content of any request or application shall not compromise or foreclose the Purchaser's or any Italian Purchaser Party's rights under Section 6.9(e) to approve the form and content of the Italian Social Security Ruling actually received from a Tax Authority), or the Italian Social Security Documentation (including but not limited to (i) being included as an addressee of the Italian Social Security Documentation and (ii) on request by the EMEA Sellers, using good faith efforts to agree to the form and content of any request or application for the Italian Social Security Documentation in advance of such request or application being made; provided, for the avoidance of doubt, that agreeing to the form and content of any request or application shall not compromise or foreclose the Purchaser's or any Italian Purchaser Party's rights under Section 6.9(e) to approve the form and content of the Italian Social Security Documentation actually received from a Tax Authority).

(g) For the avoidance of doubt, the Parties acknowledge and agree that where a reasonably satisfactory Italian Social Security Ruling has been provided which satisfies the requirements of Section 6.9(e)(i), (ii) or (iii) above, no Italian Social Security Documentation shall be required to be provided in addition to it."

18. A new Section 6.10 is hereby added and shall read as follows:

(a) "In the event that any Tax Authority in Poland shall make any claim against the Purchaser or any EMEA Designated Purchaser or any of their Affiliates (a "**Polish Purchaser Party**") for (A) any Taxes that are EMEA Excluded Liabilities of any EMEA Seller or (B) any Succession Tax Liabilities or (C) any Succession Tax Lien (any such Taxes are hereby are referred as "**Polish Excluded Taxes**"), such Polish Purchaser Party shall be entitled to recover all Losses arising out of or in connection with such Polish Excluded Taxes promptly (in accordance with the following provisions) by obtaining cash from the Polish Tax Escrow Amount in an amount equal to the aggregate

amount of such Losses, provided that: (i) the aggregate amount to be recovered under this Section 6.10 in respect of such Losses shall not exceed the Polish Tax Escrow Amount (plus any accrued interest on the Polish Tax Escrow Amount); and (ii) the only Losses recoverable under this Section 6.10 shall be Losses incurred by a Polish Purchaser Party after a Tax Authority in Poland has made a claim.

(b) If a claim for Losses under subsection (a) (a "**Polish Tax Claim**") is to be made by a Polish Purchaser Party, the Purchaser shall give written notice (a "**Polish Tax Claim Notice**") on behalf of such Polish Purchaser Party to the Joint Administrators promptly after such Polish Purchaser Party becomes aware that a Tax Authority in Poland has made a claim against it for Polish Excluded Taxes or that such Taxes have given rise to any Succession Tax Lien for which recovery is sought under this Section 6.10, stating, with reasonable specificity, the basis for the Polish Tax Claim and the amount of Polish Excluded Taxes claimed, and including a copy of all relevant documents received from the relevant Tax Authority. In the event that any Polish Purchaser Party is entitled to recover the amount of any such Losses from the Polish Tax Escrow Amount, the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent authorizing distribution of the amount of such Loss to such Polish Purchaser Party and such Polish Purchaser Party shall be responsible for paying over to the relevant Tax Authority the amount of such Polish Excluded Taxes distributed to it from the Polish Tax Escrow Amount to the extent it has not already done so at the time of the distribution of such amount from such fund, and shall provide the Joint Administrators with such written evidence as is reasonably requested in writing to confirm that payment to the relevant Tax Authority has been duly made.

(c) On the date that is the first Business Day after the third anniversary of the Closing Date, the Purchaser and the Joint Administrators shall deliver to the Escrow Agent joint written instructions to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, any remaining portion of the Polish Tax Escrow Amount (including any accrued interest thereon) in excess of an amount equal to the aggregate of all Polish Tax Claims which have been asserted prior to such date evidenced by one or more Polish Tax Claim Notices and which remain pending and unresolved on such date. Thereafter, as soon as reasonably practicable after the final resolution of all such Polish Tax Claim(s), the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, the remaining portion of the Polish Tax Escrow Amount (including any accrued interest thereon).

(d) In the event that a Polish Tax Claim Notice is served, the Purchaser shall take such steps as are commercially reasonable to mitigate or otherwise defend the assessment(s) made by the relevant Tax Authority. In the event that a payment is made to a Polish Purchaser Party pursuant to this Section 6.10, and

subsequently a Polish Purchaser Party or any Affiliate becomes entitled to and receives a refund of amounts in respect of Polish Excluded Taxes, then the Purchaser shall or shall procure that the relevant Polish Purchaser Party shall promptly pay to Distribution Agent, on behalf of the Sellers and EMEA Sellers, an amount equal to such refund (including any interest paid in connection with such refund), net of reasonable out-of-pocket expenses incurred by the Polish Purchaser Party in obtaining such refund, unless (i) such refund is received prior to the third anniversary of the Closing Date (other than where, prior to such refund being received, the provisions at Section 6.10(e) have applied) or (ii) at the time the refund is received, the Polish Tax Escrow Amount is less than the sum of the Polish Tax Claims that are evidenced by one or more Polish Tax Claim Notices and which remain pending and unresolved on such date, then, in each case, the Purchaser Party shall pay the net amount of such refund to the Escrow Agent to be added to the Polish Tax Escrow Amount.

(e) Upon delivery by Nortel Poland or by the relevant Polish Tax Authority (including, for the avoidance of doubt, the ZUS (*Zaklad Ubezpieczeń Spolecznych*)) to the Purchaser after Closing of a certificate, ruling or other documentation issued by the Tax Authorities in Poland reasonably satisfactory in form and content to the Purchaser (acting reasonably and in good faith at all times) and, if such certificate, ruling or other documentation does not address Succession Tax Liens, such other written evidence as is reasonably satisfactory in form and content to the Purchaser (acting reasonably and in good faith at all times) addressing Succession Tax Liens, together confirming either:

(i) that Nortel Poland does not have any liabilities for Tax that could become Succession Tax Liabilities or could give rise to Succession Tax Liens; or

(ii) that it is not possible (whether as a result of Bankruptcy Proceedings or otherwise) for liabilities for Tax of Nortel Poland to become Succession Tax Liabilities or give rise to Succession Tax Liens,

then the Purchaser and Joint Administrators shall deliver to the Escrow Agent joint written instructions to release to the Distribution Agent, on behalf of the Sellers and the EMEA Sellers, any remaining portion of the Polish Tax Escrow Amount (including any accrued interest thereon) in excess of an amount equal to the aggregate of all Polish Tax Claims which have been asserted prior to such date evidenced by one or more Polish Tax Claim Notices and which remain pending and unresolved on such date, provided that as soon as reasonably practicable after the final resolution of each such Polish Tax Claim, the Purchaser and the Joint Administrators shall issue joint written instructions to the Escrow Agent to release to the Distribution Agent, on behalf of the Sellers and EMEA Sellers, the remaining portion of the Polish Tax Escrow Amount referable to that Polish Tax Claim (including any accrued interest thereon).

(f) The Purchaser and/or any Polish Purchaser Party shall reasonably cooperate with the EMEA Sellers to obtain any certificate, ruling or other documentation or other written evidence referred to in Section 6.10(e) above (including but not limited to (i) submitting or filing a request or application prepared by the EMEA Sellers and/or being included as an addressee of any certificate, ruling or other documentation or other written evidence, and (ii) on request by the EMEA Sellers, using good faith efforts to agree to the form and content of any request or application for any certificate, ruling or other documentation or other written evidence in advance of such request or application being made; provided, for the avoidance of doubt, that agreeing to the form and content of any such request or application shall not compromise or foreclose the Purchaser's or any Polish Purchaser Party's rights under Section 6.10(e) to approve the form and content of the certificate, ruling, other documentation or other evidence actually received from a Tax Authority)."

19. A new Section 2.2.8 is hereby added and shall read as follows:

**"2.2.8 Post-Closing Transfers of Assets in Colombia.** In the event that additional tangible Assets of Nortel Colombia which are not otherwise transferred as of the Closing are identified and transferred to Ciena Colombia post-Closing in accordance with the terms of this Agreement (the "**Additional Colombian Assets**"), (i) the Purchaser shall cause Ciena Colombia to pay to Nortel Colombia in COP, the net book value of the Additional Colombian Assets (the "**Additional Colombian Payment**") as expressed in the invoice issued by Nortel Colombia in connection therewith and (ii) prior to such payment, the Sellers (other than Nortel Colombia) shall reimburse the Purchaser for the Additional Colombian Payment and any associated transaction fees or expenses (including Transfer Taxes); provided, however, that the Sellers shall not reimburse the Purchaser for any fees or expenses for which the Purchaser would have borne responsibility under the terms of the Agreement had the Additional Colombian Assets been transferred to Ciena Colombia on the Closing Date, except to the extent such fees or expenses exceed the amounts for which the Purchaser would have been liable had the Additional Colombian Assets been transferred to Ciena Colombia on the Closing Date and provided further, however, that the Sellers shall not reimburse the Purchaser for any legal fees and expenses.

20. Section 2.3.1 of the Agreement is hereby deleted and replaced with:

**"2.3.1. Closing Date.** The completion of the purchase and sale of the Assets and the assumption of the Assumed Liabilities (the "**Closing**") shall occur simultaneously with closing of the transaction contemplated by the EMEA Asset Sale Agreement and shall take place at the offices of Ogilvy Renault LLP in Toronto, Canada commencing at 9:00 a.m. local time on the date which is the later of (i) March 19, 2010, (ii) the date that is the earlier of (x) the Service Readiness Date and (y) May 7, 2010, and (iii) five (5) Business Days after the day upon which all of the conditions set forth under Article IX (other than conditions to be satisfied at the Closing, but subject to the waiver or fulfillment of those

conditions) have been satisfied or, if permissible, waived by the Main Sellers and/or the Purchaser (as applicable), or on such other place, date and time as shall be mutually agreed upon in writing by the Purchaser and the Main Sellers (the day on which the Closing takes place being the "**Closing Date**").

Legal title, equitable title and risk of loss with respect to the Assets will transfer to the Purchaser or the relevant Designated Purchaser, and the Assumed Liabilities will be assumed by the Purchaser and the relevant Designated Purchasers simultaneously in all jurisdictions at such time as the Closing actually occurs. For the avoidance of doubt, (i) all Transferred Employees shall transfer at the Employee Transfer Date and (ii) for the purposes of calculating the Net Working Capital Transferred as of the Closing Date, all components thereof shall be determined as of 11:59 p.m. local time on the Closing Date in each applicable jurisdiction."

21. Section 2.3.2(b) is hereby deleted and replaced with:

"(b) the Purchaser shall deliver or cause to be delivered (i) to the Distribution Agent, an amount in cash equal to the Base Cash Purchase Price (as adjusted in accordance with Sections 2.2.2 and 2.2.3) less the sum of (A) the Escrow Amount and (B) one hundred and seventeen thousand dollars ($117,000) (in respect of the Colombia Allocation), by wire transfer in immediately available funds to an account or accounts designated at least two (2) Business Days prior to the Closing Date by the Distribution Agent in a written notice to the Purchaser, (ii) to the Escrow Agent, an amount equal to the Escrow Amount to be held and disbursed in accordance with the Escrow Agreement, this Agreement and the Carling Property Lease Agreements, and (iii) as directed by the Sellers, the amount owing pursuant to Section 4(a)(ii) of the Transition Services Agreement;"

22. A new Section 2.3.2.1 is hereby added and shall read as follows:

**"2.3.2.1 Post-Closing Purchase Price Payments.** No later than Friday, March 26, 2010, Ciena Colombia shall deliver to Nortel Colombia an amount equal to the Colombia Allocation by wire transfer of COP in immediately available funds to an account designated prior to the Closing Date by the Sellers to the Purchaser."

23. The following is hereby added to the end of Section 5.34 of the Agreement:

"To the extent that, prior to the Closing Date, the Sellers have not completed their work under this Section 5.34 and to the extent that the Purchaser has notified the Sellers in writing prior to the Closing Date of a material defect in title of any of the Transferred Patents, and to the extent that the Purchaser has allowed the Sellers to retain the necessary documentation and have access to the necessary Transferred Employees to correct the defect, the Sellers shall, as soon as reasonably practicable and in any event within thirty (30) days after the Closing Date, take, at their sole cost and expense, all reasonable steps requested by the Purchaser in order to correct all material defects in title as specified by the

Purchaser in writing prior to the Closing Date and affecting any of the Transferred Patents, including without limitation, making any filings with any relevant government registry or patent office, as applicable."

24. A new Section 5.38 is hereby added and shall read as follows:

**"SECTION 5.38. Patent Segmentation.** The Sellers agree to review, within 90 days of the Closing Date, the Sellers' patent applications with a priority filing date after October 16, 2009 and prior to the Closing Date to determine whether they (or the inventions they claim) were predominantly used in the Business as of the Closing Date; it being understood that in making such determination, the Sellers will act in good faith, using the same standard and substantially similar evaluation mechanism as was applied by the Sellers prior to the Closing Date to determine which patents should be assigned to the Purchaser and to the purchasers of other business units of the Sellers and which patents should be retained by the Sellers because they were not predominantly used by the Business or any other business unit of the Sellers. The Purchaser will have the right to have Gord Mein and Jean-Pierre Fortin participate in such review, including the right to review all such patent applications which may be relevant and the right to make recommendations concerning which of such patent applications (or inventions claimed by such applications) were predominantly used in the Business as of the Closing Date. However, the final determination of whether any of such reviewed patent applications are predominantly used in the Business as of the Closing Date will be in the Sellers' discretion in accordance with this Section 5.38; provided, however in the event that the Purchaser disagrees, the Purchaser shall notify the Main Sellers of its disagreement and in the event that they are unable to agree, any dispute shall be resolved in accordance with Section 11.6(b) of the Agreement. The Sellers shall notify the Purchaser in writing not later than 100 days after the Closing Date whether any of such reviewed patent applications were found by the Sellers, based on the foregoing review, to be predominantly used in the Business as of the Closing Date (such predominantly-used patent applications, the "New Assigned Patents"). The Sellers hereby assign all their right, title and interest in the New Assigned Patents to the Purchaser and shall execute, as soon as practicable after delivery of the foregoing notice, any further documentation reasonably requested by the Purchaser to confirm and record such assignment."

25. A new Section 5.39 is hereby added and shall read as follows:

**"SECTION 5.39. ReManufacturing Assets and Operations.** Notwithstanding anything to the contrary contained in this Agreement or any of the Transaction Documents, on or before May 15, 2010, the Purchaser, at its sole expense, shall relocate all of the Owned Equipment located at the premises leased by the Sellers in Research Triangle Park, North Carolina from GEEP (the "ReMan Owned Equipment"). Until such time as the Purchaser relocates the ReMan Owned Equipment, the Sellers shall be permitted to use the ReMan Equipment to provide interoperability and other similar testing for the Sellers' retained businesses and for purchasers of other business units of the Sellers pursuant to agreements that

are similar to the Transition Services Agreement. The Purchaser and the Sellers shall cooperate to ensure that each of Purchaser and Sellers have reasonable access to the ReMan Owned Equipment on a basis that is consistent with past practice."

26. A new Section 7.4(h) is hereby added and shall read as follows:

"(h) The Sellers and the Purchaser hereby agree to the following with respect to Transferred Employees who participate as of the Closing Date in Nortel's Global Sales Incentive Compensation Plan (effective January 1, 2010) (the "SIC Plan," and such employees, "Non-EMEA Transferred Sales Employees"):

(i) The Sellers shall be responsible for paying sums due under the SIC Plan in respect of the Non-EMEA Transferred Sales Employees to the extent accrued prior to and on the Closing Date and shall pay such amounts (and any related employment and withholding Taxes arising out of such payment) on approximately the same date the Sellers pay similarly-situated employees of the Sellers who participate in the SIC Plan. The Purchaser shall, or shall procure that the relevant Designated Purchaser shall, be responsible for paying sums due under the SIC Plan in respect of the Non-EMEA Transferred Sales Employees to the extent accrued after the Closing Date. The Sellers shall calculate the amounts payable by the Purchaser for the period starting the day after the Closing Date to April 30, 2010 (inclusive) in accordance with the applicable terms of Annex B2 to Schedule B of the Transition Services Agreement and shall deliver such calculations to the Purchaser as provided therein. The Purchaser shall, or shall procure that the relevant Designated Purchaser shall, pay such calculated sums (and any related employment and withholding Taxes arising out of such payment) to the Non-EMEA Transferred Sales Employees within 20 Business Days of the receipt of such calculations from the Sellers.

The Sellers and the Purchaser hereby further agree to the following with respect to the Employees with the employee identification numbers set forth on Schedule 7.4(h) attached as Annex A hereto, each of whom participate as of March 1, 2010, in the SIC Plan (such employees being the "Non-Transferred Sales Employees"):

(ii) The Sellers shall pay to each Non-Transferred Sales Employee the amount of sales compensation relating to the period prior to and including the Closing Date, as determined in accordance with the terms of the SIC Plan and the Sellers' customary practices (the "Pre-Closing Sales Compensation Amount"). Such payment shall be made on approximately the same date the Sellers pay similarly-situated employees of the Sellers who participate in the SIC Plan.

(iii) The Sellers shall calculate the amount of sales compensation for each Non-Transferred Sales Employee relating to the period from but excluding the Closing Date through March 31, 2010, in accordance with the methodology set out in Annex B2 to Schedule B of the Transition Services Agreement ("Post-Closing Sales Compensation Amount") at such time as the Sellers perform similar calculations for similarly-situated employees of the Sellers who participate in the SIC Plan. Such calculations shall be delivered promptly by Sellers in writing to the Purchaser along with a calculation of the employer tax due on such Post-Closing Sales Compensation Amount ("Employer Tax" and, together with the Post-Closing Sales Compensation Amount, the "Total Post-Closing Payment").

(iv) Within ten (10) Business Days of receipt of such calculations with respect to the Total Post-Closing Payment with respect to each Non-Transferred Sales Employee, the Purchaser shall remit to the Sellers the Total Post-Closing Payment with respect to each such Non-Transferred Sales Employee; provided, however, in no event shall Purchaser have any obligation in respect of the Total Post-Closing Payment in excess of $56,000.

(v) Following Sellers' receipt of such amounts as set out in paragraph (iv) above, the Sellers shall pay the Post-Closing Sales Compensation Amount, less applicable withholdings, to each Non-Transferred Sales Employee at the end of the next complete payroll period applicable to Sellers' similarly situated employees, and Sellers shall remit to the appropriate Government Entity such sums as may be required to be paid by an employer or deducted or withheld from each such Non-Transferred Sales Employee's Post-Closing Sales Compensation Amount under applicable Law. If a Seller fails to make pay such Post-Closing Sales Compensation Amount to any Non-Transferred Sales Employee by the end of such payroll period, Seller shall remit to the Purchaser within ten (10) Business Days the Total Post-Closing Payment with respect to such Non-Transferred Sales Employee.

(vi) The Purchaser shall have the right to review the calculations made by the Sellers with respect to amounts for which the Purchaser or the Designated Purchaser are responsible in accordance with Section 7.4(h)(iii) and (iv) and with respect to amounts for which either the Sellers or the Purchaser are responsible in accordance with Section 7.4(h)(i) (and any supporting information reasonably requested by the Purchaser) and in the event that Purchaser disagrees with the calculations, the Purchaser shall notify the Main Sellers and the Purchaser and the Sellers shall cooperate to resolve any such disagreement."

27. Certain Exhibits and Sections of the Sellers Disclosure Schedule are hereby deleted and replaced as more specifically detailed in Annex B hereto.

28. Annex C hereto is hereby added to Schedule B of the Transition Services Agreement.

29. The Intellectual Property License Agreement attached to the Agreement as Exhibit F is hereby deleted and replaced in its entirety with the Intellectual Property License Agreement attached hereto as Annex D hereto.

30. The Trademark License Agreement attached to the Agreement as Exhibit P is hereby deleted and replaced in its entirety with the Trademark License Agreement attached hereto as Annex E hereto.

31. This Amendment No. 5 shall not constitute a modification of any provision, term or condition of the Agreement or any other Transaction Document except solely to the extent and solely for the purposes described herein. Except to the extent that provisions of the Agreement are hereby expressly modified as set forth herein, the Agreement and the other Transaction Documents shall remain unchanged and in full force and effect. By execution of this Amendment No. 5 as set forth on the signature pages hereto, the EMEA Sellers, the Joint Administrators and the Joint Israeli Administrators acknowledge and agree to any revision, amendment or alteration of any Third Party Provision as set forth herein or as set forth in the Agreement, Amendment No. 2 to the Agreement dated as of December 23, 2009 or Amendment No. 4 to the Agreement dated as of March 15, 2010.

32. The recitals to this Amendment No. 5 form an integral part hereof.

33. This Amendment No. 5 may be executed in multiple counterparts (including by facsimile or other electronic means), each of which shall constitute one and the same document.

34. This Amendment No. 5 shall be binding upon the parties hereto and their respective successors and assigns.

35. Any term or provision of this Amendment No. 5 that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions hereof or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction.

36. This Amendment No. 5 shall be governed by and construed in all respects by the Laws of the State of New York without regard to the rules of conflict of laws of the State of New York or any other jurisdiction. Any Action arising out of or relating to this Amendment No. 5 shall be resolved in accordance with Section 11.6 of the Agreement.

*[Signature Page Follows]*

IN WITNESS WHEREOF, the parties hereto have signed, or caused this Amendment No. 5 to be signed by their respective officers thereunto duly authorized, as of the date first written above.

**NORTEL NETWORKS CORPORATION,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(i) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS LIMITED,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(ii) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS INC.,**
on its own behalf and on behalf of the Other Sellers
listed in Section 11.15(a)(iii) of the Sellers
Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: Chief Legal Officer

*[Signature page to Amendment No. 5 to ASA]*

**CIENA CORPORATION**

By: /s/ David M. Rothenstein
Name: David M. Rothenstein
Title: Senior Vice-President, General Counsel and Secretary

*Signature Page to Amendment No. 5*

**Acknowledged and Agreed:**

**SIGNED** for and on behalf of **Nortel Networks UK Limited** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel GmbH** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks SpA** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks Hispania S.A.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks B.V.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks AB** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks N.V.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks (Austria) GmbH** (in administration) by Christopher Hill
as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks Polska Sp. z.o.o.** (in administration) by Christopher Hill
as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks Portugal S.A.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks s.r.o.** (in administration) by Christopher Hill

as Joint Administrator (acting as agent and without personal liability) in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON EC2A, 2HS ENGLAND

/s/ Christopher Hill
Christopher Hill

**SIGNED** for and on behalf of **Nortel Networks Frances S.A.S.** (in administration) by Kerry Trigg acting as authorised representative for Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:
Shwon Perwitter
Ernst & Young LLP
1 MORE LONDON PLACE
LONDON
SE 1 2AF

/s/ Kerry Trigg
Kerry Trigg

**SIGNED** outside of the Republic of Ireland for and on behalf of **Nortel Networks (Ireland) Limited** (in administration) by Alan Bloom

in the presence of: Wilma Graharm
Ernst & Young LLP
1 MORE LONDON PLACE
LONDON
SE 1 2AF

/s/ Alan Bloom
Alan Bloom

Location:

**SIGNED** by John Freebairn duly authorised for and on behalf of **Nortel Networks (Northern Ireland) Limited** in the presence of:
Tina McAuley
10 Knockkagh Heights
Carrick ferqus BT 388QZ

/s/ John Freebairn
John Freebairn

**SIGNED** by Marin Stanko duly authorised for and on behalf of **o.o.o. Nortel Networks** in the presence of:
Maxim Deyneka
RUSSIA, MOSCOW
13-70, Dubninskaya Str

/s/ Marin Stanko
Marin Stanko

**SIGNED** by Sharon Rolston duly authorised for and on behalf of **Nortel Networks AG** in the presence of:
Daniel Eziefula
Herbert Smith LLP
Exchange House
LONDON, EC2A 2HS

/s/ Sharon Rolston
Sharon Rolston

| | | |
|---|---|---|
| **SIGNED** for and on behalf of **Nortel Networks Israel (Sales and Marketing) Limited** (in administration) by Yaron Har-Zvi and Avi D. Pelossof as Joint Israeli Administrators (acting jointly and without personal liability) in connection with the Israeli Assets and Liabilities: | ) | /s/ Yaron Har-Zvi<br>Yaron Har-Zvi<br><br>/s/ Avi D. Pelossof<br>Avi D. Pelossof |
| **SIGNED** by Yaron Har-Zvi<br><br>in his own capacity and on behalf of the Joint Israeli Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Israeli Administrators: | ) | /s/ Yaron Har-Zvi<br>Yaron Har-Zvi |
| **SIGNED** by Avi D. Pelossof<br><br>in his own capacity and on behalf of the Joint Israeli Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Israeli Administrators: | ) | /s/ Avi D. Pelossof<br>Avi D. Pelossof |
| **SIGNED** by Alan Bloom<br><br>in his own capacity and on behalf of the Joint Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Administrators: | ) | /s/ Alan Bloom<br>Alan Bloom |

**19 March 2010**

**THE EMEA SELLERS**

**ALAN BLOOM, STEPHEN HARRIS, ALAN HUDSON, DAVID HUGHES AND CHRISTOPHER HILL AS JOINT ADMINISTRATORS**

**YARON HAR-ZVI AND AVI D. PELOSSOF AS JOINT ISRAELI ADMINISTRATORS**

**CIENA CORPORATION**

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# AMENDMENT AGREEMENT
# (AMENDMENT NO. 5)

relating to the Asset Sale Agreement relating to the sale
and purchase of the EMEA Assets

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**THIS AGREEMENT** (the **"Amendment"**) is made on this 19th day of March 2010.

**BETWEEN:**

(1) **THE EMEA SELLERS** (the details of which are set out in Schedule 2 of the Agreement (as defined below)) which, in the case of the EMEA Debtors (the details of which are set out in Schedule 3 of the Agreement (as defined below)), are acting by their joint administrators Alan Robert Bloom, Stephen John Harris, Alan Michael Hudson and Christopher John Wilkinson Hill of Ernst & Young LLP of 1 More London Place, London SE1 2AF (other than Nortel Networks (Ireland) Limited (in administration), for which David Hughes of Ernst & Young Chartered Accountants of Harcourt Centre, Harcourt Street, Dublin 2, Ireland and Alan Robert Bloom serve as joint administrators), who act as agents of the EMEA Debtors only and without any personal liability whatsoever (the **"Joint Administrators"**) and, in the case of the Israeli Company (the details of which are set out in Schedule 2 of the Agreement (as defined below)) which is acting by its joint administrators Yaron Har-Zvi and Avi D. Pelossof, who act as agents of the Israeli Company only and without any personal liability whatsoever (the **"Joint Israeli Administrators"**);

(2) **THE JOINT ADMINISTRATORS**;

(3) **THE JOINT ISRAELI ADMINISTRATORS**; and

(4) **CIENA CORPORATION** a Delaware corporation (the **"Purchaser"**).

**RECITAL:**

A. On 7 October 2009 the EMEA Sellers, the Joint Administrators, the Joint Israeli Administrators and the Purchaser entered into an Asset Sale Agreement (the **" EMEA Agreement"**) whereby the EMEA Sellers agreed to sell and transfer to the Purchaser the EMEA Assets (as defined in the EMEA Agreement) for the consideration and upon the terms and subject to the conditions set out in the EMEA Agreement. On the same date the Sellers and the Purchaser entered into the North American Agreement whereby the Sellers agreed to sell and transfer to the Purchaser the Assets (as defined in the North American Agreement) for the consideration and upon the terms and subject to the conditions set out in the North American Agreement.

B. On 16 October 2009, each of the US Bankruptcy Court and the Canadian Court entered orders approving the North American Agreement and the Bidding Procedures and Bid Protections, subject to certain amendments, as set out in those orders (the "**Court Orders**"). On 20 October 2009 the EMEA Sellers, the Joint Administrators, the Joint Israeli Administrators and the Purchaser entered into a deed of amendment (the "**Deed of Amendment**") amending the terms of the EMEA Agreement pursuant to the Court Orders.

C. On 24 November 2009, following the selection of the Purchaser as the successful Bidder at the Auction, the EMEA Sellers, the Joint Administrators, the Joint Israeli Administrators and the Purchaser entered into an Amendment Agreement (**"Amendment No. 2"**) amending the EMEA Agreement as amended by the Deed of Amendment.

D. On 19 January, 2009, the Israeli Court granted Nortel Networks Israel (Sales and Marketing) Limited (In Administration) (the **"Israeli Company"**) with a stay of proceedings order and nominated the Joint Israeli Administrators as joint administrators of the Israeli Company creditors' arrangement in connection with the Israeli Company, and further approved at a later date the continuation of all relevant rights, duties and obligations of the Joint Israeli Administrators pursuant to such stay of proceedings order.

E. On 16 December, 2009, the EMEA Sellers, the Joint Administrators, the Joint Israeli Administrators and the Purchaser entered into a deed of amendment (**"Amendment No. 3"**), amending the EMEA Agreement as amended by the Deed of Amendment and Amendment No.2.

F. On 13 January, 2010, the EMEA Sellers, the Joint Administrators, the Joint Israeli Administrators and the Purchaser entered into a deed of amendment (**"Amendment No. 4"**), amending the EMEA Agreement as amended by the Deed of Amendment, Amendment No.2 and Amendment No. 3 (such amended agreement the "**Agreement**").

G. On 15 March, 2010, the Sellers and the Purchaser entered into Amendment No. 3 to the Amended and Restated Asset Sale Agreement (the **"North American Agreement Amendment No. 3"**), amending certain terms of the North American Agreement, including, *inter alia*, extending the time (a) within which certain milestones are to be achieved by the TSA Sellers (as defined under the North American Agreement) and the Purchaser in connection with the provision of Transition Services (as defined in Section 5.28 of the Sellers Disclosure Schedule), (b) within which certain actions are to be performed by the Sellers and the Purchaser in relation to Bundled Contracts (as defined in the North American Agreement), and (c) of Closing.

H. On 15 March, 2010, the Sellers and the Purchaser entered into Amendment No. 4 to the Amended and Restated Asset Sale Agreement (the **"North American Agreement Amendment No. 4"**), amending certain terms of the North American Agreement, including, *inter alia*, adding certain Affiliates of the Main Sellers that own certain patents that are to be transferred to the Purchaser upon Closing as parties to the North American Agreement.

I. On 19 March, 2010, the Sellers and the Purchaser entered into Amendment No. 5 to the Amended and Restated Asset Sale Agreement (the **"North American Agreement Amendment No. 5"**), amending certain terms of the North American Agreement, including, *inter alia*, providing for the basis upon which the Purchaser may have access to Employee Records, and clarifying the effective time of transfer of legal title, equitable title and risk of loss with respect to the EMEA Assets and the EMEA Assumed Liabilities.

**IT IS AGREED** as follows:

**1. INTERPRETATION**

1.1 Unless the context otherwise requires, or unless otherwise defined in this Amendment, words and phrases defined in the Agreement (as amended by this Amendment) shall have the same meanings where used in this Amendment.

1.2 References in the Agreement to "this Agreement" shall, with effect from and including the Effective Date (as defined below) and unless the context dictates otherwise, be a reference to the Agreement as amended by this Agreement and words such as "herein", "hereof", "hereby" and "hereto" where they appear in the Agreement shall be construed accordingly.

**2. EFFECTIVE DATE**

2.1 The parties hereto agree that for all purposes the terms of this Agreement shall be effective as of November 24, 2009 (the **"Effective Date'**).

**3. AMENDMENTS TO THE AGREEMENT**

3.1 Clause 2.6 of the Agreement shall be amended by adding the words "*Section 6.10 (Polish Tax Escrow)*" after the words "Section 6.9 (Italian Tax Escrow)".

3.2 Clause 4.1 of the Agreement is hereby deleted and replaced with:

*"4.1 The completion of the purchase and sale of the EMEA Assets and the assumption of the EMEA Assumed Liabilities (the **"Closing"**) shall occur simultaneously with closing of the transaction contemplated by the North American Agreement and shall take place at the offices of Ogilvy Renault LLP in Toronto, Canada commencing at 9:00 a.m. local time on the date which is the later of (i) March 19, 2010, (ii) the date that is the earlier of (x) the Service Readiness Date and (y) May 7, 2010, and (iii) five (5) Business Days after the day upon which all of the conditions set forth under Clause 15 (conditions to Closing and Termination) of this Agreement (other than conditions to be satisfied at the Closing, but subject to the waiver or fulfillment of those conditions) have been satisfied or, if permissible, waived by the EMEA Sellers, the joint Administrators, or the joint Israeli Administrators, as applicable, and/or the Purchaser (as applicable), or on such other place, date and time as shall be mutually agreed upon in writing by the Purchaser, the EMEA Sellers, the joint Administrators and the joint Israeli Administrators (the day on which the Closing takes place being the **"Closing Date"**).*

*Legal title, equitable title and risk of loss with respect to the EMEA Assets will transfer to the Purchaser or the relevant EMEA Designated Purchaser, and the EMEA Assumed Liabilities will be assumed by the Purchaser or the relevant EMEA Designated Purchasers simultaneously in all jurisdictions at such time as the Closing actually occurs. For the avoidance of doubt, (i) all Transferring Employees shall transfer at the Transfer Date and (ii) for the purposes of calculating the Net Working Capital Transferred as of the Closing Date, all components thereof shall be determined as of 11:59 p.m. local time on the Closing Date in each applicable jurisdiction."*

3.3 In Clause 10.36 of the Agreement, reference to "by January 25, 2010 (or such later date as the Purchaser and the relevant EMEA Seller may mutually agree)" is hereby deleted and replaced with *"on or before the date that is five (5) Business Days prior to the Closing Date"*.

3.4 In Clause 15.3.2 of the Agreement, the reference to "30 April, 2010" is hereby deleted and replaced with *"7 May, 2010"*.

3.5 In Clause 15.4.2 of the Agreement, the reference to "30 April 2010" is hereby deleted and replaced with *"7 May, 2010"*.

3.6 A new definition is hereby inserted in Schedule 1 of the EMEA ASA as follows:

*"**"North American Agreement Amendment No. 3"** means Amendment No. 3 to the Amended and Restated Asset Sale Agreement between, inter alia, the Sellers and the Purchaser, amending certain terms of the North American Agreement, dated 15 March, 2010;"*

*"**"North American Agreement Amendment No. 4"** means Amendment No. 4 to the Amended and Restated Asset Sale Agreement between the Sellers and the Purchaser, amending certain terms of the North American Agreement, dated 15 March, 2010;"*

*"**"North American Agreement Amendment No. 5"** means Amendment No. 5 to the Amended and Restated Asset Sale Agreement between, inter alia, the Sellers and the Purchaser, amending certain terms of the North American Agreement, dated 19 March, 2010;"*

3.7 The definition of "North American Agreement" in the Agreement is hereby deleted and replaced with the following:

***""North American Agreement"** means the asset sale agreement between Nortel Networks Corporation, Nortel Networks Limited, Nortel Networks Inc and certain of their Affiliates and the Purchaser dated 7 October 2009 as amended and restated on 24 November 2009 and as further amended on 3 December 2009, by the North American Agreement Amendment No. 2, by the North American Agreement Amendment No. 3, the North American Agreement Amendment No. 4 and the North American Agreement Amendment No. 5;"*

3.8 The definition of "Sellers Disclosure Schedule" in the Agreement shall be deleted and replaced with the following:

***""Sellers Disclosure Schedule"*** *means the disclosure schedule delivered, in relation to the North American Agreement, by the Sellers to the Purchaser on October 7, 2009, as further amended by the North American Agreement Amendment No. 2, the North American Agreement Amendment No. 3, the North American Agreement Amendment No. 4 and the North American Agreement Amendment No. 5;"*

3.9 The definition of **"Cash Purchase Price"** in the Agreement shall be deleted and all references thereto in the Agreement shall be replaced with "Purchase Price".

3.10 The definition of **"Convertible Notes"** in the Agreement shall be deleted and all references thereto in the Agreement are hereby deleted.

3.11 Clause 9.3 o f the Agreement is hereby deleted and replaced with:

*"9.3 Notwithstanding that the EMEA Sellers, Joint Administrators and the Joint Israeli Administrators are not party to the North American Agreement, the EMEA Sellers, hereby agree that the obligations of the EMEA Sellers set out in Sections 2.2.1 (Purchase Price), 2.2.2 (Estimated Purchase Price), 2.2.4 (Purchase Price Adjustment), 2.2.5 (Escrows), 2.2.6 (Purchase Price Allocation), 2.2.7 (Certain Payment Mechanics), 5.18 (Termination of Overhead and Shared Services), 5.37 (Deposit), 6.8 (EMEA Tax Escrow), 6.9 (Italian Tax Escrow), 6.10 (Polish Tax Escrow) 8.5 (b) Registration Procedures; 8.8 (Indemnification) and 8.9 (Trading Limitation) of the North American Agreement, and Section 5.28 (other than subection (k) (Taxes)) of the Sellers' Disclosure Schedule, are hereby incorporated into this Agreement by reference, and are enforceable against the EMEA Sellers in accordance with the terms of such Sections as if set out in this Agreement and subject to the limitations set forth in this Agreement, under the terms of this Agreement."*

3.12 Clause 11.21 of the Agreement shall be amended by adding the words "*and Section 6.10 (Polish Tax Escrow)"* after the words "Section 6.9 (Italian Tax Escrow)".

3.13 Clause 11 of the Agreement shall be amended as follows:

*"11.27 The Purchaser represents and warrants that:*

*11.27.1 As at Closing, neither Ciena Communications Inc nor Ciena Communications International LLC:*

*(A) has established its business or has any fixed establishment in any Member State for the purposes of Article 44 of the EC Council Directive 2006/112 on the common system of value added tax or any national legislation implementing Article 44 of the Directive or any predecessor to it or supplemental to Article 44 of the Directive (in each case, the "**VAT Rules**"), or has its permanent address in any Member State for the purposes of Article 44 of the VAT Rules, or usually resides in any Member State for the purposes of Article 44 of the VAT Rules; or*

*(B) has an establishment, fixed establishment, address, place of business, place of residence, branch, agency, office or presence of any kind or any equivalent to any of the foregoing (a "**Relevant VAT Presence**") in any of Switzerland, Israel or Russia for the purposes of any legislation of, applicable to or enforceable in any of Switzerland, Israel or Russia relating to any sales or turnover tax imposed in any such country of a similar nature to value added*

*tax imposed in any Member State of the European Union pursuant to the VAT Rules;*

*11.27.2 As a consequence of Ciena Communications Inc and Ciena Communications International LLC not having established their business, not having a fixed establishment or permanent address in any Member State and/or not usually residing in any Member State, no liability to VAT will arise in any Member State as a result of Article 44 of the VAT Rules on any supply of any EMEA Assets or (if relevant) assumption of any EMEA Assumed Liabilities qualifying as a supply of services for VAT purposes, where the relevant supply is made or deemed to be made by any EMEA Seller to Ciena Communications Inc or Ciena Communications International LLC.*

*11.28 If, as a result of a breach of any of the representations and warranties contained in Clause 11.27 above, an amount or additional amount of VAT is or becomes chargeable in respect of a supply of the type referred to in Clause 11.27.2 of this Agreement, the Purchaser shall procure that Ciena Communications Inc or Ciena Communications International LLC (as applicable) shall pay to the relevant EMEA Sellers a sum equal to the amount of VAT or additional VAT determined by the relevant EMEA Seller to be so chargeable (for the avoidance of doubt, including any penalties and interest chargeable thereon), with payment to be made by Ciena Communications Inc or Ciena Communications International LLC no later than the date falling three (3) Business Days after Ciena Communications Inc's or Ciena Communications International LLC's receipt of an appropriate valid VAT invoice.*

*11.29 For the avoidance of doubt, the rights of the EMEA Sellers contained in Clause 11.28 above are in addition to, and without prejudice to, any other rights the EMEA Sellers may have under this Agreement"*

3.14 A new Section 15 is hereby added to Schedule 6 of the Agreement and shall read as follows:

*"15.1 The EMEA Sellers and the Purchaser agree to the following with respect to the Transferring Employees who participate as of the Closing Date in Nortel's Global Sales Incentive Compensation Plan, effective January 1 2010 (the* ***"SIC Plan"*** *and such employees* ***"EMEA Transferring Sales Employees"****):*

*The EMEA Sellers shall be responsible for paying sums due under the SIC Plan in respect of the EMEA Transferring Sales Employees to the extent accrued prior to and on the Closing Date and shall pay such amounts (and any related Taxes arising out of such payment) on approximately the same date the EMEA Sellers pay similarly-situated employees of the EMEA Sellers who participate in the SIC Plan. The Purchaser shall, or shall procure that the relevant EMEA Designated Purchaser shall, be responsible for paying sums due under the SIC Plan in respect of the EMEA Transferring Sales Employees to the extent accrued after the Closing Date. The EMEA Sellers shall calculate the amounts payable by the Purchaser for the period starting the day after the Closing Date to 30 June 2010 (inclusive) in accordance with the applicable terms of [Appendix B-1] [Annex B2 to Schedule B] of the Transition Services Agreement and shall deliver such calculations to the Purchaser as provided therein. The Purchaser shall, or shall procure that the relevant EMEA Designated Purchaser shall, pay such calculated sums (and any related Taxes arising out of such payment) to the EMEA Transferring Sales Employees within 20 Business Days of the receipt of such calculations from the EMEA Sellers".*

3.15 A new Section 16 is hereby added to Schedule 6 of the Agreement and shall read as follows:

*"16.1 It is acknowledged by the parties that the employment of the Transferring Employees will transfer to the Purchaser or the relevant EMEA Designated Purchaser on Closing pursuant to and in accordance with the terms of this Agreement. Notwithstanding this, the Relevant EMEA Sellers shall until 31 March 2010 continue to provide the benefits listed*

*below (which are currently provided to the relevant Transferring Employees by such Relevant EMEA Sellers), subject to the terms of the applicable policies and schemes, except for any terms that would prohibit participation under such policies and schemes by such Transferring Employees by virtue of their status as employees of a different employer. For the avoidance of doubt, the Purchaser shall, or the relevant EMEA Designated Purchaser shall, be responsible for providing all other benefits to the Transferring Employees with effect from Closing and shall become responsible for providing the benefits listed below for the period after 31 March 2010:*

*16.1.1 Car leases in respect of the relevant Transferring Employees in France, Germany, Italy, Netherlands, Spain and the UK;*

*16.1.2 Pension and related life and AD&D benefits in respect of the relevant Transferring Employees in Austria;*

*16.1.3 TFR; pension (for both Dirigenti & Non-Dirigenti Transferring Employees); and health insurance; in respect of the relevant Transferring Employees in Italy; and*

*16.1.4 Health insurance; life insurance and nursery tickets in respect of the relevant Transferring Employees in Spain.*

*16.2 The Purchaser agrees that it will reimburse and indemnify the relevant EMEA Sellers for the costs actually and reasonably incurred by the EMEA Sellers in providing the benefits listed at 16.1.1 to 16.1.4 solely in respect of the period from the Closing Date until the EMEA Sellers cease to provide such benefits on 31 March 2010 (such costs to include the cost of any claims, demands, complaints, liabilities, losses, damages, costs and expenses arising from the provision of such benefits by the EMEA Sellers solely in respect of the period from the Closing Date until 31 March 2010), within 5 working days of receipt of written confirmation that the amounts in question have been paid by the relevant EMEA Sellers; provided, however, that such costs (other than relevant insurance premium payments which, for the avoidance of doubt, Ciena will reimburse) shall not include those costs that are otherwise satisfied by applicable insurance policies related to such benefits in the ordinary course and consistent with past practice."*

3.16 A new Section 17 is hereby added to Schedule 6 of the Agreement and shall read as follows:

*"The Purchaser agrees that it will reimburse the relevant EMEA Sellers for the costs actually and reasonably incurred by the EMEA Sellers, up to a maximum of $100k in aggregate, in relation to prepaid travel payments for the Transferring Employees, to the extent that these expenses relate to any period of time after the Closing Date. The Purchasers will reimburse the EMEA Sellers for such sums within 60 days of receipt of reasonable evidence that the amounts in question have been paid by the EMEA Sellers. To the extent that the EMEA Sellers receive any refund or rebate or are notified that they are to receive any refund or rebate in relation to such sums within such 60 day period, the EMEA Sellers will inform the Purchaser of such refund or rebate, and the Purchaser shall be entitled to deduct such refund or rebate from the sums payable by the Purchaser under this Clause 17."*

**4. EXCLUSION OF LIABILITY AND ACKNOWLEDGEMENT**

4.1 Subject to Clause 4.6, notwithstanding that this Agreement shall have been signed by the Joint Administrators and the Joint Israeli Administrators both in their capacities as administrators of the EMEA Debtors for and on behalf of the EMEA Debtors and of the Israeli Company for and on behalf of the Israeli Company respectively and in their personal capacities, it is hereby expressly agreed and declared that no personal Liability under or in connection with this Agreement shall fall on the Joint Administrators, the Joint Israeli Administrators or their respective firm, partners, employees, agents, advisers or representatives whether such personal Liability would arise under paragraph 99(4) of schedule B1 to the Insolvency Act, or

otherwise howsoever. For the avoidance of doubt, this Clause 4.1 shall not operate to prevent any claim of the Purchaser against the EMEA Debtors under this Agreement or the Agreement being an expense of the administration as described in Paragraph 99(4) of Schedule B1 and Rule 2.67 of the Insolvency Act or against the Israeli Company under this Agreement being "expenses of the stay of proceedings".

4.2 Subject to Clause 4.6, it is hereby expressly agreed and declared that no personal Liability, or any Liability whatsoever, under or in connection with this Agreement shall fall on any of the Non-Debtor Seller Directors howsoever such Liability should arise.

4.3 For the avoidance of doubt, (but without prejudice to the other terms of this Agreement) the parties hereby agree that the terms of Clauses 4.1 and 4.2 do not, in and of themselves, provide that the Purchaser is under any obligation to indemnify, nor become liable or responsible for, any actions, proceedings, claims, demands, costs, expenses, damages, compensation, fines, penalties or other Liabilities against the Joint Administrators, the Joint Israeli Administrators or the Non-Debtor Seller Directors by any Person.

4.4 The Joint Administrators and the Joint Israeli Administrators are party to this Agreement in their personal capacities only for the purpose of receiving the benefit of this Clause 4 and the exclusions, limitations, undertakings, covenants and indemnities in their favour contained in this Agreement. The Purchaser acknowledges and agrees that in the negotiation and the completion of this Agreement the Joint Administrators and the Joint Israeli Administrators are acting only as agents for and on behalf of the EMEA Debtors and the Israeli Company, respectively, and without any personal Liability whatsoever.

4.5 Subject to Clause 4.6, the Purchaser further acknowledges that it has entered into this Agreement without reliance on any warranties or representations made by the EMEA Sellers or by any of their employees, agents or representatives, or by the Joint Administrators, the Joint Israeli Administrators or any of their respective firms, partners, employees, agents, advisors or representatives and (save in respect of fraud, fraudulent misrepresentation or fraudulent misstatement) it shall not have any remedy in respect of any misrepresentation or untrue statement by such persons made by or on behalf of any other party to this Agreement.

4.6 Nothing in this Clause 4 or any other provision of this Agreement shall prevent any party from bringing any action against any other party, whether in a personal or any other capacity, for fraud, fraudulent misrepresentation or fraudulent misstatement.

**5. MISCELLANEOUS**

5.1 No party hereto shall have any liability to the extent arising in connection with, as a result of, or arising out of the failure of the parties hereto (or any such party) prior to the execution of this Agreement to meet any milestone that is updated pursuant to the North American Agreement Amendment No. 3, the North American Agreement Amendment No. 4 and the North American Agreement Amendment No. 5, and if any liability has accrued to any such party (the **"First Party"**), each other party hereby irrevocably waives any recourse and rights that would have otherwise been available to it against the First Party. For the avoidance of doubt, this Clause 5.1 shall not waive any liability or recourse of the parties (or any party) for any failure to meet any milestone or deadline as revised by this Agreement or the North American Agreement Amendment No. 3, the North American Agreement Amendment No. 4 and the North American Agreement Amendment No. 5 (including any failure resulting from any action or failure to act prior to the date hereof).

5.2 Each party shall bear its own costs and expenses in relation to this Agreement and the matters referred to in this Agreement.

5.3 None of the rights or obligations and undertakings set out in this Agreement may be assigned or transferred without the prior written consent of all the parties except for direct assignment

by the Purchaser to a EMEA Designated Purchaser in accordance with Clauses 4.4 and 4.5 of the Agreement (provided that the Purchaser remains liable jointly and severally with its assignee EMEA Designated Purchaser for the assigned obligations). Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

5.4 In the event that any provision of this Agreement shall be void or unenforceable by reason of any provision of applicable Law, it shall be deleted and the remaining provisions hereof shall continue in full force and effect and if necessary, be so amended as shall be necessary to give effect to the spirit of this Agreement so far as possible (unless such invalidity or unenforceability materially impairs the ability of the parties hereto to consummate the transactions contemplated by this Agreement).

5.5 The provision for services of notices set out in Clause 17 (*Notices and Receipts*) of the Agreement shall also apply for the purposes of this Agreement.

5.6 This Agreement may be executed in any number of counterparts and by the parties to it on separate counterparts, each of which when executed and delivered shall be an original but all the counterparts together constitute one instrument.

5.7 Without prejudice to Clause 4 (*Exclusion of Liability and Acknowledgement*) of this Agreement to the extent that the benefit of any provision in this Agreement is expressed to be conferred upon:

5.7.1 the Joint Administrators or the Joint Israeli Administrators, where necessary to give effect to any such provision the EMEA Debtors or the Israeli Company (as the case may be) shall hold such benefit as trustees for each Joint Administrators, or the Joint Israeli Administrators; and

5.7.2 the firm, partners, employees, agents, advisers and/or representatives of the Joint Administrators or the Joint Israeli Administrators, where necessary to give effect to any such provision the Joint Administrators and/or the Joint Israeli Administrators (as the case may be) (or failing that the EMEA Debtors or the Israeli Company) shall hold such benefit as trustees for each such person.

5.8 The provisions of this Agreement relating to the Joint Administrators or the Joint Israeli Administrators in their personal capacities shall survive for the benefit of the Joint Administrators, the Joint Israeli Administrators, their firm, partners, employees, agents, advisers and representatives notwithstanding the discharge of the Joint Administrators as joint administrators of the EMEA Debtors, or the Joint Israeli Administrators as administrator of the Israeli Company, and shall be in addition to and not in substitution for any other right or indemnity or relief otherwise available to each of them.

5.9 No failure to exercise nor any delay in exercising, on the part of any party, any right or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy prevent any further or other exercise thereof or the exercise of any other right or remedy. The rights and remedies provided in this Agreement are cumulative and not exclusive of any rights or remedies provided by Law.

5.10 No party shall be deemed to have waived any provision of this Agreement unless such waiver is in writing, and then such waiver shall be limited to the circumstances set forth in such written waiver. This Agreement shall not be amended, altered or qualified except by an instrument in writing signed by all the parties hereto.

5.11 The parties hereby agree and acknowledge that notwithstanding any terms of the deed of transfer executed between Nortel Networks S.p.a. (in administration) and Ciena Limited (Italian branch) before an Italian Notary Public on March 19th, 2010 (in order to make the transfer set out therein enforceable against third parties under the Italian law and to comply with mandatory Italian laws) (the **"Deed of Transfer"**), (i) the Deed of Transfer shall not

supersede or otherwise amend the terms of the EMEA ASA (whether under English or Italian law), (ii) in the case of any dispute arising out of or in connection with the Deed of Transfer (including any non-contractual disputes in relation thereto), the relevant provisions of the EMEA ASA, including the provisions relating to governing law and jurisdiction, shall apply; (iii) in the event that any inconsistency, ambiguity or difference is revealed between any provision of the EMEA ASA and any provision of the Deed of Transfer, the terms of the EMEA ASA will prevail; (iv) the allocations set out in the Deed of Transfer (the "**Allocations**") are solely for the purpose of complying with local law requirements and to generally facilitate the closing of the transactions contemplated by the North American Agreement and the Agreement and for the avoidance of doubt, the Allocations shall not determine, ratify or adopt or have any impact whatsoever on the allocation of the sales proceeds for this transaction among the various selling parties to and contemplated by the North American Agreement and the Agreement; and v) the parties reserve the right to argue the appropriateness or otherwise of the Allocation, and the methodology used in the Allocations, in any discussions or disputes between the various selling parties to and contemplated by the North American and the Agreement.

5.12 This Agreement is for the sole benefit of the parties and their permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement and no term of this Agreement is enforceable under the Contract (Right of Third Parties) Act 1999 by a person who is not a party to this Agreement.

**6. GOVERNING LAW, JURISDICTION AND SERVICE OF PROCESS**

6.1 This Agreement is governed by and shall be construed in accordance with English Law.

6.2 The English courts have exclusive jurisdiction to settle any dispute arising out of or in connection with this Agreement and the parties agree to the exclusive jurisdiction of the English courts, except as mutually agreed by the parties.

6.3 The parties waive any objection to the English courts on the grounds that they are an inconvenient or inappropriate forum to settle any such dispute.

6.4 Notwithstanding anything in this Agreement, any claim, action or proceeding brought against the Joint Israeli Administrators relating to (i) the capacity of the Joint Israeli Administrators to act as agents of the Israeli Company, (ii) the personal liability of the Joint Israeli Administrators, their firm, partners, employees, advisors, representatives or agents, (iii) their qualification to act as trustees in accordance with the Israeli Court's order, (iv) their appointment as Joint Israeli Administrators of the Israeli Company and their status as such or (v) the statutory duties of the Joint Israeli Administrators or the legal obligations solely in relation to the exercise of their powers, duties or functions as administrators of the Israeli Company, shall be governed by laws of the State of Israel and shall be subject to the exclusive jurisdiction of the Israeli courts.

6.5 The Purchaser irrevocably appoints Ciena Limited of 43 Worship Street, London EC2A 2DX as its agent in England for service of process, and each of the EMEA Sellers irrevocably appoints Law Debenture Corporate Services Limited of Fifth Floor, 100 Wood Street, London, EC2V 7EX as its agent in England for service of process.

**IN WITNESS** whereof the parties have executed this Agreement on the date first mentioned above.

| | | |
|---|---|---|
| **SIGNED** for and on behalf of **Nortel Networks** | ) | /s/ Christopher Hill |
| **UK Limited** (in administration) by Christopher | ) | Christopher Hill |
| Hill | ) | |
| as Joint Administrator (acting as agent and | ) | |
| without personal liability) in the presence of: | ) | |

Witness signature

| | | |
|---|---|---|
| /s/ Daniel Eziefula | ) | |
| Name: Daniel Eziefula | ) | |
| Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England | ) | |

| | | |
|---|---|---|
| **SIGNED** for and on behalf of **Nortel GmbH** | ) | /s/ Christopher Hill |
| (in administration) by Christopher Hill | ) | Christopher Hill |
| as Joint Administrator (acting as agent and | ) | |
| without personal liability) in the presence of: | ) | |

Witness signature

| | | |
|---|---|---|
| /s/ Daniel Eziefula | ) | |
| Name: Daniel Eziefula | ) | |
| Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England | ) | |

| | | |
|---|---|---|
| **SIGNED** for and on behalf of **Nortel Networks** | ) | /s/ Christopher Hill |
| **SpA** (in administration) by Christopher Hill | ) | Christopher Hill |
| as Joint Administrator (acting as agent and | ) | |
| without personal liability) in the presence of: | ) | |

Witness signature

| | | |
|---|---|---|
| /s/ Daniel Eziefula | ) | |
| Name: Daniel Eziefula | ) | |
| Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England | ) | |

**SIGNED** for and on behalf of **Nortel Networks Hispania S.A.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks B.V.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks AB** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks N.V.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks (Austria) GmbH** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks Polska Sp. z.o.o.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks Portugal S.A.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks s.r.o.** (in administration) by Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Christopher Hill
Christopher Hill

Witness signature

/s/ Daniel Eziefula
Name: Daniel Eziefula
Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** for and on behalf of **Nortel Networks France S.A.S.** (in administration) by Kerry Trigg acting as authorised representative for Christopher Hill as Joint Administrator (acting as agent and without personal liability) in the presence of:

/s/ Kerry Trigg

Kerry Trigg

Witness signature

/s/ Sharon Perlmutter

Name: SHARON PERLMUTTER

Address: ERNST & YOUNG LLP
1 More London Place
London
SE1 2AF

| | | |
|---|---|---|
| **SIGNED** outside of the Republic of Ireland for and on behalf of **Nortel Networks (Ireland) Limited** (in administration) by Alan Bloom in the presence of: | ) | /s/ Alan Bloom<br>Alan Bloom<br><br>Location: London |

Witness signature

/s/ Daniel Eziefula

Name: Daniel Eziefula

Address: Herbert Smith LLP, Exchange House, London, EC2A 2HS, England

**SIGNED** by John Freebairn duly authorised for and on behalf of **Nortel Networks (Northern Ireland) Limited** in the presence of:

/s/ John Freebairn
John Freebairn

Witness signature

/s/ Tina McAuley
Name: Tina McAuley
Address: 10 Knockagh Heights
Carrickfergus BT 38 8QZ

| | | |
|---|---|---|
| **SIGNED** by Maria Stanko | ) | /s/ Maria Stanko |
| duly authorised for and on behalf of **o.o.o.** | ) | Maria Stanko |
| **Nortel Networks** in the presence of: | ) | [SEAL] |

Witness signature

| | |
|---|---|
| /s/ Maxim Deyneka | ) |
| Name: Maxim Deyneka | ) |
| Address: Russia, Moscow | ) |
| 13 - 70, Dubninskaya str. | |

| | | |
|---|---|---|
| **SIGNED** by Sharon Rolston | ) | /s/ Sharon Rolston |
| duly authorised for and on behalf of **Nortel** | ) | Sharon Rolston |
| **Networks AG** in the presence of: | ) | |
| | | |
| Witness signature | | |
| | | |
| /s/ B. scherwath | ) | |
| Name: B. SCHERWATH | ) | |
| Address: c/o NORTEL NETWORKS UK LTD | ) | |
| WESTACOTT WAY | | |
| MAIDENHEAD | | |
| SLG 3QH | | |
| UK | | |

| | | |
|---|---|---|
| **SIGNED** for and on behalf of **Nortel Networks Israel (Sales and Marketing) Limited** (in administration) by Yaron Har-Zvi and Avi D. Pelossof as Joint Israeli Administrators (acting jointly and without personal liability) in connection with the Israeli Assets and Liabilities: | ) | /s/ Yaron Har-Zvi |
| | ) | Yaron Har-Zvi |
| | ) | /s/ Avi D. Pelossof |
| | ) | Avi D. Pelossof |
| | ) | |
| | ) | |
| | ) | |
| | ) | |
| | ) | |

**SIGNED** by Yaron Har-Zvi )
)
in his own capacity and on behalf of the Joint Israeli )
Administrators without personal liability and solely for the
benefit of the provisions of this Agreement expressed to be
conferred on or given to the Joint Israeli Administrators:

/s/ Yaron Har-Zvi
Yaron Har-Zvi

Witness signature

/s/ Gilal Gittlemen )
Name: Gilal Gittlemen )
Address: 3 Aminatov St, Tel-Ariv. )

**SIGNED** by Avi D. Pelossof )
)
in his own capacity and on behalf of the Joint Israeli )
Administrators without personal liability and solely for the
benefit of the provisions of this Agreement expressed to be
conferred on or given to the Joint Israeli Administrators:

/s/ Avi D. Pelossof
Avi D. Pelossof

Witness signature

/s/ Gilal Gittlemen )
Name: Gilal Gittlemen )
Address: 3 Aminatov St, Tel-Ariv. )

**SIGNED** by Alan Bloom )
)
in his own capacity and on behalf of the Joint Administrators )
without personal liability and solely for the benefit of the
provisions of this Agreement expressed to be conferred on or
given to the Joint Administrators in the presence of:

/s/ Alan Bloom
Alan Bloom

Witness signature

/s/ WILIMA GRAHAM )
Name: WILIMA GRAHAM )
Address: ERNST & YOUNG LLP )
1 More London Place
London
SE1 2AF

**SIGNED** by David Rothenstein )
)
duly authorised for and on behalf of Ciena Corporation in the presence of: )

Witness signature

/s/ FRANCES M. JACKSON )
Name: FRANCES M. JACKSON )
Address: c/o Ciena Corporation )
1201 Winterson Rd
Linthieum MD 21090

/s/ David M. Rothenstein
David M. Rothenstein

**Exhibit 10.1**

**NORTEL NETWORKS TECHNOLOGY CORPORATION**

**AND**

**CIENA CANADA, INC.**

# LEASE

**Premises: Lab #10, Nortel Carling Campus, 3500 Carling Avenue, Ottawa, Ontario**

**Date: March 19, 2010**

**Table of Contents**

**LEASE**

REAL ESTATE LEASE ("**Lease**") dated March 19, 2010, between NORTEL NETWORKS TECHNOLOGY CORPORATION ("**Landlord**") and CIENA CANADA, INC. ("**Tenant**")

WHEREAS, Tenant and its affiliates have purchased the 'Metro Ethernet Networks' business of Landlord and certain of its affiliates (the "**MEN Business**") identified in an Amended and Restated Asset Sale Agreement (the "**ASA**") dated as of November 24, 2009, which transaction is being completed as of the date hereof (the "**Closing Date**");

WHEREAS, Landlord is one of the entities granted certain initial creditor protection in an application for protection under the *Companies' Creditors Arrangement Act* (the "**CCAA**") pursuant to an order issued by the Ontario Superior Court of Justice (the "**Canadian Court**") dated January 14, 2009 (the "**Initial Order**"), which also appointed Ernst & Young Inc. as "Monitor" in connection with the CCAA Cases (defined below) and was extended by further order of the Canadian Court from time to time, most recently on July 30, 2009, as the same may be amended, extended, restated or replaced from time to time by the Canadian Court (the proceedings commenced by such application, the "**CCAA Cases**");

WHEREAS, on December 2, 2009, the Canadian Court in the CCAA Cases issued that certain Approval and Vesting Order authorizing the transactions contemplated in the ASA, including, without limitation, the entering into of this Lease (the "**Order**");

WHEREAS, Landlord proposes to lease the Premises, as defined below, and the Additional Premises as defined in the Additional Premises Lease to Tenant, and Tenant proposes to lease the Premises from Landlord upon the terms and conditions hereinafter set forth and the Additional Premises upon the terms and conditions set forth in the Additional Premises Lease.

**NOW, THEREFORE,** for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

**Article 1. Basic Terms and Definitions**

**Section 1.1** "**Additional Premises**" means the premises in the Carling Campus leased by Tenant from Landlord under the Additional Premises Lease.

**Section 1.2** "**Additional Premises Lease**" means the lease agreement between Landlord and Tenant dated as of the date of this Lease in respect of the Additional Premises, as same may be amended, restated or extended from time to time.

**Section 1.3** "**Additional Rent**" has the meaning set forth in Section 2.3.

**Section 1.4** "**Authority**" has the meaning set forth in Section 11.1.

**Section 1.5** "**Building Services**" means the services to be provided by Landlord to the Premises or otherwise for the benefit of Tenant as listed in the "Services Matrix" set out in Exhibit "C" attached hereto.

**Section 1.6** "**Base Rate**" has the meaning set forth in Section 20.1(e).

**Section 1.7** "**Building**" means the building identified as the "Lab 10" building within the Carling Campus within which the Premises are situate.

**Section 1.8** "**Building Standard**" means the standard of quality to which the Premises and the Carling Campus have been constructed, maintained, repaired and operated by Landlord typically prior to the Commencement Date, and the typical Operating Expenses which would be expected to be incurred and expended by Landlord in connection with such maintenance and operation of the Premises and the Carling Campus as a multi-tenant commercial office campus.

**Section 1.9** "**Building Systems**" means the utility, heating, ventilation, air-conditioning, mechanical, electrical, plumbing, life safety, security, storm and sanitary drainage systems and other facilities of the Premises and the Carling Campus, as the same exist as at the Commencement Date and as may be modified by Landlord in its sole discretion from time to time, provided that such modifications do not adversely affect the maintenance and operation of the Building in accordance with the Building Standard in any material manner.

**Section 1.10** "**Business Day**" means a day on which the banks are opened for business (Saturdays, Sundays, statutory and civic holidays excluded) in Ottawa, Ontario, Canada.

**Section 1.11** "**Carling Campus**" means the buildings, facilities and improvements on the owned and leased parts of the lands forming part of the "Nortel Carling Campus," municipally known as 3500 Carling Avenue, Ottawa, Ontario existing as at the Commencement Date of this Lease, as illustrated on Exhibit "A" attached hereto, as may be modified by Landlord in its sole discretion from time to time, provided that such modifications do not adversely affect the maintenance and operation of the Carling Campus in accordance with Building Standard in any material manner.

**Section 1.12** "**Carling Works**" has the meaning set forth in Section 4.2.

**Section 1.13** "**Commencement Date**" means the Closing Date, as defined in the ASA.

**Section 1.14** "**Common Areas**" means all parts of the lands, areas, facilities, improvements, systems, equipment, and installations in, upon or forming part of the Carling Campus which, from time to time are not used exclusively by other occupants of the Carling Campus and includes pedestrian sidewalks, driveways (including, without limitation, the ring road circling the Carling Campus) parking areas, public or shared corridors, including without limitation, the pedestrian traffic tunnel between the Lab 2 Building and the Lab 10 Building, stairways and elevators, loading and dock areas, truck courses, and Building Systems provided, utilized or available for the occupants of the Carling Campus, their employees, customers and others or for general use and enjoyment, as the same exist as at the Commencement Date and as may be modified by Landlord in its sole discretion from time to time, provided that such modifications do not adversely affect the maintenance and operation of the Common Areas in accordance with the Building Standard in any material manner.

**Section 1.15** "**Consolidation Works**" has the meaning set forth in Section 2.1.

**Section 1.16** "**Default**" has the meaning set forth in Section 19.1.

**Section 1.17** "**Default Rate**" has the meaning set forth in Section 20.6.

**Section 1.18** "**Early Termination Fee**" and "**Early Termination Right**" have the respective meanings set forth in Section 27.1.

**Section 1.19** "**Escrow Agreement**" means the "Closing and Escrow Agreement — Carling" to be entered into between the parties concurrently with the Lease in substantially the form set out in Exhibit "F" hereto.

**Section 1.20** "**Expenses**" has the meaning set forth in Section 7.1.

**Section 1.21** "**Fixed Rent**" has the meaning set forth in Section 2.1.

**Section 1.22** "**GST**" means the goods and services tax imposed on Rent under the Excise Tax Act, and any additional, supplemental, replacement, amended, or harmonized tax levied upon the Rent from time to time.

**Section 1.23** "**Interim License**" has the meaning set forth in Section 2.1.

**Section 1.24** "**Laws**" has the meaning set forth in Section 11.1.

**Section 1.25** "**Landlord's Regulations**" has the meaning set forth in Section 3.3.

**Section 1.26** "**Material Interruption**" has the meaning set forth in Section 26.1.

**Section 1.27** "**Mortgagee**" has the meaning set forth in Section 12.1.

**Section 1.28** "**Mortgages**" has the meaning set forth in Section 12.1.

**Section 1.29** "**Notice Address**" means:

(a) for Landlord:

Nortel Networks Technology Corporation

c/o Nortel Networks
GMS 991-01-A10
2221 Lakeside Boulevard
Richardson, Texas 75082
Attention: Real Estate Group
Facsimile: (972) 684-3868

c/o Nortel Networks
5945 Airport Road, Suite 360
Mississauga, Ontario,
Canada L4V 1R9
Attention: Real Estate Group
(Richardson Tx)

(b) for Tenant:

Ciena Canada Inc.
c/o Ciena Corporation
1201 Winterson Road
Linthicum, MD
21090 USA
Fax: 1-410-865-8001
Attention: General Counsel

with a copy to:

Ciena Corporation
1201 Winterson Road
Linthicum, MD
21090 USA
Fax: 1-410-981-7651
Attention: Director, Facilities
(Real Estate)

**Section 1.30** "**Operating Expense Contribution**" has the meaning set forth in Section 2.3.

**Section 1.31** "**Permitted Uses**" has the meaning set forth in Section 3.1.

**Section 1.32** "**Premises**" means the whole of the "Lab 10" Building in the Carling Campus having a deemed area for all purposes under this Lease of 265,000 square feet of Rentable Area and the lands used in connection with such Lab 10 Building (the "**Lands**") shown outlined in thick black on Exhibit "A" to this Lease. The Premises include any fixtures and improvements in the Premises on the Commencement Date, and any other fixtures and improvements installed in the Premises by or on behalf of Tenant or by Landlord after the Commencement Date (in each case excluding Tenant's Property).

**Section 1.33** "**Rent**" has the meaning set forth in Section 2.3.

**Section 1.34** "**Rentable Area**" has the meaning set forth in Section 2.2.

**Section 1.35** "**Security**" means an amount equivalent to a total of three (3) month's Rent, to be adjusted as such amounts are applied by Landlord where permitted by the terms of this Lease to ensure it continues to represent three (3) month's Rent at all times through the Term.

**Section 1.36** "**Taxes**" means all taxes, rates, duties and assessments whatsoever, whether municipal, provincial, parliamentary or otherwise, now charged or hereafter to be charged upon the Premises, the Lands, the Building, the Carling Campus or any part or parts thereof or upon Landlord in respect thereof, including school taxes, municipal taxes and taxes for local improvements or works assessed against the Carling Campus, including any interest and penalties related thereto.

**Section 1.37** "**Tenant's Property**" means Tenant's trade fixtures, furniture, furnishings, fittings, equipment, apparatus, appliances and other articles of personal property. Tenant's Property includes any Transferred Tenant's Property.

**Section 1.38** "**Tenant's Share**" means that percentage of total Expenses for the Carling Campus determined by the fraction having as the numerator the Rentable Area of the Premises and as the denominator, the Rentable Area of the occupied portions of the Carling Campus.

**Section 1.39** "**Tenant's Work**" has the meaning set forth in Section 5.2.

**Section 1.40** "**Term**" means the period commencing on the Commencement Date and ending on the date (the "**Expiration Date**") which is the earlier of (i) the last day of the month in which occurs the tenth (10th) anniversary of the day immediately preceding the Commencement Date ("**Fixed Expiration Date**"), and (ii) the date the term of this Lease is terminated by Landlord pursuant to Section 27.1 ("**Early Termination Date**"), and (iii) the date the term of this Lease is otherwise terminated under the provisions of this Lease ("**Earlier Expiration Date**").

**Section 1.41** "**Transferred Tenant's Property**" means Landlord's former trade fixtures, furniture, furnishings, fittings, equipment, apparatus, appliances and other articles of personal property located at the Premises and used primarily in connection with the MEN Business divested pursuant to the ASA in accordance with the terms thereof.

**Section 1.42** "**Unavoidable Delay**" has the meaning set forth in Section 24.8.

**Section 1.43 Certain Definitions**. Any reference in this Lease to (a) "legal action", includes any suit, proceeding or other legal, arbitration or administrative process, (b) "person", includes any individual or entity, and (c) "this Lease", includes Landlord's Regulations and the Exhibits to this Lease. Any capitalized terms used and not otherwise defined in this Lease shall, if defined in the ASA, have the meanings ascribed to such terms in the ASA.

**Article 2. Demise; Rent**

**Section 2.1** Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, for the Term, at the Rent and on the other terms and conditions of this Lease. The use and occupation by Tenant of the Premises includes the non-exclusive right of Tenant and Persons having business with Tenant, in common with Landlord, its other tenants, subtenants and all others entitled or permitted by Landlord to the use of such parts of the Common Areas as may be designated by Landlord from time to time as being available for general use by tenants and other occupants of the Carling Campus and customers and visitors thereto. Pending the completion of any relocation, demising and consolidation works by Landlord in respect of the Transferred Employees and Transferred Tenant Property into the Premises (the "**Consolidation Works**"), Landlord grants to Tenant and the Transferred Employees a non-exclusive license to access, occupy and operate within the existing spaces and locations occupied by the Business in the Campus as at the Commencement Date in the same manner as was the case prior to the Commencement Date (the "**Interim License**"). The Interim License shall expire and cease to have force and effect upon completion of the Consolidation Works.

**Section 2.2** Beginning on the Commencement Date, and in each year of the Term, Tenant shall pay to Landlord without demand, and without any set-off or deduction whatsoever, as rental for the Premises and for the non-exclusive use of the Common Areas, the fixed rent (the "**Fixed Rent**"), which is hereby set at [*] per annum ([*] per month) plus GST calculated at the rate of [*] per square foot of rentable area per annum, based upon the area of the Premises having a total deemed rentable area of 265,000 sq. ft. ("**Rentable Area**").

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

The Fixed Rent shall be paid in equal monthly installments, in advance, on the first day of each calendar month during the Term, except that on the first day of the month following the Commencement Date, Tenant shall pay Landlord the full monthly installment of the Rent due for such month along with the Rent for the period between the Commencement Date and the last day of the month in which the Commencement Date occurs on a per diem basis (such amount being agreed by the parties to be [*]), to be applied to the first installments of Rent due under this Lease. If the Commencement Date or the last day of the Term or such earlier date as the Lease may be terminated is not the first day of a month, the Fixed Rent for the month in which such date occurs shall be apportioned according to the number of days in that month.

**Section 2.3** Tenant covenants to pay at the same time and in the same manner as Fixed Rent, Tenant's Share of Expenses subject to the proviso that Tenant's share of Expenses for the first year of the Term shall be [*] per square foot of Rentable Area of the Premises per annum ([*], payable in monthly installments of [*]) plus GST. On the first anniversary of the Commencement Date, and every anniversary thereafter during the Term, Tenant's share of Expenses shall be increased by [*] per annum, and each such increased amount shall represent Tenant's share of Expenses for that applicable year (herein called the "**Operating Expense Contribution**"). It is the intention of the parties that Tenant's Operating Expense Contribution constitute a "gross rental" amount in respect of the Expenses that Tenant is responsible for and that Tenant shall not be responsible for any other Expenses of Landlord whatsoever over and above Tenant's Operating Expense Contribution other than those expressly set forth in this Lease as being the responsibility of Tenant.

Tenant further covenants to pay as additional rent the following sums to Landlord under this Lease (other than Fixed Rent and Operating Expense Contribution) (herein called "**Additional Rent**", and together with the Fixed Rent and the Operating Expense Contribution, collectively called "Rent")

(a) GST on Rent;

(b) all fees and management or administrative costs of Landlord expressly stipulated in this Lease to be payable by Tenant over and above Operating Expense Contribution;

(c) the cost of Landlord's consent to, review and supervision of in respect of any Tenant's Works which require the consent of Landlord under the terms of this Lease; and

(d) any Expense incurred by Landlord to repair or replace any part of the Premises or the Carling Campus damaged or destroyed by Tenant or those for whom Tenant is responsible in law.

In addition to the foregoing, Tenant shall be responsible to pay directly to the applicable Authority, its own business taxes and license fees.

**Section 2.4** Tenant shall pay Landlord the Rent, without notice, demand, deduction or offset (except as provided in this Lease), in Canadian Dollars, by wire transfer or another method approved by Landlord, at Landlord's Notice Address or another address Landlord designates, and as provided in this Lease. Landlord's delay in rendering, or failure to render, any statement required to be rendered by Landlord for any Rent for any period shall not waive Landlord's right

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to render a statement or collect that Rent for that or any subsequent period provided that Landlord shall not claim or recover any amount relating to any lease year more than one year after the end of that year. The rendering of an incorrect statement shall not waive Landlord's right to render a corrected statement for the period covered by the incorrect statement and collect the correct amount of the Rent, provided such corrected statement is rendered to Tenant within ninety (90) days from the date of the incorrect statement.

**Article 3. Use**

**Section 3.1** Tenant shall be entitled to use the Premises primarily for the purposes of operation of the MEN Business in substantially the manner as previously conducted in the Premises by Landlord, or any other similar type of technology based business, having as ancillary uses thereto (i) offices and associated meeting areas, (ii) a sales centre and showroom, (iii) laboratories and research and development purposes and/or (iv) any other uses permitted under the zoning by-laws and other restrictions imposed by any Authority upon the Premises (collectively, the "**Permitted Uses**") and for no other uses. Landlord represents and warrants that it has received no notice from any Authority imposing such restrictions on the use of the Premises for the purposes of the MEN Business.

**Section 3.2** Tenant shall not (a) use any part of the Premises in violation of this Lease or the certificate of occupancy, if any, for the Premises; (b) use any area outside the Premises and adjacent to the Premises for the outdoor sale or display of any merchandise, for solicitations or demonstrations; (c) store trash other than inside the Premises or in areas behind the Premises, provided such outdoor storage areas are maintained in a clean and orderly condition; (d) cause waste or damage to the Premises, or permit the use of the Premises for any dangerous, noxious or offensive use, trade, business or activity; (e) place any sign outside the Premises or in the Carling Campus except as expressly permitted by Section 9.8 of this Lease, (f) park trucks or other vehicles in a manner which interferes with ingress and egress to and from the Premises or the Carling Campus, (g) cause the release in or from the Premises of any Hazardous Material, or any other item which is deemed Hazardous under any Law, or (h) advertise in a manner which, if the Premises are identified, in Landlord's reasonable judgment, impairs the reputation or desirability of the Carling Campus, or (i) move any large equipment into or out of the Premises the installation or removal of which could reasonably be expected to cause damage to the Premises, without prior notice to, and in compliance with any reasonable requirements imposed by, Landlord.

**Section 3.3** Tenant shall comply with the existing rules and regulations of the Carling Campus attached to this Lease as Exhibit "B", and any future rules and regulations adopted by Landlord, acting reasonably, ten (10) days prior written notice of which shall be given to Tenant, in connection with the operation of, and construction work within, the Premises which do not materially and adversely affect Tenant's rights under this Lease (collectively, "**Landlord's Regulations**"). Landlord is not required to enforce Landlord's Regulations or any other lease in the Carling Campus and Landlord shall not be liable to Tenant for a violation of Landlord's Regulations or any other lease in the Carling Campus by any other tenant or occupant of the Carling Campus. Landlord's failure to enforce Landlord's Regulations against Tenant or any other occupant of the Carling Campus shall not be considered a waiver of Landlord's Regulations. Landlord shall not, however, enforce Landlord's Regulations against Tenant in a

discriminatory or arbitrary manner. If there is any inconsistency between this Lease and Landlord's Regulations, this Lease shall control.

**Article 4. Condition of the Premises**

**Section 4.1** Tenant confirms that, subject to the Carling Works to be completed by Landlord in accordance with the provisions of Subsection 4.3, (i) it has examined the Premises and shall accept possession of the Premises in their "AS IS" condition on the Commencement Date, subject to normal wear and tear and the removal of the existing occupant's property, if any, and repair of any damage caused by such removal; (ii) Landlord has no obligation to perform any other work, supply any materials, incur any expenses or make any installations to prepare the Premises for Tenant's occupancy. Landlord represents and warrants that, to the best of its knowledge, the Premises (including the Building Systems) are in a good state of repair and in proper working order for the purposes for which the Premises have typically been used by Landlord for the period prior to the Commencement Date.

**Section 4.2** Landlord has estimated (with reference to the plans and documentation attached to the Escrow Agreement) that the aggregate cost of all works necessary in order to demise and segregate the Lab 2 Premises and to relocate the MEN Business into the Lab 10 Premises and Lab 2 Premises, each in accordance with the plans and specifications referenced in the Escrow Agreement (the "**Carling Works**"), is [*], plus applicable Taxes. Landlord shall be responsible for completing the Carling Works pertaining to the relocation and consolidation of the MEN Business into the Premises and the Lab 2 Premises) and all works required to physically separate and demise the Premises from the balance of the space within the Lab 2 Building. Tenant shall be responsible, in accordance with the provisions set out in the Escrow Agreement, for up to a maximum of [*] of the initial costs of completing such works and Landlord shall be responsible for all remaining costs associated with completing such Carling Works.

**Section 4.3** Landlord shall undertake and complete the Carling Works in accordance with the provisions of the Escrow Agreement. Tenant shall make itself available to provide reasonable and timely cooperation to assist with the planning, designing, implementation and completion of the Carling Works in each case without further cost contribution by Tenant.

**Article 5. Tenant's Work/Alterations**

**Section 5.1** All structural alterations to the Premises and such works referred to in Subsection 5.2(b)(i), (ii) and (iii) hereof are strictly prohibited without the prior written consent of Landlord, such consent not to be unreasonably withheld, conditioned or delayed.

**Section 5.2**

(a) Tenant may, at any time or times, subject to prior written notice to but without the prior written consent of Landlord, (i) install and remove Tenant's Property at the Premises; and, (ii) paint, decorate, install carpeting and flooring at the Premises and make architectural changes (i.e., cosmetic changes that do not require a building permit) to the interior of the Premises, provided, in each case, that such changes do not materially adversely affect any

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Building System servicing the Premises or the Landlord's Building Services or operation of the Premises in accordance with the Building Standard.

(b) Tenant may, at any time or times, subject to prior written notice to and with the prior written consent of Landlord, such consent not to be unreasonably withheld, conditioned or delayed, make additions, changes or alterations to the Premises as it deems desirable for the Permitted Uses of the Premises, provided that such additions, changes or alterations do not (i) weaken or endanger the structure of the Premises or the Building; (ii) materially adversely affect any Building System servicing the Premises, the Landlord's Building Services or operation of the Premises in accordance with the Building Standard, or (iii) materially adversely affect the operation of any other buildings in the Carling Campus. The work referred to in Section 5.1 and Section 5.2 is hereinafter collectively referred to as the "**Tenant's Work**".

(c) Tenant's Work shall be performed only by reputable contractors or subcontractors in good standing. Tenant's Work shall be performed at Tenant's expense, in a professional manner using new materials of first class quality and in compliance with this Lease, all Laws and Tenant's Plans (as defined in Section 5.3).

**Section 5.3** Prior to performing any Tenant's Work which pursuant to this Article requires Landlord's consent, Tenant shall, at Tenant's expense (a) deliver to Landlord, detailed plans and specifications for Tenant's Work in form reasonably satisfactory to Landlord, and to the extent reasonably necessary, prepared and certified by a registered architect or licensed engineer, and suitable for filing with the applicable Authority, if filing is required by Law ("**Tenant's Plans**"), (b) in respect of any Tenant's Works which require consent, obtain Landlord's approval of Tenant's Plans (which shall not be unreasonably withheld, conditioned or delayed), (c) obtain (and deliver to Landlord copies of) all required authorizations of any Authority and (d) deliver to Landlord certificates (in form reasonably acceptable to Landlord) of worker's compensation and insurance (covering all persons to be employed by Tenant, and all contractors and subcontractors performing any Tenant's Work), commercial general liability insurance (naming Landlord, Landlord's managing agent, if any, Landlord and any Mortgagee as additional insureds) and Builder's risk insurance (issued on a completed value basis), in form, with companies, for periods and in amounts reasonably required by Landlord, naming Landlord, Landlord's managing agent, if any, and any Mortgagee as additional insureds. Whether Tenant's Plans are approved or not, Tenant shall promptly reimburse Landlord for any reasonable out-of-pocket expenses incurred by Landlord in connection with Landlord's review of Tenant's Plans and inspection of Tenant's Work, including outside experts retained by Landlord for that purpose. Following the completion of Tenant's Work, Tenant shall, at Tenant's expense, obtain and deliver to Landlord copies of all authorizations of any Authority required upon the completion of Tenant's Work and "as-built" plans and specifications for Tenant's Work prepared as reasonably required by Landlord.

**Section 5.4** If, in connection with Tenant's Work or any other act or omission of Tenant or Tenant's employees, agents or contractors, a construction lien, financing statement or other lien or violation is filed against Landlord, or any part of the Premises, the Building or Tenant's Work, Tenant shall, at Tenant's sole cost and expense, have it removed by bonding or otherwise within twenty (20) days after Tenant receives notice of the filing.

**Section 5.5** Tenant shall not employ, or permit the employment of, any contractor, subcontractor or other worker in the Premises, whether in connection with Tenant's Work or otherwise, if such employment shall, in Landlord's reasonable judgment, interfere or cause conflict with other contractors, subcontractors or workers in the Carling Campus.

**Section 5.6** At Tenant's request, Landlord shall join in any applications for any authorizations required from any Authority in connection with Tenant's Work (to which Landlord has consented, if required pursuant to this Article), and otherwise cooperate with Tenant in connection with Tenant's Work, but Landlord shall not be obligated to incur any expense or obligation in connection with any such applications or cooperation.

**Section 5.7** Tenant shall not place a load on any floor of the Premises exceeding the floor load per square foot which the floor was designed to carry and which is allowed by any applicable Law.

**Section 5.8**

(a) All Tenant's Work shall become the property of Landlord at the Expiration Date. By the Expiration Date, Tenant shall, at Tenant's expense, remove from the Premises and the Carling Campus Tenant's Property and, if required by Landlord, Tenant's Work including all demising walls, and repair any damage to the Premises or the Carling Campus caused by the installation or removal of Tenant's Property or Tenant's Work.

(b) All Tenant's Property shall remain the property of Tenant and may be removed by Tenant at any time prior to the expiry of the Term. If Tenant removes any Tenant's Property from the Premises, Tenant shall repair any damage to the Premises caused by such removal Any Tenant's Property which is not removed by Tenant by ten (10) days of the Expiration Date shall be deemed abandoned and may, at Landlord's option, be retained as Landlord's property or disposed of by Landlord at Tenant's expense.

**Article 6. Real Estate Taxes**

**Section 6.1** Landlord acknowledges and agrees that Tenant's Share of Taxes are included in Tenant's Operating Expense Contribution.

**Section 6.2** Landlord may, at Landlord's option and at no additional expense to Tenant (Landlord acknowledging that all such costs and expenses are deemed to be included in Tenant's Operating Expense Contribution), institute proceedings to reduce Taxes. Tenant may not institute such proceedings.

**Section 6.3** If Taxes are reduced, abated or discounted for any reason or Landlord receives a refund or credit of Taxes, the reduction, refund, or credit shall not be taken into account, and there shall be no adjustment to Tenant's Operating Expense Contribution in respect of such refund or credit. Likewise, if Taxes are increased for any reason, the increase shall not be taken into account, and there shall be no increase in Tenant's Operating Expense Contribution as a result of such increase.

**Article 7. Expenses**

**Section 7.1** "**Expenses**" means, without duplication, all of Landlord's costs, fees and expenses incurred in connection with operating, insuring, maintaining, repairing and replacing the Carling Campus in accordance with the Building Standard, including, without limiting the generality of the foregoing, the delivery of the Building Services, insurance premiums, the cost of providing electric light, power, fuel, heat, processed air and gas and the maintenance of any service arrangements and shipping and receiving infrastructure in any building in the Carling Campus which provides shipping and receiving services for the Premises.

**Section 7.2** Tenant's Share of Expenses are included in Tenant's Operating Expense Contribution. Tenant's Operating Expense Contribution shall be paid in equal monthly installments, in advance, on the first day of each calendar month during the Term, except that on the Commencement Date, Tenant shall pay Landlord one full monthly installment of Tenant's Operating Expense Contribution, to be applied to the first full monthly installment of Tenant's Operating Expense Contribution due under this Lease. If the Commencement Date or the last day of the Term or such earlier date as the Lease may be terminated is not the first day of a month, Tenant's Operating Expense Contribution for the month in which such date occurs shall be apportioned according to the number of days in that month.

**Section 7.3** For the avoidance of doubt, Tenant's Operating Expense Contribution is deemed to be inclusive of all of the following Expenses which may be incurred by Landlord from time to time (a) income tax, profit, excess profit, capital, large corporations, place of business, gift, estate, succession, inheritance, franchise, land transfer, non-residential, business (other than those business taxes specifically payable by Tenant pursuant to this Lease), and any other taxes personal to Landlord; (b) the cost of any repairs, replacements, upgrades or additions to the Building Systems, the structure of the Premises (including the roof and roof membrane) and such other repairs, replacements, installations, upgrades and/or additions to the Carling Campus or the Premises of a capital nature or constituting a capital improvement, except where necessitated due to the negligence or willful misconduct of Tenant, its agents, servants, invitees or those for whom Tenant is in law responsible; (c) penalties, interest, fines, suits, actions, costs and/or charges relating to the late payment of Taxes, insurance premiums or equipment leases, or any other breach of any contract or applicable laws, unless caused by the default of Tenant, its agents, servants, invitees or those for whom Tenant is in law responsible; and (d) all work to the Premises, the Carling Campus or any part thereof, made necessary by Landlord's non-compliance with governing codes, by-laws and/or ordinances, regulations and ordinances relating to the construction or operation of the Premises or the Carling Campus.

**Section 7.4** Notwithstanding the foregoing, Tenant agrees to pay for the entirety of any Expenses incurred by Landlord in accordance with the terms of this Lease and solely related to increases in Building Services or Building Standard costs due solely to Tenant's required use of the Premises or alterations thereto and such amounts shall thereafter be included in the calculation of Tenant's Share of the Expenses for the duration of such use or the existence of the alterations, as applicable. For greater clarity, Landlord acknowledges and agrees that Tenant's Operating Expense Contribution includes all Expenses necessary to maintain the proper operation of the Premises and the Building Systems in accordance with the Building Standard in order to accommodate: (i) the operation of the MEN Business in substantially the same manner

as typically conducted in the Premises by Landlord for periods prior to the Commencement Date (operating primarily during the hours of 8am to 6pm Monday to Friday), including up to [*] square feet of the Rentable Area of the Premises for laboratory uses and, (ii) a population density in the Premises of [*] of Rentable Area of the Premises for the purposes of carrying out the Permitted Uses.

**Section 7.5** Tenant services not part of Building Services (e.g. coffee, mail, vending machines, reprographic services, and Tenant's equipment maintenance) and other services not typically provided by a landlord under a commercial lease shall be the sole responsibility of Tenant,

**Article 8. Electricity — Direct**

**Section 8.1** Subject to the provisions of this Article, Landlord shall at all times during the Term provide electricity to the Premises through the existing electrical system of the Carling Campus and the Building Systems in accordance with the Building Standard for reasonable use in connection with the Permitted Uses, having regard to the uses previously conducted in the Premises by Landlord. Landlord shall not be liable to Tenant for any failure, defect or interruption of electric service, save and except where caused to due any gross negligence or willful act or omission by Landlord or those for whom Landlord is responsible at law (including, for greater certainty, any failure to pay any utilities and service fees and charges as and when due). Tenant's use of electricity in the Premises shall not at any time exceed the capacity of the electrical system within or serving the Premises and Tenant shall not overload any component of the Building Systems. Landlord shall select (and may from time to time change) the utility or other supplier providing electricity to the Carling Campus and the Premises). Tenant shall comply with all rules, regulations, and other requirements of the utility or other supplier.

**Section 8.2** Tenant's Share of electrical costs consistent with the Building Standard are included in the Tenant's Operating Expense Contribution. In order to ensure that the capacity of the electrical systems servicing the Premises is not exceeded and to avert possible adverse effect upon such electrical systems serving the Premises, Tenant shall not, without Landlord's prior written consent in each instance, such consent not to be unreasonably withheld, condition or delayed, make any material alteration or addition to the electrical system of the Premises existing at the Commencement Date. If Landlord grants such consent, the cost of all additional risers and other equipment required therefor, and the increases in electrical consumption within the Premises resulting from the operation of such additional fixtures, appliances or equipment shall be paid as Additional Rent by Tenant to Landlord within fifteen (15) days of delivery of written notice to Tenant. As a condition to granting such consent, Landlord may require Tenant to agree to pay an increase in Tenant's Operating Expense Contribution by an amount which will reasonably reflect the increased cost of Landlord of the additional electrical services to be furnished to the Premises by Landlord.

**Section 8.3** For greater clarity, Landlord acknowledges and agrees that Tenant's Operating Expense Contribution is inclusive of all electrical costs necessary in order to accommodate: (i) the operation of the MEN Business in substantially the same manner as conducted in the Premises by Landlord immediately prior to the Commencement Date (operating primarily during the hours of 8am to 6pm. Monday to Friday) including up to [*] square feet of

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the Rentable Area of the Premises for laboratory uses; and (ii) a population density in the Premises of [*] of Rentable Area of the Premises for the purposes of carrying out the Permitted Uses.

**Article 9. Services**

**Section 9.1** Landlord shall deliver, through third party service providers, the Building Services to the Premises and otherwise for the benefit of Tenant in accordance with the Services Matrix attached hereto as Exhibit "C" and in accordance with the Building Standard. The costs of the Building Services delivered in accordance with the base Building Standard is included in Tenant's Operating Expense Contribution.

**Section 9.2 Elevators.** Landlord shall (unless the Premises are on street level) provide passenger elevator service for the benefit of the occupants of the Premises. Landlord may change the manner of operation of any of the elevators, but shall not reduce the hours of operation without consultation with Tenant.

**Section 9.3 Heat, Ventilation and Air Conditioning.** Landlord shall provide to the Premises through the existing Building Systems, for the comfortable occupancy of the Premises (in accordance with the Building Standard and Building Systems operational sequences as reasonably determined by Landlord), heat, ventilation and air conditioning. Landlord makes no representation and shall have no obligation or liability with respect to the performance or nonperformance of the Building Systems by reason of (a) the use of the Premises, or any part thereof, in a manner exceeding the design criteria of the Building Systems, (b) the arrangement of any partitioning or the ceiling distribution system in the Premises which interferes with normal operation of the Building Systems, (c) the use of machines or equipment in the Premises, except for ordinary office machines which do not produce excess heat, (d) Tenant's failure to comply with this Lease which affects the performance of the Building Systems, (e) Tenant's Work, (f) any other act of Tenant or Tenant's employees or contractors, or (g) any Law. Landlord represents and warrants that as of the Commencement Date the Building Systems are in a proper working condition and can accommodate (i) the operation of the MEN Business in substantially the same manner as conducted in the Premises by Landlord immediately prior to the Commencement Date (operating primarily during the hours of 8am to 6pm, Monday to Friday) including up to [*] square feet of the Rentable Area of the Premises for laboratory uses and, (ii) a population density in the Premises of [*] of Rentable Area of the Premises for the purposes of carrying out the Permitted Uses.

**Section 9.4 Cleaning.** Landlord shall provide janitorial and cleaning services for the Premises (save and except for specialized cleaning of the interior lab spaces) and all Common Areas in the Carling Campus and cause same to be maintained and kept clean in accordance with the Building Standard and the costs of such janitorial and cleaning services are included in the Tenant's Operating Expense Contribution. In providing such cleaning services, Landlord shall comply with, and shall make commercially reasonable efforts to require each of its contractors and agents to comply with, Tenant's security requirements.

**Section 9.5 Water; Lavatories.** Landlord shall provide to the Premises domestic water for ordinary drinking, pantry and lavatory purposes in accordance with the Building

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Standard and the service charges and consumption costs related thereto are included in Tenant's Operating Expense Contribution. If Tenant requires domestic water for any other purpose, and domestic water is available for that purpose from the existing Building System, Landlord shall provide that domestic water, but may install a meter to measure Tenant's domestic water consumption for all purposes (or, at Landlord's option, to measure Tenant's consumption of only the additional domestic water), in which event Tenant shall (a) pay to Landlord the cost of the meter and its installation, (b) at Tenant's expense, keep the meter in good working order and repair, and (c) pay to Landlord, within fifteen (15) days following Tenant's receipt of a bill, the cost incurred by Landlord to supply domestic water to the Premises as measured by the water meter (including any GST or other taxes).

**Section 9.6 Access and Security.** Tenant shall have access to the Premises 24 hours each day, seven days each week. Tenant shall have the right to install, at its sole cost and expense, and subject to prior written approval from Landlord, such approval not to be unreasonably withheld, conditioned or delayed, its own security system for the Premises. Subject to Section 18.1, Tenant shall have the right: (a) to require all persons entering and leaving the Premises to identify themselves by registration, security card, electronic identification measures or otherwise and to establish their right to enter or leave; and (b) to exclude or expel any person at any time from the Premises if such person is not authorized or entitled to be in the Premises. Landlord may impose in respect of the Premises, temporarily from time to time, or permanently, security procedures applicable to the Carling Campus.

**Section 9.7 Directory Listing.** Landlord shall list Tenant's name and the name of any permitted subtenant on the main tenant directory serving the Premises, if any, at Tenant's expense. The listing of any other name on the door of the Premises, the building directory serving the Premises, or otherwise, shall not vest in that person any right or interest in this Lease or in the Premises, nor shall it be considered Landlord's consent to any assignment of this Lease or any sublease or occupancy of the Premises.

**Section 9.8 Signage.** Tenant shall have the right, to the extent permitted by applicable governmental laws, regulations and ordinances and subject to compliance with Landlord's signage guidelines and the consent of the National Capital Commission, to have and install at its own cost its sign panels on pylon sign serving the Carling Campus along Carling Avenue and Moody Drive and on the blade sign in front of Lab 10 (which blade sign Tenant to have exclusive use of. In addition, Tenant shall be permitted to erect temporary signs/banners for a short period of time after Closing to announce the Closing. Landlord agrees to use its reasonable best efforts to obtain the consent of the National Capital Commission, to the extent required, to the signage requested by Tenant. All signage shall be subject to the rules and regulations of Landlord respecting the size, shape and context of signage at the Carling Campus.

**Section 9.9 Overtime, Extra or Outside Services.** If Tenant shall give Landlord reasonable advance notice that Tenant requires heating, ventilation, air conditioning, or shipping/receiving services, in addition to, or during hours or on days other than, those set forth in this Lease, Landlord shall make commercially reasonable efforts to provide that service (unless, with respect to shipping/receiving service, it is not available during the requested hours or on the requested days) and Tenant shall pay Landlord, within fifteen (15) days following Tenant's receipt of a bill, Landlord's then established charge for that service. If, upon Tenant's

request, Landlord provides Tenant with any service which Landlord is not required to furnish pursuant to this Lease, Tenant shall pay to Landlord, within ten (10) days following Tenant's receipt of a bill, Landlord's then established charge for that service. Any outside service providers (other than those used by Tenant in connection with Tenant's business) may be excluded from the Carling Campus if in Landlord's reasonable determination the presence of that service provider is detrimental to the Carling Campus or any tenant.

**Section 9.10 Parking.** Landlord shall provide to Tenant for the non-exclusive use of Tenant's employees and invitees, and at no additional cost to Tenant, no less than [*] parking spaces in the parking areas located on the Carling Campus and shown on the plan Exhibit "A" as lots U, V, W, X and Y on a first-come, first-served basis. Tenant shall have non-exclusive access to the parking areas twenty-four (24) hours a day, seven (7) days a week (but subject to security and other requirements of Landlord which are applicable to all users of such parking areas). Landlord covenants that, unless required by applicable Laws, it will not at any time during the Term designate any of the above-described parking areas for the exclusive use of any tenant or occupant of the Carling Campus or other party, but such covenant does not extend to guaranteeing that there will not be modifications or elimination to such parking areas in the future, subject to compliance with Laws. In the event that any of the aforesaid parking areas are eliminated, Landlord shall use its commercially reasonable efforts to provide an equivalent number of parking spaces for Tenant's use in similar proximity to the Premises on the terms and conditions hereinbefore provided.

**Section 9.11 Campus Amenities.** Subject to the rules and regulation in effect from time to time, Tenant's employees shall have access to and use of any existing sports fields and/or fitness facilities so long as Landlord continues to operate the same during the Term. Landlord shall in no event be obligated to continue any such operation and Tenant shall have no claim against Landlord if it ceases such operation or changes the hours or service levels at any time. Users of the said facilities shall pay the user costs associated with such facilities as established by Landlord from time to time.

**Section 9.12 No Warranty by Landlord.** Landlord shall have no obligation to provide to Tenant or the Premises any services except as specifically set forth in this Lease. Landlord does not warrant that any Building System or service to be provided by Landlord, or any other systems or services which Landlord may provide shall be free from interruption or reduction. Building Systems and Building Services, including access, may be interrupted or reduced by reason of Laws, repairs or changes which are, in Landlord's reasonable judgment, necessary or desirable, or Unavoidable Delays, in which event such interruption or reduction shall not, unless otherwise provided in this Lease (i) constitute an actual or constructive eviction, or a disturbance of Tenant's use of the Premises, (ii) entitle Tenant to any compensation or abatement of the Rent, (iii) relieve Tenant from any obligation under this Lease, or (iv) impose any obligation or liability on Landlord. Notwithstanding anything in this Section to the contrary, Landlord shall use commercially reasonable efforts resolve the interruption noted above as soon as reasonably possible and to minimize the interference to Tenant's business caused thereby.

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**Article 10. Maintenance and Repairs**

**Section 10.1** Landlord shall throughout the Term, as part of Expenses (except for damage resulting from any act or omission of Tenant or those for whom Tenant is responsible in law) and in accordance with the Building Services and Building Standard:

(a) maintain, repair and replace, as required, the structure of the Buildings in which the Premises are situate;

(b) be responsible for any capital repair or replacement (including, without limitation, the paving and or resurfacing if the parking lots, lanes and roadways on or servicing the Carling Campus);

(c) maintain, repair and replace, as required, the Building Systems (whether or not such systems are located within or outside the Premises);

(d) remove ice and snow from driveways and parking areas in the Carling Campus; and

(e) be responsible for any other maintenance, repair and replacement in respect of the Premises which are expressly stated herein to be the responsibility of Landlord or are not expressly stated herein to be the responsibility of Tenant.

**Section 10.2** Landlord shall, as part of the services included within Tenant's Operating Expense Contribution, subject to the provisions of this Lease and the proviso set out below, maintain and repair the Premises (including any lavatories within the Premises) and all Building Systems within and serving the Premises, subject to reasonable wear and tear and damage, but shall have no responsibility to maintain, repair, replace or insure the Tenant's Property. Subject to Section 13.4, all damage to the Premises (including the Building Systems) or the Carling Campus resulting from any act or omission of Tenant or Tenant's employees, invitees, customer, guests or contractors, shall be repaired, at Tenant's expense, by Tenant to the reasonable satisfaction of Landlord or, at Landlord's option, by Landlord. Tenant shall give prompt notice to Landlord if any portion of the Premises or any Building System within the Premises requires repair.

**Section 10.3** Landlord shall have no liability to Tenant, there shall be no abatement of the Rent and there shall not be deemed to be any actual or constructive eviction of Tenant arising from Landlord performing any repairs or other work to any portion of the Premises or the Carling Campus (including the Premises or the Building Systems). In the performance of such repairs or other work, Landlord will take reasonable measures to minimize interference with the conduct of Tenant's business in the Premises and damage to the Premises, Tenant's Work and Tenant's Property (all of which shall promptly be repaired by Landlord, at its expense), but Landlord is not required to employ overtime labor or incur extraordinary expenses.

**Article 11. Laws**

**Section 11.1** Tenant shall, at Tenant's expense, subject to the provisions of this Lease, including Article 5, as if part of Tenant's Work, comply with all present and future laws, rules,

regulations, orders, ordinances, judgments, requirements and (if Landlord adopts same) and other similar laws (collectively, "**Laws**"), of any applicable federal, provincial or municipal governmental authority or any department, commission, board or officer thereof (collectively, "**Authority**") applicable to the Premises, Tenant's occupancy of the Premises, Tenant's Work or Tenant's Property. If, however, compliance requires structural work to the Premises or any work to the Building Systems within and serving only the Premises, Tenant shall comply, at Tenant's expense, only if the obligation to comply arises from Tenant's Work, Tenant's Property or Tenant's manner of using the Premises (and, in such event, Landlord may, at Landlord's option, perform the work, at Tenant's expense, to be paid within thirty (30) days following Tenant's receipt of a bill and other reasonable details and supporting information confirming the requirement of such work in accordance with the provisions of this Section 11.1). If Tenant's manner of using the Premises requires work outside the Premises or to any Building System serving areas outside the Premises, Tenant shall cease that manner of using the Premises unless Landlord, at Landlord's option acting reasonably, agrees to perform that work, at Tenant's expense, to be paid within thirty (30) days following Tenant's receipt of a bill and other reasonable details and supporting information confirming the requirement of such work in accordance with the provisions of this Section 11.1.

**Section 11.2** Tenant shall promptly deliver to Landlord a copy of any communication or other materials relating to the Premises, the Building (including the Building Systems), Tenant's Property or Tenant's Work received by Tenant from, or sent by Tenant to, any Authority.

**Section 11.3** Landlord shall promptly cure any violation of Law caused by Landlord affecting the Carling Campus to the extent the violation interferes with Tenant's occupancy of the Premises or the performance of Tenant's Work.

**Article 12. Subordination; Estoppel Certificates**

**Section 12.1** This Lease, and the rights of Tenant under this Lease, are subject and subordinate in all respects and to all present and future mortgages on the Building, including all modifications, extensions, supplements, consolidations and replacements thereof ("**Mortgages**"), and all advances under any Mortgage, provided the Tenant receives a reasonable "non-disturbance agreement" from any Mortgagee in respect of whose Mortgage this Lease is subordinated. This Section is self-operative and no further instrument of subordination is required. Provided Tenant receives the aforesaid non-disturbance agreement from the Mortgagee, Tenant shall, within fifteen (15) days following receipt of Landlord's request, sign, acknowledge and deliver any instrument that Landlord or any mortgagee under a Mortgage ("**Mortgagee**") may reasonably request to evidence that subordination.

**Section 12.2** Landlord shall make commercially reasonable efforts at the request of Tenant to obtain for the benefit of Tenant a subordination, non-disturbance and attornment agreement, from the party seeking to obtain such subordination or attornment, in a commercially reasonable form mutually satisfactory to the parties. Such subordination, non-disturbance and attornment agreement shall be in recordable form and may be recorded on title to the Lands at Tenant's election and expense.

**Section 12.3** If any Mortgagee succeeds to the rights of Landlord under this Lease, then at the request of the successor, Tenant shall attorn to the successor as Tenant's landlord under this Lease, and shall, within fifteen (15) days following Tenant's receipt of a written request from said Mortgagee, sign, acknowledge and deliver any instrument that the successor reasonably requests to evidence the attornment. Upon such attornment, this Lease shall continue in full force and effect as a direct lease between the Mortgagee and Tenant on all of the terms of this Lease, except that the Mortgagee shall not be (a) liable for any previous act or omission of Landlord under this Lease, or subject to any offset not expressly provided in this Lease, or (b) by any prepayment of more than one month's Rent, unless the prepayment has been approved in writing by the Mortgagee in question. Upon Tenant's receipt of an attornment request, Tenant shall be entitled to pay the Rent to the Mortgagee and Landlord agrees that it shall have no claim of any nature or kind against Tenant as a result of Tenant paying the Rent in accordance with such notice.

**Section 12.4** If any Mortgagee requires that any Mortgage be subordinate to this Lease, Tenant shall, within fifteen (15) days following Tenant's receipt of a request, sign, acknowledge and deliver to Landlord instruments in form and substance reasonably requested by Landlord providing for that subordination.

**Section 12.5** Landlord and Tenant shall, at any time and from time to time, within fifteen (15) days following its receipt of a request from the other party, sign, acknowledge and deliver to the requesting party or any other person designated by that party a certification (a) that this Lease is in full force and effect and has not been modified (or, if modified, setting forth all modifications), (b) the date to which the Rent has been paid, (c) stating whether or not, to the best of its knowledge, there is then a Default or any event has occurred which, with the serving of notice or the passage of time, or both, would give rise to a Default, or if Landlord is in default under this Lease, and if so, setting forth the specific nature of same, and (d) to the best of its knowledge, any other factual matters reasonably requested by the other party or any person designated by the other party. Any certification delivered pursuant to this Section may be relied upon by the requesting party or any other person designated by the other party.

**Article 13. Insurance**

**Section 13.1** Tenant shall, at Tenant's expense, maintain at all times during the Term and at all times when Tenant is in possession of the Premises (a) commercial general liability insurance in respect of the Premises, on an occurrence basis, with a combined single limit (annually and per occurrence and location) of not less than [*] (which may consist of primary coverage of not less than [*] per occurrence and [*] aggregate and umbrella coverage), naming Landlord and any Mortgagee of the freehold interest in the Premises, if any, as additional insured, (b) property insurance in an amount equal to 100 percent of full replacement value covering Tenant's Work, Tenant's Property and the property of third parties located in the Premises, against fire and other risks included in the standard form of property insurance, and (c) such other insurance as Landlord may reasonably require to the extent that such coverage is then customarily required of tenants occupying similar premises in similar buildings in the general vicinity of the Premises. Landlord shall have the right at any time and from time to time, but not more frequently than once every year, to require Tenant to increase the amount of the commercial general liability insurance required to be maintained by Tenant under this Lease

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

provided the amount shall not exceed the amount then customarily required of tenants occupying similar premises in similar buildings in the general vicinity of the Premises.

**Section 13.2** Tenant shall deliver to Landlord (a) standard form certificates of insurance evidencing the insurance required by this lease to be maintained by Tenant before the Commencement Date (and with respect to any insurance required pursuant to Article 13, before the commencement of any Tenant's Work), and within fifteen (15) days before the expiration of any such insurance. All required insurance (including insurance required pursuant to Article 5) shall be primary, issued by companies with an A.M. Best rating of A-VII or better and contain a provision whereby it cannot be canceled unless the carriers endeavor to provide Landlord with at least thirty (30) days' prior written notice of the cancellation. Tenant may carry any required insurance under a blanket policy if that policy complies with the requirements of this Lease.

**Section 13.3** Landlord, acting reasonably, shall carry, at its expense, such insurance with such deductibles and exclusions as would a prudent owner for the account and benefit of Landlord as Landlord from time to time considers useful, expedient or beneficial, it being agreed and understood however that such insurance shall include, the following:

(a) insurance against "all risks" of loss or damage including sprinkler leakage and damage due to flood or earthquake, covering all property owned by the Landlord or for which the Landlord is responsible under this Lease relative to the Carling Campus including the buildings, the Common Areas and the Premises, but excluding all Tenant's Property and Tenant's Work;

(b) insurance against loss of Landlord's gross profits including loss of Rent;

(c) insurance against mechanical break down, explosion, rupture or failure of boilers, pressure vessels, heating, ventilating and air conditioning equipment, electrical apparatus and other like apparatus owned by Landlord; and

(d) comprehensive general liability insurance with respect to Landlord's operation of the Carling Campus covering bodily injury, death and damage to tangible property of others.

Tenant shall not do or permit to be done any act which shall invalidate or be in conflict with Landlord's insurance policies, or increase the rates of insurance applicable to the Building. If, solely as the result of a Default, the insurance rates for the Building increase, in addition to any other obligation or liability of Tenant or any right or remedy of Landlord, Tenant shall reimburse Landlord for the increased premiums, within fifteen (15) days following Tenant's receipt of Landlord's written request.

**Section 13.4** Landlord and Tenant shall, to the extent obtainable, each procure a clause in, or endorsement on, any property insurance carried by it, pursuant to which the insurance company waives its right of subrogation against the other party to this Lease and its agents and employees or consents to a waiver of the right of recovery against the other party to this Lease and its agents and employees. If an additional premium is required for the waiver or consent, the other party shall be advised of that amount and may, but is not obligated to, pay the same. If that party elects not to pay the additional premium, the waiver or consent shall not be required in

favor of that party. Provided its right of full recovery under its insurance policy is not adversely affected, Landlord and Tenant each hereby releases the other (and its agents and employees) with respect to any claim (including a claim for negligence) it may have against the other for damage or loss covered by its property insurance (including business interruption and loss of rent).

**Section 13.5** The provisions of this Article shall apply to any subtenant or other occupant of the Premises.

**Article 14. Casualty**

**Section 14.1** Except to the extent that the damage is caused by Tenant or those for whom Tenant is responsible in law, if (a) the Premises (including any Building System) are damaged by fire or any other casualty (including where Tenant is deprived of reasonable access to the Premises or any part of the Premises for a prolonged period of time, or the Premises or any part of the Premises, are unusable by Tenant for the reasonable conduct of Tenant's normal business in the Premises), Tenant shall give prompt notice to Landlord. Subject to the provisions of this Article 14, Landlord shall, at Landlord's expense, repair the damage, excluding the damage to Tenant's Work or Tenant's Property, to the extent of the insurance proceeds received or which would have been received had Landlord maintained the insurance required by the terms of this Lease, in a manner which is in all material respects reasonably comparable to the status of the Premises prior to the occurrence of such damage; and (b) Tenant shall, at Tenant's expense, promptly remove Tenant's Property from the Premises to the extent reasonably required by Landlord in connection with Landlord's repair of the damage. Until the date which is sixty (60) days following the date upon which repairs to be performed by Landlord are substantially completed such that Tenant can access and occupy the Premises, whether or not Tenant's Work is complete, the Rent shall be reduced in proportion to the area of the Premises to which Tenant shall not have reasonable access or which is unusable by Tenant for the reasonable conduct of Tenant's normal business in the Premises.

**Section 14.2** Except to the extent that the damage is caused by Tenant or those for whom Tenant is responsible in law, if (a) the Premises or the Carling Campus are materially damaged by fire or any other casualty, Landlord and Tenant shall each have the right, by notice to the other within sixty (60) days following the date of the damage, to terminate this Lease. If this Lease is terminated pursuant to this Section, the Term shall expire on the 60th day after the notice is given (and any Rent paid by Tenant to Landlord for any period after that date shall be promptly refunded by Landlord to Tenant) and during such period, the Rent payable by Tenant shall abate in accordance with the provisions of Section 14.1 hereof. If Landlord and Tenant do not elect to terminate this Lease pursuant to this Section 14.2, Landlord shall proceed to repair or rebuild the Premises with due diligence and the provisions of Section 14.1 hereof shall apply. For purposes of this Section 14.2, the Premises shall be deemed to be "materially damaged" if the cost of repairing any such damage exceeds 25% of the replacement cost thereof or the damage impacts 25% or more of the aggregate square footage of the Premises and in each case cannot be repaired or rebuilt with reasonable diligence within six (6) months of the date of the occurrence of such damage or destruction, in each case as reasonably determined by an independent and reputable architect or engineer selected by Landlord.

**Section 14.3** For greater certainty, the parties confirm that in the event this Lease is terminated due to fire or other casualty under this Article 14, no Early Termination Fee is payable to Tenant, and the Escrow Agent shall, in such circumstances, be instructed to release and remit the Early Termination Fee funds to Landlord.

**Article 15. Expropriation or Condemnation**

**Section 15.1** If as the result of a taking by expropriation or condemnation or similar legal action of an Authority (a) all of the Premises, or so much thereof as renders the Premises wholly unusable by Tenant, is taken, (b) a portion of the Building or the Land is taken, resulting in Tenant no longer having reasonable access to or use of the Premises, (c) all or substantially all of the Building or the Land is taken or (d) a portion of the Building is taken resulting in Landlord's determination to demolish or substantially renovate the Building, the Term shall expire on the date of the vesting of title. In that event, the Rent shall be apportioned as of the date of termination and any Rent paid by Tenant to Landlord for any period after that date shall be promptly refunded by Landlord to Tenant.

**Section 15.2** Each party shall have the right to claim and recover from the expropriating Authorities such compensation as may be separately awarded or recoverable. Landlord and Tenant agree to inform each other fully as to their respective claims for compensation made by them in the event of any expropriation and not to claim compensation on any basis inconsistent with this Lease and to reasonably cooperate with each other in the prosecution of any proper separate claims. Neither party shall compromise the claim of the other party without its prior written consent.

**Section 15.3** If a taking does not result in the termination of this Lease (a) Landlord shall, at Landlord's expense, as soon as practicable, subject to receipt of compensation award from the expropriating authority, restore that part of the Premises, the Building or the Land not taken, so that the Premises are usable which restoration shall, as necessary, include providing alternative means of ingress, egress, and other common areas, and (b) from and after the date Tenant is required by Law to vacate by reason of such taking, the Rent shall be reduced in the same proportion as the area of the Premises, if any, which was taken.

**Section 15.4** For greater certainty, the parties confirm that in the event this Lease is terminated due to expropriation or condemnation under this Article 15, no Early Termination Fee is payable to Tenant, and the Escrow Agent shall, in such circumstances, be instructed to release and remit the Early Termination Fee funds to Landlord.

**Article 16. Environmental Matters**

**Section 16.1** Tenant shall notify Landlord immediately if it has knowledge of any environmental contamination on or under the Land, Building, or Premises.

**Section 16.2** Tenant will afford site access to Landlord, where appropriate for specific site requirements, for purposes of on-going environmental monitoring and remediation work.

**Section 16.3** Landlord represents and warrants that it has received no notice from any Authority that the Premises do not comply in all material respects, as at the date of this Lease,

with all current applicable Environmental Laws. If an issue of non-compliance is found, Landlord shall take such action as is necessary to bring such condition into compliance at Landlord's expense unless such non-compliance is due to the activities of Tenant (or those for whom Tenant is in law responsible).

**Section 16.4** Tenant hereby indemnifies Landlord and each and every of its officers, directors, employees, agents and shareholders and agrees to hold each of them harmless from and against any and all Liabilities, including any Order, arising (directly or indirectly) out of or relating to any Hazardous Materials contamination in, under or on the Premises which at any time or from time to time may be paid, incurred or asserted against any of them for, with respect to or as a direct or indirect result of, the presence on or under, or the escape, seepage, leakage, spillage, discharge, emission or release from, the Premises of any Hazardous Materials, but only to the extent caused by the act, omission or negligence of Tenant or anyone for whom it is in law responsible. For greater certainty, Tenant shall have no liability for any Hazardous Materials located in, on, under or upon the Building or any part thereof prior to the Commencement Date, or which migrate to or under the Building from adjacent properties after the Commencement Date.

**Section 16.5** Landlord hereby (i) acknowledges that Tenant did not cause or contribute to, and shall not be liable or responsible for, the currently or formerly existing Hazardous Materials contamination in, under, at, near or migrating from, to or through the Carling Campus prior to the Commencement Date; (ii) indemnifies Tenant and each and every one of its officers, directors, employees, agents and shareholders and agrees to hold each of them harmless from and against (A) any Liabilities, including any Order, arising (directly or indirectly) out of or relating to any currently or formerly existing Hazardous Materials contamination in, under, at, near or migrating from, to or through the Carling Campus prior to the Commencement Date and (B) if and to the extent caused by Landlord, any Liabilities, including any Order, arising (directly or indirectly) out of or relating to any Hazardous Materials contamination in, under, at, near or migrating from, to or through the Carling Campus.

**Article 17. Assignment and Subletting**

**Section 17.1** Subject to Section 17.7, Tenant shall not, without Landlord's consent, such consent not to be unreasonably withheld, conditioned or delayed: (a) assign (directly or indirectly, by operation of law or otherwise), encumber or otherwise transfer this Lease or any interest in this Lease, or (b) sublet or permit others to occupy all or any part of the Premises (whether for desk space, mailing privileges or otherwise). The transfer, redemption or issuance (by one or more transactions) of ownership interests of Tenant or any direct or indirect parent of Tenant that is a controlled Affiliate of Ciena Corporation or its successor which results in 50 percent or more of the ownership interests of that person being held by persons other than Ciena Corporation, its successor or their controlled Affiliates ("Change of Control") shall be considered an assignment of this Lease which requires Landlord's consent, unless such ownership interests are publicly traded on a national stock exchange or over the counter market. For the avoidance of doubt, a change in control of Ciena Corporation shall not be deemed a Change of Control nor require Landlord's consent. Landlord's consent to an assignment, subletting or occupancy shall not relieve Tenant from any liability under this Lease or from obtaining Landlord's consent to any further assignment, subletting or occupancy.

**Section 17.2 Intentionally Deleted.**

**Section 17.3** In the event that Tenant wishes to engage in an assignment of the Lease or a sublet of the Premises which requires Landlord's consent in accordance with this Article 17, it shall give Landlord notice of Tenant's desire, accompanied by (i) an executed copy of the proposed assignment (with an assumption agreement signed by the assignee in a form acceptable to landlord, acting reasonably, (ii) a reasonably detailed description of the proposed assignee or subtenant and its principals, the nature of its business and its proposed use of the Premises, and (iii) current financial information with respect to the proposed assignee or subtenant, including its most recent financial statements (and Tenant shall promptly deliver to Landlord such additional information as Landlord reasonably requests).

**Section 17.4** Any permitted assignee or subtenant, including as permitted by Section 17.7, shall perform and observe all of Tenant's covenants contained in this Lease, including providing the same guaranty, if any, as provided by Tenant. Tenant shall be responsible for any act or omission of any assignee or subtenant (or anyone claiming through any assignee or subtenant) which violates this Lease, and that violation shall be considered a violation by Tenant.

**Section 17.5** If Landlord, provided it has acted in accordance with its rights under Section 17.1, denies consent to a proposed assignment or sublease, Tenant shall indemnify, defend and hold harmless Landlord and Landlord's managing agent, if any, against and from any and all loss, liability, damages, costs and expenses (including reasonable counsel fees) resulting from any claims that may be made against Landlord or Landlord's managing agent, if any, by any proposed assignee or subtenant or by any brokers or other person claiming a commission or similar compensation in connection with the proposed assignment or sublease.

**Section 17.6** Tenant shall pay Landlord, within fifteen (15) days following payment to Tenant, (a) all sums and other consideration in connection with an assignment, after Tenant recovers therefrom all reasonable costs incurred by Tenant in connection with that assignment which have been paid or are then due and payable; and (b) the excess, if any, of the rents, additional charges or other consideration in connection with a sublease over the Rent allocable to the subleased premises (which Rent shall be allocated equally throughout the Premises) accruing during the term of that sublease after Tenant recovers therefrom all reasonable costs incurred by Tenant in connection with that sublease which have been paid or are then due and payable. This Section shall not apply to an assignment or a sublease described in Section 17.7.

**Section 17.7** Tenant may, without Landlord's consent,

(a) assign this Lease or sublet all or any part of the Premises to any person which, directly or indirectly, controls, is controlled by, or is under common control with Tenant (which means the ownership, directly or indirectly, of more than 50 percent of all voting ownership interests or the possession, directly or indirectly, of the power to direct management), or permit any such person to occupy all or any part of the Premises in each case in connection with the any Permitted Use of the Premises;

(b) assign this Lease to a purchaser of all or substantially all of the assets of Tenant, or

(c) sublet to any person or persons up to [*] of the Rentable Area of the Premises in the aggregate, provided that Landlord shall be entitled to [*] of the rents, additional charges or other consideration in connection with a sublease over the Rent allocable to the subleased premises (which Rent shall be allocated equally throughout the Premises) accruing during the term of that sublease after Tenant recovers therefrom all reasonable costs incurred by Tenant in connection with that sublease which have been paid or are then due and payable;

and provided further that (a) there is then no Default which is then subsisting, (b) Landlord is given not less than fifteen (15) days prior notice of the assignment, sublet or occupancy, including an executed original of all related documents, including an original assignment (with an assumption signed by the assignee), sublease or permission, and proof reasonably satisfactory to Landlord of the requisite control, and (c) the assignee or subtenant assumes in writing all the obligations hereunder. No such assignment, subletting or occupancy shall relieve Tenant from any liability under this Lease or from obtaining Landlord's consent to any further assignment, subletting or occupancy.

**Article 18. Access**

**Section 18.1** Landlord shall have the right, without the same constituting an eviction or constructive eviction of Tenant in whole or in part and without any abatement of the Rent or liability to Tenant, to (a) place (and have access to) concealed ducts, pipes and conduits through the Premises (without a material reduction or reconfiguration of the useable area of the Premises), (b) access to the Premises where necessary for Landlord to carry out its obligations under this Lease at such times mutually agreeable with Tenant and accompanied by a representative of Tenant, on at least 48 hours prior notice (except in the case of an emergency or to avoid damage to persons or property, in which case Landlord shall use reasonable efforts to contact the representative designated by Tenant as its liaison for addressing emergencies on Tenant's behalf prior to accessing the Premises), (c) maintain or repair the Building (including the Building Systems) or the Carling Campus; (d) change the name, number or designation by which the Building is known; and (e) take all material into the Premises that may be required in connection with any of the matters described in this Section. If in an emergency or to avoid damage to persons or property, Tenant is not present when Landlord desires to enter the Premises and Landlord is unable to reach a Tenant representative, Landlord or Landlord's contractors may enter the Premises, by force, without liability to Tenant.

**Section 18.2** If there is to be any excavation or construction adjacent to the Building, Tenant shall permit Landlord or any agent of Landlord to enter the Premises on reasonable prior written notice to perform such work as Landlord or that person deems necessary to protect the Building, without any abatement of the Rent or liability to Tenant.

**Section 18.3** Except as may be provided in this Lease, all walls, windows and doors bounding the Premises (including exterior walls of the Building, core corridor walls, and exterior doors and entrances, other than surfaces facing the interior of the Premises and doors and entrances servicing only the Premises), balconies, terraces, vaults, Building systems and all other

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

portions of the Building are reserved to Landlord for Landlord's use, are not part of the Premises, and Landlord may have access thereto through the Premises.

**Section 18.4** Landlord acknowledges that any information delivered or received by Landlord from Tenant or otherwise in accordance with the undertaking of its duties or the exercise of its rights herein in respect of the business conducted by Tenant at the Premises shall remain confidential and proprietary to Tenant, and Landlord agrees to hold and keep such information confidential as and to the full extent provided herein. For greater certainty, "confidential information" refers to, without limitation, all financial, technical, all analyses, inventories, correspondence, reports, studies or other material when prepared by Tenant or its representatives. Landlord shall use reasonable efforts to exercise Landlord's rights to access the Premises under this Lease, including this Section 18, in a manner which respects Tenant's security requirements and provides Tenant with at least 48 hours prior written notice of the exercise of such rights and which minimizes interference with the conduct of Tenant's business in the Premises and damage to the Premises, Tenant's Work and Tenant's Property (all of which shall promptly be repaired by Landlord, at its expense).

**Section 18.5** Except in the case of emergency or to avoid damage to persons or property, Tenant shall be entitled to require that Landlord and any of its agents and employees be accompanied by representatives of Tenant when accessing the Premises. Notwithstanding anything in this Article to the contrary, Landlord shall use commercially reasonable efforts to minimize any interference and disruption to Tenant's business caused by the exercise of its rights under this Article 18.

**Article 19.Default**

**Section 19.1** Each of the following is a "Default" by Tenant under this Lease:

(a) Tenant fails to pay when due any Rent and the failure continues for ten (10) days following Landlord's written notice (which notice shall also be considered any demand required by any Law). If, however, Landlord gives such a written notice twice in any consecutive 12-month period, any additional failure to pay any Rent when due within that 12-month period shall be considered an immediate Default (without the requirement of any notice by Landlord);

(b) Tenant fails to comply with Article 17;

(c) Tenant fails to comply with any other teen of this Lease and the failure continues for thirty (30) days following Landlord's notice. If, however, compliance cannot, with diligence, reasonably be fully accomplished within that 30-day period, Tenant shall have an additional 30-day period to comply, provided Tenant promptly commences compliance and thereafter pursues compliance to completion with all due diligence;

(d) Tenant institutes, or has instituted against it any legal action seeking any relief from its debts under any Law which is not dismissed within sixty (60) days; a receiver, trustee, custodian or other similar official is appointed for it or for all or a substantial portion of its assets; Tenant becomes insolvent or is unable to pay its debts or fails or admits in writing its

inability generally to pay its debts as they become due; or Tenant commits any other act indicating insolvency;

(e) Tenant commits an act of default under the Additional Premises Lease which subsists beyond any applicable cure period provided for therein;

(f) Tenant fails to comply with requirements of Section 21.1 to ensure the Security continues to represent three (3) month's Rent throughout the Term.

**Section 19.2** If a Default occurs, Landlord may at any time during the continuance of the Default give notice to Tenant that this Lease shall terminate on the date specified in that notice, which date shall not be less than five (5) days after Landlord's notice to Tenant. If Landlord gives that notice, the Term shall expire on the date set forth in that notice (but Tenant shall remain liable as provided in this Lease).

**Section 19.3** If Tenant is in arrears in the payment of the Rent, Tenant waives Tenant's right, if any, to designate the items against which any payments made by Tenant are to be credited, and Landlord may apply any payments made by Tenant to any items Landlord sees fit.

**Article 20. Remedies**

**Section 20.1** If this Lease is terminated pursuant to Article 19 or Landlord re-enters or obtains possession of the Premises by summary proceedings or any other legal action (which Landlord may do without further notice and without liability or obligation to Tenant or any occupant of the Premises), all of the provisions of this Section shall apply (in addition to any other applicable provisions of this Lease).

(a) Tenant (and all other occupants) shall vacate and surrender to Landlord the Premises in accordance with this Lease.

(b) Landlord, at Landlord's option, may (i) re-let the Premises, or any portion of the Premises, from time to time, in the name of Landlord, Tenant or otherwise, as determined by Landlord, to any person and on any terms, but Landlord shall have no obligation to re-let the Premises, or any portion of the Premises, or to collect any rent (and the failure to re-let the Premises, or any portion of the Premises, or to collect any rent shall not impose any liability or obligation on Landlord or relieve Tenant of any obligation or liability under this Lease), and (ii) make any changes to the Premises as Landlord, in Landlord's judgment, considers advisable or necessary in connection with a re-letting, without imposing any liability or obligation on Landlord or relieving Tenant of any obligation or liability under this Lease.

(c) Tenant shall pay Landlord all Rent payable to the date on which this Lease is terminated or Landlord re-enters or obtains possession of the Premises.

(d) Tenant shall also pay to Landlord, as damages, any deficiency between (i) the aggregate Rent for the period which otherwise would have constituted the unexpired portion of the Term to the Fixed Expiration Date (including any increases in additional rent for each year thereof in accordance herewith) and any expenses incurred by Landlord in connection with the termination, reentry or obtaining of possession, and the re-letting of the Premises, including all

repossession costs, brokerage commissions, reasonable attorneys' fees and disbursements, alteration costs and other expenses of preparing the Premises for re-letting and (ii) the Rent, if any, applicable to that period collected under any re-letting of any portion of the Premises. Tenant shall pay any deficiency in monthly installments on the days specified in this Lease for payment of installments of the Fixed Rent, and Landlord shall be entitled to recover from Tenant each monthly deficiency as the same arises. No suit to collect the deficiency for any month shall prejudice Landlord's right to collect the deficiency for any subsequent month. Tenant shall not be entitled to any rents payable (whether or not collected) under any re-letting, whether or not those rents exceed the Rent.

(e) Landlord may recover from Tenant, and Tenant shall pay Landlord, on request, in lieu of any further deficiency pursuant to paragraph (d) of this Section (as liquidated damages) the amount by which (i) the unpaid Rent for the period which otherwise would have constituted the unexpired portion of the Term (including any increases in additional rent for each year thereof in accordance herewith) exceeds (ii) the then fair and reasonable rental value of the Premises, including the additional rent for the same period, both discounted to present value at the annual rate of interest (the "**Base Rate**") publicly announced by the Royal Bank of Canada (or any successor thereto) as its "base rate" on the date of the Default in question, or such other term as may be used by the Royal Bank of Canada from time to time for that rate (and if no longer publicly announced, then a similar rate selected by Landlord). If, before presentation of proof of liquidated damages, Landlord re-lets the Premises or any portion of the Premises for any period pursuant to a bona fide lease with an unrelated third party, the net rents payable in connection with the re-letting shall be considered to be the fair and reasonable rental value for the Premises or the portion of the Premises re-let during the term of the re-letting. If Landlord re-lets the Premises, or any portion of the Premises, together with other space in the Building, the rents collected under the re-letting and the expenses of the re-letting shall be equitably apportioned for the purposes of this Article.

(f) Nothing contained in this Lease shall be considered to limit or preclude the recovery by Landlord from Tenant of the maximum amount allowed to be obtained as damages or otherwise by any Law.

**Section 20.2** Tenant hereby waives (a) the service of any notice of intention to re-enter or obtain possession of the Premises or to institute any legal action in connection therewith, except as provided in this Lease and (b) on its own behalf and on behalf of all persons claiming under Tenant, including all creditors, any rights Tenant and all such persons might otherwise have under any Law to redeem the Premises, to re-enter or repossess the Premises, or to restore this Lease, after (i) Tenant is dispossessed pursuant to any Law or by any Authority, (ii) Landlord reenters or obtains possession of the Premises pursuant to any legal action, or (iii) the Expiration Date, whether by operation of law or pursuant to this Lease (including the occurrence of the Expiration Date by Landlord terminating this Lease pursuant to Section 19.2). The words "re-enter," "re-entry" and "re-entered" as used in this Lease shall not be considered to be restricted to their technical legal meanings. Landlord shall have the right to enjoin any Default and the right to invoke any remedy allowed by any Law in addition to any remedies provided in this Lease. All remedies provided in this Lease are cumulative and Landlord's right to invoke, or invocation of, any remedy shall not preclude Landlord from invoking any other remedy.

**Section 20.3** For greater certainty, the parties confirm that in the event this Lease is terminated due to a Default by the Tenant under this Lease, no Early Termination Fee is payable to Tenant, and the Escrow Agent shall, in such circumstances, be instructed to release and remit the Early Termination Fee funds to Landlord.

**Section 20.4** If there is a Default, or if Tenant fails to comply with any obligation under this Lease which, in Landlord's reasonable opinion creates an emergency or danger to the health or safety of any person or risk of damage to property, Landlord may, but is not obligated to, cure the Default or, without notice, cure the failure to comply, for the account of Tenant. All amounts incurred by Landlord in that connection, and any amounts (including reasonable attorneys' fees and disbursements) in instituting, prosecuting or defending any legal action by or against Tenant, or in connection with any dispute under this Lease, in which Landlord prevails, with interest thereon at the Default Rate, shall be paid by Tenant to Landlord within fifteen (15) days following Tenant's receipt of Landlord's request. Landlord shall promptly reimburse Tenant for any reasonable legal fees and disbursements incurred by Tenant in connection with any legal action or other dispute with Landlord under this Lease, in which Tenant prevails.

**Section 20.5** The failure of Landlord to seek redress for a Default, or of Landlord or Tenant to insist upon the strict performance of any term of this Lease, shall not prevent Landlord from redressing a subsequent Default or Landlord or Tenant from thereafter insisting on strict performance. The receipt by Landlord of the Rent with knowledge of a Default or Tenant's failure to strictly perform under this Lease shall not be deemed a waiver of the Default or failure. No term of this Lease shall be considered waived by Landlord or Tenant unless the waiver is in a writing signed by the waiving party. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent shall be considered other than on account of the next installment of the Rent, or as Landlord may elect to apply same. No endorsement or statement on any check or letter accompanying any check or payment shall prevent Landlord from cashing the check or otherwise accepting the payment, without prejudice to Landlord's right to recover the balance of the Rent or pursue any other remedy.

**Section 20.6** If Tenant fails to pay any installment of the Fixed Rent on the first day of the month or any Additional Rent when due, in addition to any other right or remedy of Landlord, Tenant shall pay to Landlord within fifteen (15) days following Landlord's written notice interest at the rate (the "**Default Rate**") which is the lesser of the rate of 5% per annum above the Base Rate or the maximum legal interest rate permitted under the circumstances, on the amount unpaid, from the date the payment was first due to and including the date paid.

**Article 21. Security**

**Section 21.1** Tenant has deposited with Landlord, as security for Tenant's compliance with this Lease, the Security by a standby letter of credit on the terms, and substantially in the form, attached to this Lease as Exhibit "D", issued by a bank listed under Schedule I, Schedule II or Schedule III of the Bank Act (Canada) (the "**Letter of Credit**"). If there is a Default, Landlord may use all or any portion of the Security, only as necessary, to cure the Default or for the payment of any other amount due and payable from Tenant to Landlord in accordance with this Lease. Tenant shall, within thirty (30) days following Landlord's written notice, deposit with Landlord in cash or by a Letter of Credit an amount sufficient to restore the full amount of

the Security (without giving consideration to any interest accrued on the Security) following a Default. Landlord may assign the Security to a permitted assignee of this Lease, or to a Mortgagee of the Carling Campus. Landlord shall not be required to exhaust its remedies against Tenant or the Security before having recourse to Tenant, the Security or any other security held by Landlord, or before exercising any right or remedy, and recourse by Landlord to any one of them, or the exercise of any right or remedy, shall not affect Landlord's right to pursue any other right or remedy or Landlord's right to proceed against the others. If there is then no uncured Default, the Security and any accrued and unpaid interest thereon, or any balance, shall be paid or delivered to Tenant promptly after the Expiration Date and Tenant's vacating of the Premises in accordance with this Lease. If Landlord's interest in the Building is sold or leased, Landlord shall transfer the Security and any accrued and unpaid interest thereon, or any balance, to the new landlord and, upon such transfer and delivery of an agreement in writing in favor of Tenant wherein the assignee assumes all obligations of Landlord under this Lease whenever arising (including in respect of the Security), the assignor shall thereupon be released by Tenant from all liability for the return of the Security or any interest (and Tenant agrees to look solely to the assignee for the return of the Security or any interest).

**Section 21.2** Given Tenant has elected to post the Security by way of a Letter of Credit, the following provisions of this Section shall also apply (in addition to the other provisions of this Article):

(a) If the bank issuing the Letter of Credit shall notify Landlord that the term of the Letter of Credit shall not be renewed, Tenant shall, at least thirty (30) days prior to the expiration date of the Letter of Credit, replace the Letter of Credit with a new Letter of Credit, having an initial expiration date at least one year from the date of the new Letter of Credit. If Tenant fails to so renew and does not otherwise provide cash by the date that is fifteen (15) days prior to expiry, Landlord may draw on the Letter of Credit and hold the cash and all interest earned thereon as Security hereunder.

(b) If, for any reason other than Landlord's failure to comply with the requirements of the Letter of Credit, the bank issuing the Letter of Credit shall fail or refuse to honor any demand, Tenant shall within fifteen (15) days following Landlord's written notice to Tenant of such failure or refusal, at Landlord's option, either (i) deposit with Landlord the Security in cash or (ii) replace the Letter of Credit with a new Letter of Credit (having an initial expiration date at least one year from the date of the new Letter of Credit).

(c) If Landlord shall transfer its interest in the Building, Tenant shall, at the request of the transferor or transferee, replace or amend the Letter of Credit within fifteen (15) days following such request, so that the transferee is named as the beneficiary. Any reasonable transfer fee or charge imposed by the bank issuing the Letter of Credit shall be reimbursed to Landlord (or, at Landlord's option, paid) by Tenant within fifteen (15) days following Landlord's request.

(d) If there shall be a Default, in addition to any other right or remedy of Landlord, Landlord shall have the right, to immediately draw the full amount of the Letter of Credit and then hold the cash and all interest thereon as Security hereunder and apply such amounts in accordance with the provisions of Section 21.1 hereof.

**Article 22. Broker**

**Section 22.1** Except for fees and commissions that will be paid by Tenant to CB Richard Ellis for which Tenant hereby indemnifies Landlord, no broker is entitled to any fee or commission in connection with the transactions contemplated by this Lease based upon arrangements made by or on behalf of Tenant or any of its affiliates. Except for fees and commissions that will be paid by Landlord for which Landlord hereby indemnifies Tenant, no broker is entitled to any fee or commission in connection with the transactions contemplated by this Lease based upon arrangements made by or on behalf of Landlord or any of its affiliates.

**Article 23. Notices**

**Section 23.1** Except as may be expressly provided in this Lease, all notices and other communications under this Lease must be in writing and sent by nationally recognized overnight courier service or registered or certified mail (return receipt requested), addressed to Landlord or Tenant at its Notice Address.

**Section 23.2** Any notice or other communication sent as provided in this Article shall be effective (a) on the date received (or rejected) if sent overnight courier service, or (b) two Business Days after mailing by registered or certified mail.

**Section 23.3** Any notice or other communication given by Landlord to Tenant in accordance with this Article may be signed and given by Landlord's managing agent, if any, with the same force and effect as if signed and given by Landlord.

**Article 24. Representations and Liability**

**Section 24.1** Neither Landlord nor any of Landlord's agents, employees or representatives has made any warranties, representations, statements or promises with respect to the Premises, the Building, the Land, the Building systems, any additional rent, any Law or any other matter, unless expressly set forth in this Lease. This Lease, Escrow Agreement and the ASA contain the entire agreement between Landlord and Tenant with respect to the subject matter of this Lease, and any previous agreements between Landlord and Tenant are merged in this Lease, which alone expresses their agreement. Tenant is entering into this Lease after full investigation, and is not relying on any warranties, representations, statements or promises made by Landlord or any other person not expressly set forth in this Lease or in the ASA, and is not acquiring any rights of any nature, by implication or otherwise, except as expressly set forth in this Lease.

**Section 24.2** No act or omission of Landlord or Tenant, or their respective employees, agents or contractors, including the delivery or acceptance of keys, shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept such surrender shall be valid unless it is in a writing signed by Landlord. Any employee of Landlord, Landlord's managing agent, if any, or the Building to whom any property is entrusted by or on behalf of Tenant shall be deemed to be acting as Tenant's agent with respect to that property and neither Landlord nor Landlord's managing agent, if any, shall be liable for any damages to or loss of property of Tenant or others entrusted to employees, agents or contractors of Landlord, Landlord's managing agent, if any, or the Building.

**Section 24.3** Neither Landlord nor Landlord's managing agent, if any, shall be liable for any injury, damage or loss to Tenant, Tenant's Property, Tenant's Work, Tenant's business or to any other person or property resulting from any cause, except to the extent caused by the negligence act or omission of Landlord, Landlord's managing agent, if any, or their respective employees, agents or contractors, subject to Section 13.4.

**Section 24.4** If, at any time or from time to time, any windows of the Premises are temporarily closed, blocked or darkened for any reason, or permanently closed, blocked or darkened if required by any Law or due to any construction on property adjacent to the Building by any person, including Landlord or any person in which Landlord has an interest (a) Landlord shall not be liable for any loss or damage Tenant may sustain thereby, (b) Tenant shall not be entitled to any compensation or abatement of the Rent, (c) Tenant shall not be relieved of its obligations under this Lease and (d) it shall not constitute an eviction or constructive eviction of Tenant from the Premises.

**Section 24.5** Subject to the provisions of Section 27.1, in the event of a transfer of the Building (a) the Landlord shall be and hereby is relieved of all obligations and liabilities of Landlord under this Lease accruing after the effective date of the assumption by the transferee; and (b) the transferee shall be deemed to have assumed all of Landlord's obligations and liabilities under this Lease effective from and after the effective date of the transfer.

**Section 24.6** Landlord, its partners, members, shareholders, officers, directors and principals, disclosed or undisclosed, have no personal liability under or in connection with this lease. Tenant shall look only to Landlord's interest in the Premises and the Carling Campus for the satisfaction of Tenant's remedies or to collect any judgment requiring the payment of money by Landlord under or in connection with this lease, and no other assets of Landlord or such persons shall be subject to lien, levy, execution or other enforcement procedure for the satisfaction of Tenant's remedies or the collection of any judgment under or in connection with this lease. If Tenant acquires a lien on such other property or assets by judgment or otherwise, Tenant shall promptly release that lien by signing, acknowledging and delivering to Landlord any instrument, prepared by Landlord, required for the lien to be released.

**Section 24.7 Intentionally deleted**

**Section 24.8** It is understood and agreed that whenever and to the extent that Landlord or Tenant shall be unable to fulfill or shall be delayed or restricted in the fulfillment of any obligation hereunder in respect of the supply or provision of any service or utility or the doing of any work or the making of any repairs by reason of delays caused by acts of God, war, civil riot, insurrection, strike or labour dispute not caused by the party claiming same, unusual delays in transportation of materials, unusual government delays, or delays due to condemnation, fire or other unavoidable casualty, being unable to obtain the material, goods or equipment required to enable it to fulfill such obligation (collectively and individually, "**Unavoidable Delay**") then, provided the party claiming a benefit of a delay due to Unavoidable Delay shall have the obligations to: (i) notify the other party within a reasonable time period after such delay commences; and (ii) use its best efforts to minimize the duration of such delay and the effect of the delay, Landlord or Tenant (as the case may be) shall be relieved from the fulfillment of such obligation during the period of such delay and the other party shall not be entitled to

compensation for any inconvenience, nuisance or discomfort thereby occasioned, provided that in no event will Tenant be relieved of its obligation to pay Rent. Notwithstanding the foregoing, the inability to procure funds shall not be considered to be or to result in an event of Unavoidable Delay.

**Section 24.9** Tenant shall not perform or permit to be performed any act which may subject Landlord or Landlord's managing agent, if any, to any liability. Tenant shall, to the extent not caused by the negligence or willful misconduct of Landlord or its contractors or agents, indemnify, defend and hold harmless Landlord and Landlord's managing agent, if any, from and against (a) all claims arising from any act or omission of Tenant, its contractors, agents, employees, invites or visitors, (b) all claims arising from any accident, injury or damage to any person or property in the Premises during the Term or when Tenant is in possession of the Premises, and (c) Tenant's failure to comply with Tenant's obligations under this Lease (whether or not a Default), and all liabilities, damages, losses, fines, costs and expenses (including reasonable attorneys' fees and disbursements) incurred in connection with any such claim or failure.

**Article 25. End of Term**

**Section 25.1** On the Expiration Date (a) Tenant (and all other occupants) shall vacate and surrender the Premises, broom clean, in good order and condition, and with interior finished including but not limited to carpets and other floor finishes, window coverings, ceilings and paint in substantially the same condition as at the Commencement Date, except for ordinary wear and tear and damage by fire and other casualty for which Tenant is not responsible under this Lease, and otherwise as may be required by this Lease, including if required by Landlord, removal of Tenant's Work and Tenant's Property. Tenant shall be under no obligation to return the Premises to base building standard. For greater certainty, Landlord acknowledges and agrees that Tenant shall not be obligated or responsible, under any circumstance, for the removal or restoration of any installations, alterations, partitions or improvements of any kind whatsoever existing in, on or under the Premises as of the Commencement Date, other than to repair any damage caused by the removal of Tenant's Work and Tenant's Property. If the last day of the Term is not a Business Day, this Lease shall expire on the immediately preceding Business Day. Should Tenant fail to yield up space in accordance with its obligations, Landlord may carry out works on behalf of Tenant and recover any costs incurred in doing so. Tenant waives, for itself and for any person claiming under Tenant, any right which Tenant or any such person may have to a stay of proceedings.

**Section 25.2** If the Premises are not vacated and surrendered in accordance with this Lease, on the date required by this Lease, Tenant shall be liable to Landlord for (a) all losses, costs, liabilities and damages which Landlord incurs by reason thereof, including reasonable attorneys' fees, and (b) per diem use and occupancy in respect of the Premises equal to 150% of the then current Rent payable under this Lease (which Landlord and Tenant presently agree is the Rent to which Landlord would be entitled, is presently contemplated by them as being fair and reasonable under such circumstances and is not a penalty) until Tenant vacates and surrenders the Premises in accordance with this Lease. Tenant shall indemnify, defend and hold harmless Landlord against all claims made by any succeeding tenants against Landlord or otherwise resulting from the failure of Tenant (and all other occupants) timely to vacate and surrender the

Premises in accordance with this Lease. In no event, however, shall this Section be construed as permitting Tenant (and all other occupants) to remain in possession of the Premises after the Expiration Date. Landlord and Tenant agree that any statutory right to hold over after the expiration of the term is expressly waived in accordance with applicable Laws.

**Section 25.3** Any obligation of Landlord or Tenant under this Lease which by its nature or under the circumstances can only be, or by the terms of this Lease may be, performed after the Expiration Date and any liability for a payment with respect to any period ending on or before the Expiration Date, unless otherwise set forth in this Lease, shall survive the Expiration Date.

**Article 26. Tenant's Self-Help Remedy**

**Section 26.1** While the Landlord is Nortel Networks Technology Corporation, or any entity affiliated with Nortel Networks Technology Corporation or Nortel Networks Limited, and except in the case of an Unavoidable Delay, if Landlord shall default in the performance or observance of any obligation or condition in this Lease on its part to be performed or observed which results in a Material Interruption (as hereinafter defined) and shall not cure such default within two (2) Business Days after notice from Tenant specifying the default (or shall not within such period have commenced to cure the default and be pursuing the cure of the default with due diligence), Tenant may, at its option, without waiving any claim for damages for the default permitted under this Lease, at any time thereafter, and on written notice to Landlord, take such steps as are necessary to cure such default. Tenant shall submit detailed invoices to Landlord for the costs incurred by Tenant to cure such default of Landlord, and if Landlord fails to pay the costs so invoiced, or to provide notice to Tenant denying that it has committed a default or responsibility for the costs so invoiced (which notice must include reasonable detail of the grounds on which Landlord is supporting such assertion) and request an arbitration of the issue pursuant to Section 26.2 within fifteen (15) days after its receipt of the aforesaid invoice, Tenant shall have the right to deduct such costs, and interest thereon, from the amounts then owed for any Rent due or to become due by Tenant to Landlord under this Lease until the invoice amounts are satisfied in full ("**Set-off Right**"). Tenant's right to cure a default of Landlord under this Section 26.1 shall not preclude it from pursuing any other rights available to it under this Lease or at law in the event that the Set-off Right is insufficient to compensate Tenant for its costs and expenses resulting from Landlord's default under this Section 26.1 (it being agreed that in no event shall Landlord be responsible for indirect, consequential damages or losses of intangible property). For purposes of this Section 26.1, "**Material Interruption**" means any circumstance, other than an Unavoidable Delay, a casualty under Article 14 or an Expropriation or Condemnation under Article 15, caused by a default by Landlord which would prevent or impede Tenant's access to or ability to conduct business from the Premises in a material manner (such as, loss or interruption of utilities or failure of any critical Building System).

Landlord grants to Tenant a non-exclusive right on, over, within and across the Common Areas for purposes of exercising the self-help remedy hereinbefore provided.

**Section 26.2** If Landlord denies that it has committed a default or disputes responsibility for the costs claimed by Tenant pursuant to Section 26.1, then Landlord shall, within fifteen (15) days after receipt of an invoice from Tenant in respect of the claim under Section 26.1, request that the matter be resolved as follows:

(a) Negotiations — Each of the Parties hereto will attempt in good faith to resolve any dispute between them arising out of or relating to or in connection with the an alleged Material Interruption caused by a default of Landlord (each, a "**Dispute**") promptly by negotiations between representatives of the relevant parties who have authority to settle the Dispute, as follows:

(i) The "disputing" party or parties, as the case may be, (the "**Disputing Party**" or a "**party**") will give the other party or parties, as the case may be, (the "**Receiving Party**" or a "**party**") written notice of the Dispute in question. Within 2 Business Days after receipt of such notice, the Receiving Party shall submit to the Disputing Party a written response. Each such notice and response shall not exceed three pages and shall include:

1) a statement of each party's understanding of the issue(s) in the Dispute, and

2) the name and title of the individual who will represent that party at the negotiation.

(ii) The representatives and/or their counsel shall meet at a mutually acceptable time and place within 2 Business Days of the date of the Disputing Party's receipt of the Receiving Party's response and thereafter as often as they reasonably deem necessary to exchange relevant information and to attempt to resolve the Dispute.

(b) Arbitration — If a Dispute has not been resolved within 6 Business Days of the receipt by the Receiving Party of the Disputing Party's notice referred to in Section 26.2(a)(i) hereof, or if the Receiving Party will not meet within the 2 Business Day period as contemplated in Section 26.2(a)(ii) hereof (the earlier of which is the "**Submission Date**"), the Dispute shall be finally settled by arbitration in accordance with the provisions of the *Arbitration Act, 1991* (Ontario) and any amendments thereto. The following rules shall apply to the arbitration:

(i) The arbitration tribunal shall consist of one arbitrator ("Arbitrator") appointed by mutual agreement of the Disputing Party and the Receiving Party or, in the event of their failure to agree on and appoint an arbitrator within 10 days, either party may request ADR Chambers Inc. (including its successor), or, if such entity does not exist, counsel to the Disputing Party and counsel to the Receiving Party, to provide a list of 5 qualified arbitrators. Within 2 Business Days of their receipt of the list, the Disputing Party and the Receiving Party shall independently rank the proposed candidates, shall simultaneously exchange rankings, and shall select as the Arbitrator the individual receiving the highest

combined ranking who is available to serve. If either party does not rank the proposed candidates and provide a copy of the ranking to the other party, the party who does rank the proposed candidates and does provide a copy of the ranking to the other party will be entitled to select the Arbitrator.

(ii) The Arbitrator shall be instructed that time is of the essence in proceeding with his or her determination of any Dispute.

(iii) The Disputing Party and the Receiving Party will agree, in consultation with the Arbitrator, on the rules for the arbitration within 5 days of the selection of the Arbitrator. Absent agreement within such time period to the contrary, the following rules, designed to save time and expense for the parties, will apply:

1) The arbitration hearing shall be held within 10 days of the date of selection of the Arbitrator;

2) Pleadings shall be no more than 5 pages in length;

3) Each party will provide to the other access to any documents that may be relevant to the Arbitration. Each party will also provide to the other a list and copies of up to (but not exceeding) 15 documents that such party intends to rely on at the arbitration;

4) Each party will be entitled to oral discovery of up to 2 representatives of the other party if it deems it appropriate. Each party may only discover each such representative of the other party for a maximum of three hours. Any questions refused will be put to the Arbitrator for the Arbitrator's determination as to whether the questions are appropriate and relevant;

5) At the hearing, opening argument will be limited to one half hour per party;

6) Each party may produce up to two witnesses for direct examination. The total time permitted for direct examination (whether one or two witnesses are produced) will be two hours. Total time for cross-examination will also be two hours for each party;

7) Hearsay evidence will be admissible and its weight will be determined by the Arbitrator;

8) Each party may introduce any of its 15 documents through either of its witnesses. The other party may, if appropriate,

challenge the authenticity of any document produced through such witnesses;

9) Closing argument will be limited to one hour for each party; and

10) The Arbitrator will attempt to produce a decision within 7 days of the conclusion of the arbitration, and written reasons within 10 days of the Arbitration.

(iv) The arbitration shall be conducted in English and shall take place in Ottawa, Ontario.

(v) The arbitration award shall be given in writing and shall be final, and binding on the Disputing Party and the Receiving Party, not subject to any appeal, and shall deal with the question of costs of the arbitration and all matters related thereto. In his or her award of costs, the Arbitrator may consider each party's effort to resolve the Dispute through negotiation, and any settlement offer made. If either party has refused to participate in the negotiation contemplated in Section 26.2(a) hereof, there shall be a presumption that solicitor and client costs on a full indemnity basis shall be awarded against that party refusing to participate, regardless of the outcome of the arbitration.

(vi) Judgment upon the award rendered may be entered into any court having jurisdiction, or application may be made to such court for judicial recognition of the award or an order for enforcement thereof, as the case may be.

(c) Exclusive Procedure for Settling Disputes — The procedures specified in this Section 26.2 are the only procedures for the resolution of any Dispute, no party shall have recourse to the courts in respect thereof other than in the limited circumstances provided for in this Section 26.2. If any party attempts to have issues resolved in court that should properly be resolved pursuant to this Section 26.2, the parties agree that this Section 26.2 can be used to stay any such proceedings. However, before or during the time that the Disputing Party and the Receiving Party follow the procedures specified in this Section 26.2 above, either party may make application to the appropriate court for a preliminary injunction or other preliminary judicial relief if such party reasonably believes that such a step is necessary to avoid irreparable damage or harm, Even if either party takes such action, both parties will continue to participate in good faith in the procedures specified in this Section 26.2 above.

**Section 26.3** Subject to the provisions of Section 26.4, if the Premises are sold to any person not affiliated with Landlord or Norte] Networks Limited ("**New Landlord**") and the

Early Termination Right under Section 27.1 has not been exercised (or if the Early Termination Right has been exercised and pending the expiry of the Early Termination Notice Period under Section 27.1), all of the provisions of Sections 26.1 and 26.2 shall be applicable, *mutatis mutandis*, to a default by the landlord which results in a Material Interruption and a resolution of a dispute in connection therewith by negotiation or arbitration, save and except that upon delivery of notice to Tenant confirming the payment of [*] into the Landlord Security Account, as hereinafter provided, Tenant's Set-off Right against Rent in accordance with Section 26.1 shall be extinguished and of no further force or effect, and the following provisions shall apply in lieu thereof:

(a) At the time of the sale of the Campus, a sum of money equivalent to [*] shall be deposited into an interest bearing escrow account of the Escrow Agent by Landlord or the New Landlord to represent the full extent of security for the performance of the New Landlord's obligations under this Lease ("**Landlord Security Account**");

(b) Except in the case of an Unavoidable Delay, if the New Landlord shall default in the performance or observance of any obligation or condition in this Lease on its part to be performed or observed which results in a Material Interruption and shall not cure such default within two (2) Business Days after Notice from Tenant specifying the default (or shall not within such period commence to cure the default and thereafter be pursuing the cure of the default with due diligence), Tenant may, at its option, without waiving any claim for damages for the default permitted under this Lease, at any time thereafter, and on written notice to the New Landlord, take such steps as are necessary to cure such default. Tenant shall submit detailed invoices to the New Landlord for the costs incurred by Tenant to cure such default of the New Landlord, and if the New Landlord fails to pay the costs so invoiced, or to provide notice to Tenant denying that it has committed a default or responsibility for the costs so invoiced (which notice must include reasonable detail of the grounds on which Landlord is supporting such assertion) and request an arbitration of the issue in accordance with the provisions of Section 26.2 within fifteen (15) days after its receipt of the aforesaid invoices, Tenant shall have the right to unilaterally instruct and direct the Escrow Agent to pay Tenant the costs so invoiced from the Landlord Security Account.

**Section 26.4** Notwithstanding the provisions of Section 26.3, in the event that the New Landlord has, or is affiliated with entities which have, a credit rating and financial net worth comparable to or better than that of Ciena Corporation, and a commercial real estate portfolio which includes properties comparable in value and use to that of the Premises; there will be no requirement to provide for the Landlord Security Account to secure the performance of the New Landlord's covenants under this Lease.

**Article 27. Early Termination by Landlord**

**Section 27.1** Effective at any time after the end of the thirtieth (30th) month of the Term (the "**Standstill Period**"), Landlord will have the right to early terminate the Term of this Lease at any time on at least thirty (30) months prior written notice (the "**Early Termination Notice**" and the "**Early Termination Notice Period**") to Tenant in the event that the Carling Campus is sold to a bona fide arm's length purchaser who requires vacant possession of the Premises occupied by Tenant prior to the end of the Term (the "**Early Termination Right**").

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

For greater clarity, the Landlord's entitlement to provide the Early Termination Notice shall be at any time during the Term, provided that it is effective only as and from the end of the Standstill Period, and the Early Termination Notice Period shall commence on the date Tenant has received both the Early Termination Notice and the Early Termination Fee. The Early Termination Right is personal to, and may only be exercised by, Nortel Networks Technology Corporation or any of its Affiliates during the period of its or their ownership of the Premises.

**Section 27.2** If Landlord exercises the Early Termination Right, it will direct the Escrow Agent to pay to Tenant from the Carling Property Escrow Amount the Early Termination Fee within three (3) Business Days of the delivery of the Early Termination Notice.

**Section 27.3** The termination fee payable pursuant to Section 27.2 shall be USD $33,500,000 (plus applicable taxes and all interest earned thereon, the "**Early Termination Fee**"). For the period commencing on the seventy-third (73rd) month of the Term, the Early Termination Fee shall begin to be reduced on a monthly schedule at a rate of USD$697,916.67, such monthly reductions to be effective on the expiry of each month such that on the expiry of the Term, the Early Termination Fee would be $0.

For greater clarity, the table set out in Exhibit "E" hereto sets forth the Early Termination Fee which would be payable in the event the Lease was terminated at the end of each of the listed months in accordance with this Article 27.

**Section 27.4** Notwithstanding anything to the contrary herein, the provisions in respect of the Early Termination Fee and the payment by Landlord thereof to Tenant in this Article 27 shall apply, *mutatis mutandis*, in respect of any termination of the Lease resulting from an Incurable Termination Event. For purposes of this Article 27, "**Incurable Termination Event**" means any termination of this Lease prior to the expiry of the Term as a result of the occurrence of any circumstance under any Lien resulting in the subject lien claimant terminating the Lease or foreclosing Tenant's leasehold interest under this Lease (including as a result of the failure to pay Taxes when due) resulting in Tenant being force to vacate the Premises as applicable, but provided that the such circumstance has not resulted due to the Default of Tenant under the terms of this Lease.

**Section 27.5** In the event that Landlord provides written notice to Tenant irrevocably waiving the Early Termination Right and agreeing that Article 27 shall be of no further force or effect, and provided that at the time of the giving of such notice to Tenant no proceedings are being prosecuted by a lien claimant in respect of a Lien securing a material obligation which could result in this Lease being terminated, the Escrow Agent shall be instructed to release the Early Termination Fee to Landlord.

**Article 28. Miscellaneous**

**Section 28.1**

(a) This Lease shall be governed by the laws of the Province of Ontario.

(b) Tenant shall not record this Lease or any memorandum of this Lease, except Landlord and Tenant will enter into a mutually agreeable notice of lease.

(c) Subject to the provisions of this Lease, this Lease shall bind and inure to the benefit of Landlord and Tenant and their respective legal representatives, successors and assigns.

(d) This Lease may not be changed or terminated, in whole or in part, except by agreement in writing signed by Landlord and Tenant.

(e) Notwithstanding any provision of this Lease, or any Law, to the contrary, or the execution of this Lease by Tenant, this Lease shall not bind or benefit Landlord or Tenant, unless and until this Lease is signed and delivered by Landlord and Tenant.

(f) Tenant shall hold in confidence and shall not disclose to third parties other than its officers, directors, partners, members, employees, representatives, brokers, lenders, attorneys, accountants and advisors, and shall cause its officers, directors, partners, members, employees, representatives, brokers, lenders, attorneys, accountants and advisers to hold in confidence and not disclose to third parties, the terms of this Lease, except to the extent any such terms (i) must be disclosed pursuant to any Law, (ii) are publicly known or become publicly known other than through the acts of Tenant, or any of its officers, directors, partners, members, employees, representatives, brokers, lenders, attorneys, accountants or advisers, or (iii) are disclosed by Tenant in connection with any financing or any proposed financing, any proposed sale of Tenant or its business, any proposed subletting of the Premises, or any proposed assignment of this Lease. Notwithstanding the provisions of this paragraph or any other provision of this Lease, each party to this Lease (and each of its employees, representatives or agents) may disclose to any person, without limitation of any kind, the tax treatment and tax structure of any transactions contemplated by this Lease and all materials of any kind (including opinions or other tax analyses) that are or have been provided to any party to this Lease (or to its employees, representatives or agents) relating to such tax treatment or tax structure, provided, however, that this authorization of disclosure shall not apply to restrictions reasonably necessary to comply with securities laws. This authorization of disclosure is retroactively effective immediately upon commencement of the first discussions regarding the transactions contemplated by this Lease, and the parties to this Lease aver and affirm that this tax disclosure authorization has been given on a date which is no later than thirty (30) days from the first day that any party to this Lease (or its employees, representatives or agents) first made or provided a statement as to the potential tax consequences that may result from the transactions contemplated hereby.

(g) The Exhibits to this Lease, if any, are a part of this Lease, but in the event of an inconsistency between this Lease and the Exhibits, this Lease shall control.

(h) Each obligation of Tenant under this Lease is a separate and independent covenant of Tenant, not dependent on any other provision of this Lease.

(i) The captions in this Lease are for reference only and do not define the scope of this Lease or the intent of any term. All Article and Section references in this Lease shall, unless the context otherwise specifically requires, be deemed references to the Articles and Sections of this Lease.

(j) If any provision of this Lease, or the application thereof to any person or circumstance, is invalid or unenforceable, then in each such event the remainder of this Lease or the application of such provision to any other person or any other circumstance (other than those as to which it is invalid or unenforceable) shall not be affected, and each provision hereof shall remain valid and enforceable to the fullest extent permitted by Law.

(k) Tenant and Landlord have been represented by legal counsel and is sophisticated in real estate leasing and commercial transactions and have had ample opportunity to negotiate the terms of this Lease as one component of an overall business transaction.

(l) If there is then no Default subsisting, Tenant may peaceably and quietly enjoy the Premises without hindrance by Landlord or any person lawfully claiming under Landlord, subject however, to the terms of this Lease.

(m) If (i) Tenant is comprised of two or more persons, or (ii) Tenant's interest in this Lease is assigned to any person as permitted by this Lease, "Tenant," as used in this Lease, shall mean each of those persons, and the liability of those persons under this Lease shall be joint and several. Wherever appropriate in this Lease, personal pronouns shall be considered to include the other gender and the singular to include the plural.

(n) If required in order to comply with the rule against perpetuities, if the Commencement Date shall not occur within 21 years following the date of this Lease, this Lease shall be deemed cancelled.

(o) This Lease is subject to compliance with the provisions of the *Planning Act* of Ontario, if applicable.

(p) Tenant shall have the right to vacate the Premises or leave them unoccupied or unused, provided Tenant continues to fulfill its monetary and other obligations hereunder.

(q) This Lease shall be binding upon, extend to and enure to the benefit of Landlord and Tenant and to each of their respective, successors and permitted assignees.

**Section 28.2** This Lease may be executed in any number of counterparts, each of which will be deemed to be an original, but all of which together will constitute one instrument. This Lease shall be considered properly executed by any party if executed, scanned and transmitted by fax or e-mail to the other parties' representative or solicitor.

***[Signature Page Follows]***

**In Witness Whereof**, the parties have executed this Lease on the date of this Lease.

Landlord

**NORTEL NETWORKS TECHNOLOGY CORPORATION**

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: Secretary

Tenant

**CIENA CANADA, INC.**

By: _____
Name:
Title:

**In Witness Whereof**, the parties have executed this Lease on the date of this Lease.

Landlord

**NORTEL NETWORKS TECHNOLOGY CORPORATION**

By: _____
Name:
Title:

Tenant

**CIENA CANADA, INC.**

By: /s/ Gary B. Smith
Name: Gary B. Smith
Title: President and Chief Executive Officer

**Exhibit 10.2**

**Confidential** **Execution Copy**

# TRANSITION SERVICES AGREEMENT

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**Table of Exhibits**



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**TRANSITION SERVICES AGREEMENT**
**TERMS AND CONDITIONS**

This Transition Services Agreement (this "Agreement") is made and entered into as of 19 March 2010 and effective as of the Closing Date, by and between:

(1) Nortel Networks Corporation, a Canadian corporation ("NNC"),

(2) Nortel Networks Limited, a Canadian corporation ("NNL"),

(3) Nortel Networks Inc., a Delaware corporation ("NNI"),

(4) Nortel Networks UK Limited (in administration), a company incorporated in England (Company number 03937799) ("NNUK"), acting by its joint administrators A. R. Bloom, S. J. Harris, A. M. Hudson and C. J. W. Hill of Ernst & Young LLP of 1 More London Place, London SE1 2AF, United Kingdom, who act as agent only of NNUK and without any personal liability whatsoever (collectively, the "UK Joint Administrators"),

(5) Nortel Networks (Ireland) Limited (in administration), a company incorporated in the Republic of Ireland (Company number 40287) ("NN Ireland"), acting by its joint administrators A. R. Bloom and D. Hughes of Ernst & Young Chartered Accountants of Harcourt Centre, Harcourt Street, Dublin 2, Ireland, who act as agent only of NN Ireland and without any personal liability whatsoever (together with the UK Joint Administrators, the "Joint Administrators"),

(6) each of the Other Sellers (as defined in the ASA),

(7) each of the Joint Administrators in their respective capacities as joint administrators of respectively NNUK and NN Ireland only, acting as agent of respectively NNUK and NN Ireland and without any personal liability whatsoever, and

(8) Ciena Corporation, a Delaware corporation ("Purchaser"),

each a "Party" and collectively, the "Parties".

WHEREAS, Purchaser and the Main Sellers (together with the Other Sellers) have entered into the Amended and Restated Asset Sale Agreement, dated November 24, 2009 (the "ASA"), pursuant to which Purchaser has agreed to purchase and the Main Sellers (and those other persons) have agreed to sell that part of the Business carried on by the Main Sellers (and those other persons);

WHEREAS, Purchaser and the EMEA Sellers (together with certain other persons) have entered into the Asset Sale Agreement, dated October 7, 2009, as amended (the "EMEA ASA"), pursuant to which Purchaser and the EMEA Designated Purchasers designated by the Purchaser have agreed to purchase and the EMEA Sellers (and those other persons) have agreed to sell (subject to the irrevocable offer wording in Schedule 6 to the EMEA ASA) that part of the Business ( as defined in the ASA) carried on by the EMEA Sellers (and those other persons) (the

sale of the Business under the ASA and the EMEA ASA is hereinafter collectively referred to as the "Transactions");

WHEREAS, Purchaser desires to receive and Sellers (as defined below) have agreed to provide or to cause their Affiliates to provide after the Closing Date (as defined in the ASA) certain transition services related to the Business on the terms and subject to the conditions of this Agreement and as set forth in the Schedules hereto and any subsequent Work Orders (as defined below);

NOW, THEREFORE, in consideration of the foregoing and the respective covenants, agreements, undertakings and obligations set forth herein and other consideration, the sufficiency and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

1. Definitions

Unless otherwise defined in these Terms and Conditions or the Exhibit and Schedules hereto, any capitalized term used herein shall have the meanings assigned to such term in the ASA. The following capitalized terms used in this Agreement shall have the meanings set forth below:

"Active Employees" means those Transferred Employees and Additional Employees using the Services and having access to Providers' systems.

"Additional Employees" means those employees of Purchaser, a Designated Purchaser or an EMEA Designated Purchaser, other than Transferred Employees, and Business NPWs who require the use of Services in connection with the Business and are either identified on Exhibit B (Additional Employees) or are otherwise individually approved by Sellers, such approval not to be unreasonably withheld or delayed.

"Administration" means, the administration of each TSA EMEA Seller under the Insolvency Act in accordance with the EC Regulation.

"Administration Expense" has the meaning set forth in the EMEA ASA.

"Agreement" has the meaning set forth in the preamble.

"ASA" has the meaning set forth in the recitals.

"Assumptions" means (i) those assumptions set forth under the Assumptions section of the relevant Services Schedule or Work Order, and (ii) the assumptions that the actual headcount or product volume will not exceed [*] of the Headcount Plan or Product Volume Plan, respectively.

"Authorized Workers" has the meaning set forth in Exhibit D (Access to Providers' Information Systems).

"Business NPW" means an employee of a third-party contractor to Purchaser who is using the Services and has access to Providers' Information Systems.

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

"Change" has the meaning set forth in Schedule D (Governance).

"Charges" with respect to any Service means the applicable Fees, Pass Through Expenses, and Purchaser's share of Segregation and Other Costs.

"Confidential Information" has the meaning set forth in Section 7(a).

"Contract Service Providers" means those contractors to Purchaser using the Services and having access to Providers' Information Systems and identified in Part A of Schedule B (IT Infrastructure Services).

"Disclosing Party" has the meaning set forth in Section 7(a).

"Drop Dead Date" has the meaning set forth in Section 2(a)(ii).

"EC Regulation" has the meaning set forth in the EMEA ASA.

"EMEA ASA" has the meaning set forth in the recitals.

"EMEA Designated Purchaser" has the meaning set forth in the EMEA ASA.

"Excess VAT" has the meaning set forth in Section 4(f)(vi).

"Equipment Premises" has the meaning set forth in Section 26.

"Equipment Rooms" has the meaning set forth in Section 26.

"Fee Principles" means the aggregate of the following cost elements, each without any mark-up, premium or any addition other than administrative cost allocations consistent with Sellers' internal charging methods as at the Reference Date:

[*]

"Fees" means those fees set forth in the Fee Schedule and Work Orders.

"Fee Schedule" has the meaning set forth in Section 5.28 of the Sellers Disclosure Schedule, as such Schedule may be amended from time to time pursuant to Sections 4(a)(v), 4(b), 4(c) and 4(d) and pursuant to the Change procedures set forth in Section 5 of Schedule D (Governance).

"Financial Performance Escrow" means $15,000,000 of the Transition Services Escrow Amount.

"Firewall" has the meaning set forth in Section 9(c).

"Force Majeure Event" means any act of God, fire, flood, storm or explosion; any strike, lockout or other material labor disturbance (other than by employees of the Party or its Affiliates seeking to assert the occurrence of a Force Majeure Event); any industry-wide material shortage of facilities, labor, materials or equipment; any substantial and unforeseen change in applicable

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Law; any riot, war, act of terror, rebellion or insurrection; any industry-wide embargo or fuel or energy shortage; any material interruption in telecommunications, Internet or utilities services; or any other similar event, in each case beyond the reasonable control of a Party and that actually prevents, hinders or delays such Party from performing its obligations under this Agreement, but only to the extent such prevention, hindrance or delay could not have been avoided with reasonable planning for business continuity and disaster recovery, consistent with industry practice.

"General Service Level Escrow" means [*] of the Transition Services Escrow Amount.

"Headcount Plan" means those Active Employees and employees of Contract Service Providers projected to use the Services and requiring access to Providers' systems at the time of such forecast, initially set forth in Exhibit E (Headcount Plan), as amended from time to time in accordance with Section 4(c).

"Insolvency Act" has the meaning set forth in the EMEA ASA.

"Interest Rate" means the prime rate published in the Eastern Edition of The Wall Street Journal or a comparable newspaper if The Wall Street Journal shall cease to publish the prime rate.

"Joint Administrators" has the meaning set forth in the preamble.

"Loaned Employees" shall mean those employees who shall continue to be employed by the Sellers (other than the TSA EMEA Sellers) subsequent to the Closing pursuant to the Loaned Employee Agreement.

"Losses" has the meaning set forth in Section 5(a).

"Migration Services" has the meaning set forth in Section 2(h).

"NBS Employees" means those employees of Providers engaged in delivering Business Services to Purchaser or a Recipient.

"NBS Equipment" has the meaning set forth in Section 26.

"New Service" has the meaning set forth in Schedule D (Governance).

"NN Ireland" has the meaning set forth in the preamble.

"NNC" has the meaning set forth in the preamble.

"NNI" has the meaning set forth in the preamble.

"NNL" has the meaning set forth in the preamble.

"NNUK" has the meaning set forth in the preamble.

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"Nortel Retained Businesses" has the meaning set forth in the Intellectual Property License Agreement dated 19 March 2010 between NNL and the Purchaser.

"Other Sellers" has the meaning set forth in the preamble.

"Party" or "Parties" has the meaning set forth in the preamble.

"Pass Through Expenses" means those expenses incurred by Provider to third parties that are either included in the cost elements enumerated below or described with greater particularity in the categories set forth in Annex E3 (Pass Through Expenses) to Schedule E (Charges), or approved in advance by Purchaser. Providers shall pass such expenses on to Purchaser without any mark-up, premium, administrative charge or other addition. The following categories of Pass Through Expenses are approved by the Purchaser:

[*]

"Performance Standards" means those standards of performance for the Services as set forth in Section 2(f).

"Permitted Systems" has the meaning given to it in Exhibit D (Access to Providers' Information Systems).

"Product Volume Plan" means the estimated volume of product flow through the order-to-cash cycle over the Term at the time of such forecast, initially set forth in Exhibit F (Product volume Plan), as amended from time to time in accordance with Section 4(b).

"Project" has the meaning given to it in Schedule D (Governance).

"Provider" means a Seller or its Affiliate providing a Service under this Agreement (whether directly or indirectly by a third party at the direction of such Seller or Affiliate).

"Provider NPW" means an employee of a third-party contractor to a Provider who is either currently performing or will perform Services.

"Providers' Information Systems" has the meaning given to it in Exhibit D (Access to Providers' Information Systems).

"Purchaser" has the meaning set forth in the preamble.

"Purchaser Data" has the meaning set forth in Section 2(i)(i).

"Purchaser Indemnified Party" has the meaning set forth in Section 5(a).

"Purchaser Responsibilities" has the meaning set forth in Section 2(b).

"Purchaser Third Party Consents" means those consents set forth in Exhibit H (Purchaser Third Party Consents).

"Receiving Party" has the meaning set forth in Section 7(a).

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"Recipient" means the Purchaser or its Affiliate to whom a Service is provided under this Agreement.

"Reference Date" means March 1, 2009.

"Relevant EMEA Seller" has the meaning set forth in paragraph (e) of the definition of Pass Through Expenses.

"Representatives" has the meaning set forth in Section 7(c).

"Restricted Access Active Employees" means those Transferred Employees, as determined during the refinement of Services pursuant to Section 5.28 of the Sellers Disclosure Schedule, subject to changes after Closing as reasonably agreed by the Parties, that (i) are permitted to access the Sellers' Confidential Information, (ii) are individually approved by the Sellers (such approval not to be unreasonably withheld or delayed), and (iii) have individually executed a confidentiality agreement with terms and conditions substantially consistent with those set forth in Section 7 as may be reasonably required by Sellers in order to permit access to particular Sellers' Confidential Information.

"Retention Costs" means those costs set forth in the Retention Plan (as such is defined in Section 2(b) of Schedule D (Governance) and paid by Purchaser as part of the Fees in accordance with Section 2(b) of Schedule D (Governance).

"Sales Tax" has the meaning set forth in Section 4(f)(i).

"Secondary Proceedings" means any insolvency proceedings opened in accordance with Article 3(3) of the EC Regulation.

"Segregation and Other Costs" means the amount equal to the sum of the following (in each case to the extent reasonably incurred in and allocable to enabling use of or provision of the Services to the Recipients) and without any mark-up, premium or any addition other than administrative cost allocations consistent with Sellers' internal charging methods as at the Reference Date:

[*]

"Seller Indemnified Party" has the meaning set forth in Section 5(b).

"Seller Third Party Consents" means those Third Party Consents other than Purchaser Third Party Consents.

"Sellers" means the Main Sellers, the Other Sellers and the TSA EMEA Sellers.

"Service Coordinators" has the meaning set forth in Schedule D (Governance).

"Service Credit" means an amount due to Purchaser on account of a Service Shortfall payable as set forth in Sections 2(f)(iii) – 2(f)(iv).

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"Service Level" means those measurable standards of performance required for certain of the Services and designated as such in Section 2(f)(iv) and Schedule C (Service Levels).

"Services Shortfall" has the meaning set forth in Section 2(f)(ii).

"Services" has the meaning set forth in Section 2(a).

"Services Schedules" means Schedule B (Services).

"Shortfall Notice" has the meaning set forth in Section 2(f)(ii).

"Shortfall Services" has the meaning set forth in Section 2(f)(ii).

"Term" means the period commencing on the Closing Date and terminating on the date on which the last to expire or terminate TSA Periods expires or terminates, but in any event (i) not exceeding twenty-four (24) months from the Closing Date, and (ii) in the case of the TSA EMEA Sellers, not exceeding twelve (12) months from the Closing Date.

"Terms and Conditions" means this Agreement excluding all Work Orders, Schedules, Exhibits, and Annexes to the Schedules.

"Third Party Consents" means those consents and licenses from third parties necessary (i) for Sellers to provide the Services to Purchaser under this Agreement without infringing on any third party proprietary right, and (ii) for Purchaser to use the Services in the Business or in support of the Business throughout the Term hereof.

"Third Party Provisions" has the meaning set forth in Section 15.

"Transactions" has the meaning set forth in the recitals.

"Transferred Employees" means the Transferred Employees (as defined in the ASA), the Transferring Employees (as defined in the EMEA ASA) and the Loaned Employees.

"Transition Services Escrow Amount" means an amount in immediately available funds equal to $30,000,000, to be allocated and distributed in accordance with this Agreement and the Escrow Agreement.

"TSA EMEA Sellers" means NNUK and NN Ireland.

"TSA Period" means, with respect to any Service or sub-category of Service, the period of time set forth in the applicable Schedule or Work Order hereto (if any) during which Provider(s) will perform such Service or sub-category of Service, which in the case of Services provided by the TSA EMEA Sellers will not be beyond twelve (12) months from the Closing Date.

"UK Joint Administrators" has the meaning set forth in the preamble.

"VAT" has the meaning set forth in the EMEA ASA.

"Work Order" means the document setting out the terms and conditions of a Change to a Service, including a Project or New Service, as mutually agreed by the applicable Seller and Purchaser, the form of which is attached hereto as Exhibit C.

2. Services to be Provided

(a) Services

Subject to the other provisions of this Agreement, each Seller hereby agrees to provide, or to cause one or more of the Providers to provide:

(i) the tasks, functions, services and responsibilities set forth in the Services Schedules and in any Work Orders agreed to in writing by the Parties;

[*]

during the Term for the applicable TSA Period, upon the terms and conditions of this Agreement, its Exhibits, Schedules and Work Orders (if any) (collectively, the "Services"), provided that (x) in respect of each TSA EMEA Seller, the Services Schedules set out explicitly each Service which is to be provided by such TSA EMEA Seller and a TSA EMEA Seller shall only be obliged to provide those Services which are so allocated to it and any Migration Services required of it to deliver a Project agreed by the Parties in accordance with Section 2(h), (y) within six (6) months after Closing and with a view to assisting the Purchaser to develop its migration strategy to ensure the stability of the supply of Services to the Purchaser after the first anniversary of the date of this Agreement, the TSA Sellers (other than the TSA EMEA Sellers) will initiate meetings with the Purchaser with a view to assisting them to establish a viable migration strategy for relevant Services, pursuant to which appropriate Migration Services will be identified in accordance with Section 2(h) and Schedule F (Migration), and (z) on the first anniversary of the Closing Date (the "Drop Dead Date"), the TSA EMEA Sellers and the Joint Administrators shall cease to be parties to this Agreement and shall be relieved of any further obligations under this Agreement and any Services to be provided by a TSA EMEA Seller (without prejudice to any claims that have arisen prior to that date). For the purposes of clarity, after the Drop Dead Date, the Sellers (other than the TSA EMEA Sellers) shall likewise have no obligations respecting any Services formerly provided by TSA EMEA Sellers (other than with respect to any Migration Services agreed as aforesaid, respecting any claims that have arisen prior to that date, and as otherwise agreed by the Parties).

(b) Purchaser Responsibilities

Unless otherwise expressly agreed in writing by the Parties, the Services shall not include:

(i) those tasks, functions, services and responsibilities specifically listed and set forth in the "Purchaser Responsibilities" section of the Services Schedules or any Work Orders, including Purchaser's responsibility to provide all reasonably necessary access to the Assets and EMEA Assets listed in such Purchaser Responsibilities section,

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(ii) the obligations of the Purchaser pursuant to Section 2(j) (Third-Party Consents and Licenses), and

(iii) those tasks, functions, services and responsibilities formerly undertaken in support of the Business by Transferred Employees on behalf of Sellers, to the extent that the same are reasonably required for Sellers to perform the Services,

(collectively, the "Purchaser Responsibilities").

(c) Seller Responsibilities

Except for the Purchaser Responsibilities, each Seller is severally responsible for (i) performing all tasks, functions, services, and responsibilities reasonably required to perform the Services (or, in the case of the TSA EMEA Sellers, as reasonably required to perform those Services to be provided by it in accordance with Section 2(a)), and (ii) providing all resources reasonably required for the performance of the Services (or, in the case of the TSA EMEA Sellers, to provide those resources reasonably required for the performance of the Services to be provided by it in accordance with Section 2(a)) in accordance with this Agreement.

(d) Applicable Laws

Sellers shall perform the Services, or cause the Services to be performed, in accordance with all applicable Laws, including the Foreign Corrupt Practices Act, 15 U.S.C.A. §§ 78dd-1, et seq., laws addressing the treatment of labor including child labor, environmental laws, and data privacy laws, whether such laws are applicable to Providers or to Recipients (in the latter instance, to the extent such applicable Law and any Changes required thereby is notified to Providers by the Recipients). Notwithstanding anything in this Agreement, no Provider shall be required to take any action (including by providing any Services) that would constitute, or that such Provider reasonably believes would constitute a violation of a court order or applicable Law. For purposes of clarity, neither Party shall construe as a violation of applicable Law Providers' provision of the Services in the face of claims by nongovernmental Persons that the Services infringe such party's proprietary rights because either Party failed to obtain a Third Party Consent, except that no Provider shall be required to breach the order of a court or any other governmental authority having jurisdiction.

(e) Relief from Performance

(i) Sellers will be excused from a failure to perform a task, function, service, or responsibility under this Agreement in accordance with Section 2(f)(i)(A) only to the extent that Sellers' performance was:

(A) dependent upon an Assumption scheduled in the Services Schedules or Work Orders, and such Assumption turns out to be inaccurate,

(B) dependent upon Purchaser's performance of a Purchaser Responsibility and Purchaser failed to perform, or performed in a deficient manner, such Purchaser Responsibility, or

(C) dependent upon Purchaser's compliance with Section 9 or 26 and Purchaser failed to so comply,

(ii) Sellers will be excused from a failure to perform a task, function, service, or responsibility under this Agreement in accordance with the relevant standards required by Section 2(f)(i)(B) only to the extent that Sellers' performance was:

(A) dependent upon an Assumption schedule in the Services Schedules or Work Orders, and such Assumption turns out to be materially inaccurate,

(B) dependent upon Purchaser's performance of a Purchaser Responsibility that Purchaser failed to perform, or performed in a deficient manner, or

(C) a direct consequence of Purchaser's material breach of Section 9 or Section 26,

provided that, with respect to both Sections 2(e)(i) and 2(e)(ii): (m) Sellers sufficiently promptly (so as not to prejudice the Purchaser) notified Purchaser upon becoming aware of the Purchaser's failed or deficient performance of the Purchaser Responsibility or that an Assumption is inaccurate, (n) Purchaser did not cure its failed or deficient performance or relieve Provider's dependency on such Assumption within such a time period so as to reasonably enable Sellers' performance in accordance with this Agreement, and (o) Sellers establish that the relevant Provider used commercially reasonable efforts to perform its obligations, including by way of workarounds or other means (all in accordance with the Change procedures set forth in Section 5 of Schedule D (Governance)), notwithstanding Purchaser's failed or deficient performance or the inaccurate Assumption; and provided further that, with respect to both Sections 2(e)(i)(B) and 2(e)(ii)(B), to the extent that the relevant Purchaser Responsibility relates to the obligations of the Purchaser pursuant to Section 2(j) (Third-Party Consents and Licenses), Seller shall be excused under this Section 2(e) only to the extent Sellers are (y) directed by order of a court of competent jurisdiction to cease and desist using an item covered by a Purchaser Third Party Consent, or (z) a third party's action denies Sellers necessary physical or logical access to an item covered by a Purchaser Third Party Consent, and (respecting both items (y) and (z) herein), Sellers otherwise comply with the requirements of this Section 2(e).

(iii) For purposes of clarity, except as set forth in Sections 3(d) (Term and Termination), 4(d) (Updates), and 12 (Force Majeure/Delay), this Section 2(e) establishes Sellers' sole relief from performance of the Services in accordance with Section 2(f)(i) and Schedule C (Service Levels).

(f) Standard of Performance

(i) Each of the Sellers shall provide, or cause to be provided, the Services hereunder to the Recipients:

(A) with the same degree of care and skill with which it performed similar services for the Business in the ordinary course of business on the Reference Date (subject to deviations beyond such Seller's reasonable control that may be caused by (x) changes in the delivery of Services as a result of the Transaction, or (y) changes in the

nature or quality of relationships with third parties arising from the sale of the Business to Purchaser, to the extent such changes exist despite Sellers having used commercially reasonable efforts either to maintain such relationships or, as may be appropriate, to provide reasonable workarounds in respect of any degradation in the same), and in such regard each of the Sellers shall continue to provide such Services to the Business after the Closing Date with the same level of priority relative to other businesses of the Sellers as the Sellers provided such Services to the Business on the Reference Date in the ordinary course, and

(B) in accordance with the Service Levels as set forth in Section 2(f)(iv) and Schedule C (Service Levels), as they may be amended from time to time in accordance with this Agreement.

(ii) If the quality or performance of the Services provided hereunder falls below the relevant standard required by Section 2(f)(i) and such deficiency is not otherwise excused herein (a "Services Shortfall"), Purchaser may notify the relevant Service Coordinator in writing of such Services Shortfall (a "Shortfall Notice"), and the relevant Provider shall, within the time specified in the applicable Schedule or, if no time is specified, within a time period that is reasonably appropriate in the circumstances, correct in all material respects such Services Shortfall, create an appropriate workaround, or re-perform in all material respects such Service at the request of Purchaser and at the expense of Seller. Shortfall Notices will specify in reasonable detail the particular error or defect in relation to the performance of the Services and be submitted no more than fifteen (15) days from the date such error or defect was discovered by Purchaser. If a Provider fails to remedy such Services Shortfall as required by this Section 2(f)(ii), Purchaser may escalate the matter for resolution through the dispute resolution process set forth in Section 9 of Schedule D (Governance), and the Provider and Purchaser shall promptly implement any remedy determined in accordance with Section 9 of Schedule D (Governance). To the extent the applicable Schedule does not otherwise provide, if (w) Purchaser notifies Seller of the same Services Shortfall in any two consecutive months, (x) the Services Shortfalls relate to performance in accordance with Section 2(f)(i)(A) and they are material, (y) Sellers do not dispute the existence of such Services Shortfalls in accordance with Section 9 of Schedule D (Governance), and (z) such dispute is not ongoing or resolved in Sellers' favor, Purchaser may upon ten (10) days' prior notice to Seller elect to terminate the Services that are the subject of the Services Shortfall (the "Shortfall Services") and procure such Services instead from a third-party provider or provide the Services itself at Seller's sole cost and expense; provided always that, Purchaser shall have paid all relevant Charges to Providers in respect of the Shortfall Services and provided further that the cost of Purchaser's recourse to the aforesaid remedies shall be reasonable in all of the circumstances. Subject to the aforesaid provisos, if Purchaser so elects and it is not commercially practical to receive or self provide, as applicable, only the Shortfall Services, such additional Services as are necessary make the receipt of the Shortfall Services commercially practical may also be procured or self-provided at Seller's sole cost and expense.

(iii) Some, but not all, Service Levels have an associated Service Credit payable to Purchaser in the event that Sellers fail to meet the Service Level in an applicable measurement period. In the event that a Services Shortfall relates to a Provider's failure to comply with a Service Level that includes a Service Credit, Purchaser will be entitled to receive

a Service Credit as set forth in Schedule C (Service Levels). If Purchaser believes that it is entitled to a Service Credit, Purchaser may submit notice to the Escrow Agent requesting such Service Credit to be withdrawn from the General Service Level Escrow and delivered to Purchaser in accordance with the Escrow Agreement, with a copy of such notice provided to the Sellers. If the Sellers dispute Purchaser's entitlement to such Service Credit, Sellers will notify the Escrow Agent and Purchaser of such dispute, and the Parties will resolve such dispute in accordance with Section 9 of Schedule D (Governance); upon the resolution of such dispute, (A) the Parties shall either jointly notify the Escrow Agent of the resolution of such dispute, or (B) either Party may provide the Escrow Agent with reasonable evidence of the disposition of such dispute.

(iv) Financial Close Service Level and Service Credit

(A) Subject to the last sentence of this Section 2(f)(iv)(A), at any time in connection with either of Purchaser's first two quarterly financial close processes that occurs after the Closing Date, in the event that Provider(s) fails to deliver to Purchaser, no later than the [*], materially all the financial data identified in Annex C1 (Quarterly Financial Closing Data Requirements) to Schedule C (Service Levels) or, (provided Purchaser has given reasonable notice thereof) otherwise reasonably required for Purchaser to comply with Purchaser's SEC quarterly financial reporting requirements, then Purchaser may elect to receive a Service Credit by submitting notice to the Escrow Agent requesting such Service Credit to be withdrawn from the Financial Performance Escrow and delivered to Purchaser in accordance with the Escrow Agreement, with a copy of such notice provided to the Sellers. If Seller's performance is late, the Service Credit for such failure will be [*]. In the event that the first monthly financial close to occur after the Closing Date is a quarterly close, Purchaser may elect, by giving thirty (30) days' prior written notice to Sellers, to apply this Section 2(t)(iv)(A) to the second and third quarterly close processes only that occur after the Closing Date.

(B) If the Sellers dispute Purchaser's entitlement to escrow amounts under Section 2(f)(iv)(A), Sellers will notify the Escrow Agent and Purchaser of such dispute, and the Parties will resolve such dispute in accordance with Section 9 of Schedule D (Governance); upon the resolution of such dispute, (A) the Parties shall either jointly notify the Escrow Agent of the resolution of such dispute, or (B) either Party may provide the Escrow Agent with reasonable evidence of the disposition of such dispute.

(C) For purposes of clarity, the amounts that Purchaser may claim under Section 2(f)(iv) are in addition to, and not a part of or in lieu of amounts Purchaser may claim under Section 2(f)(iii), unless and only to the extent that a failure giving rise to a claim under Section 2(f)(iii) had no material impact on the Services other than with respect to Purchaser's ability to meet its financial reporting obligations.

(D) Sellers specifically acknowledge and agree that Service Credits and amounts withdrawn from escrow under this Section 2(f) are adjustments to the Charges for the relevant period to reflect the reduced level of, and value of, the Service to Purchaser, and are not an estimate of the loss or damage that may be suffered by Purchaser as a result of Provider(s)' failure to achieve a Service Level.

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(g) Sellers' Escrow Draw-Down

(i) Thirty (30) days after Purchaser's second (or, third, as may be applicable pursuant to Section 2(f)(iv)(A) above) quarterly close process that occurs after the Closing Date is complete, the Escrow Agent shall pay to Sellers any amounts in the Financial Performance Escrow that Purchaser has not requested under Section 2(f)(iv); thereafter, and upon resolution of all disputes between the Parties regarding Purchaser's rights to Financial Performance Escrow amounts, as such disputes are resolved in accordance with Section 9 of Schedule D (Governance), the Escrow Agent shall pay to Sellers any remaining amounts in the Financial Performance Escrow.

(ii) Ten (10) days after delivery of the Providers' Service Level metrics report for the period ending on the first anniversary of the Closing Date, which report shall include notice from the Provider of the forthcoming draw-down in accordance herewith, if:

(A) [*] or more has not been paid to Purchaser from the General Service Level Escrow, and

(B) all disputes brought by Sellers contesting Purchaser's rights to amounts in the General Service Level Escrow for Services rendered in the first year of this Agreement in accordance with Section 9 of Schedule D (Governance) have been resolved, or, to the extent such disputes remain outstanding, such disputes relate to Service Credits that, in aggregate and if paid to Purchaser, would bring the aggregate paid to Purchaser from the General Service Level Escrow to an amount less than [*],

the Escrow Agent shall pay to Sellers an amount equal to [*] minus any amounts either paid to Purchaser from the General Service Level Escrow or under dispute in accordance with Section 9 of Schedule D (Governance).

(iii) Ten (10) days after delivery of Provider's Service Level metrics report for the period ending on the second anniversary of the Closing Date (or the date on which the last remaining TSA Period expires or terminates, if such date is earlier than the second anniversary of the Closing Date), which report shall include notice from the Provider of the forthcoming draw- down, the Escrow Agent shall pay to Sellers any amounts in the General Service Level Escrow that Purchaser has not requested under Section 2(f)(iii); thereafter, and upon resolution of all disputes between the Parties regarding Purchaser's rights to General Service Level Escrow amounts, as such disputes are resolved in accordance with Section 9 of Schedule D (Governance), the Escrow Agent shall pay to Sellers any remaining amounts in the General Service Level Escrow.

(iv) Notwithstanding anything to the contrary in this Section 2(g), in the event that Purchaser has any unsatisfied claims against Sellers under this Agreement at the time Sellers are otherwise entitled to amounts under this Section 2(g), the Escrow Agent shall not pay to Sellers any amounts from the Transition Services Escrow Amount that would reduce remaining funds in the Transition Services Escrow Amount below the amount of such outstanding claims until such time as the claims are resolved and satisfied; for greater certainty, the Parties agree that such amounts shall exclude any funds withheld under Section 4(e)(ii). For purposes of

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clarity, the Transition Services Escrow Amount is retained under this Section 2(g)(iv) as security against Sellers' ability to pay its liabilities (excluding withheld funds under Section 4(e)(ii)), and the Transition Services Escrow Amount is not a limitation of Sellers' liability or indemnification obligations under this Agreement.

(h) Migration

Each Seller shall provide, or cause one or more of the Providers to provide, at any time during the Term, those tasks, functions, and services reasonably requested by Purchaser and determined in accordance with the provisions of Schedule F (Migration) to aid in the migration of the Services to Purchaser or Purchaser's third-party service provider(s) upon the termination or expiration of any Services (collectively, the "Migration Services").

(i) Intellectual Property, Technology, and Data

(i) Purchaser shall retain all right, title, and interest in and to any data provided to the Sellers or any Provider under this Agreement or in order to receive the benefit of the Services (collectively, "Purchaser Data").

(ii) Except as set forth in Section 2(i)(iii) the Parties agree that each Provider or Recipient, as applicable, owns and shall retain sole ownership of its intellectual property, technology and data, including any intellectual property, technology or data (or improvements or modifications to any of the foregoing) created or developed by such Provider or Recipient, as applicable, in connection with the performance of Services hereunder.

(iii) Purchaser shall retain all right, title, and interest in:

(A) all business data (as opposed to system administrative data) derived from Purchaser Data,

(B) any intellectual property created exclusively as a work for hire on a Project basis or as New Services provided exclusively to the Purchaser, and

(C) all intellectual property created in the course of providing the Services that relates exclusively to the Business and is not used and is not applicable to or intended for use in any of the Nortel Retained Businesses or for any other customers of Providers,

whether created by a Recipient, a Provider, or any third party.

(iv) To the extent necessary to give effect to Sections 2(i)(i) to 2(i)(iii) upon the request of the owning Party, the Recipient or Provider, as applicable, shall promptly, and shall cause its employees, agents and contractors to promptly (a) disclose all information and provide copies of all documents relating to such intellectual property to the owning party, (b) assign all right, title and interest in any such intellectual property to the owning party, and (c) execute such documents and do such other acts as the developing party may reasonably request in relation to such intellectual property.

(v) If the receipt or provision of the Services hereunder requires the use by the Provider or Recipient, as applicable, of the intellectual property, technology or data of the Recipient or Provider, as applicable, then the Recipient or Provider hereby grants such Provider or Recipient, as applicable, a non-exclusive, royalty-free right to use such intellectual property, technology and data for the sole purpose of, and only to the extent and duration necessary for, the use, receipt or provision of the Services hereunder, pursuant to the terms and conditions of this Agreement, including Section 7.

(vi) Provider hereby grants Purchaser a perpetual, irrevocable, non-exclusive, royalty-free license to use, solely for Recipients' internal use in the Business, any intellectual property created by Providers between the date of execution of the ASA and the expiration or termination of the Term in support of or during the course of performing the Services, to the extent that Providers have rights in the same, and to the extent the same has been integrated by Providers into the Business. The Parties agree that any trade secrets and patentable processes which are not publicly available, and which are the subject of the license granted in this Section 2(i)(vi) constitute Confidential Information and will be treated as such in accordance with Section 7.

(vii) Provider hereby grants Purchaser a perpetual, irrevocable, non-exclusive, royalty-free license to use, in object code form only, those software tools (excluding any patent or trademarks) listed in Exhibit G (Object Code Licensed Software) and that have been integrated by Provider into the systems of the Business during the Term in connection with the receipt of Services, solely for Recipient's internal use and solely in connection with the operation of the Business; provided that the Recipient shall not modify such Software and shall not use such Software in a manner that could reasonably cause such Software to be subject to any GNU General Public License or any similar freeware or open source license.

(viii) Except as expressly provided herein, Provider shall not be obligated under this Agreement to provide any software updates or support.

(ix) Seller reserves all rights and licenses not expressly granted in this Agreement, and nothing in this Agreement shall be construed as implying or giving rise to any implied pant or license of any right not expressly set forth in this Agreement.

(j) Third-Party Consents and Licenses

(i) The parties acknowledge that receipt of the Services, including access to the Permitted Systems, requires Third Party Consents. Accordingly, Providers, to the extent of their legal right so to do, if any, hereby grant to Purchaser a sublicense under the rights Providers may have, if any, in such third-party software, but only to the extent necessary to enable Recipients to receive the Services as provided herein and only for such purpose.

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(k) Personnel and Contractors

Except as set forth in Sections 2 and 3 of Schedule D (Governance), and subject to their obligation to provide the Services in accordance with the standards of performance set forth in

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Section 2(f), each Provider will have the right, in its sole discretion, to (A) designate which personnel or third-party contractors or service providers it will assign to perform Services, and (B) remove and replace such personnel or third-party contractors or service providers at any time.

3. Term and Termination

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(e) This Agreement will expire with respect to any Service, unless previously terminated pursuant to this Section 3, at the end of the applicable TSA Period. Any termination of this Agreement with respect to any individual Service shall not terminate the Agreement with respect to any other Service then being provided hereunder. In any event, this Agreement shall expire in its entirety at the end of the Term.

(f) Notwithstanding any provision contained herein to the contrary, the TSA EMEA Sellers and the Joint Administrators shall, without prejudice to the continuing obligations of any other Seller under this Agreement, be relieved of any further obligations under this Agreement (without prejudice to (i) any accrued obligations of the TSA EMEA Sellers, (ii) any accrued rights of the Purchaser, or (iii) any accrued Liabilities in relation to any obligations to have been carried out by the TSA EMEA Sellers, in each of (i), (ii) or (iii) prior to the Drop Dead Date) no later than that date that is twelve (12) months following the Closing Date.

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4. Fees; Invoicing; Taxes

(a) Charges

(i) Schedule E (Charges) sets forth all Charges payable by Purchaser for the Services; such amounts, together with Charges payable in association with Changes and Work Orders, collectively constitute the Charges payable for the Services. If a function, task, responsibility, or expense is part of the Services, but no Charges for such are set forth in the applicable Services Schedule or Work Order, then Provider(s) must nevertheless perform such function, task, or responsibility, or incur such expense without a separate charge hereunder; Purchaser shall not be liable for any other charges or fees under the Agreement.

(ii) Schedule E (Charges) and its Annexes shall include a non-binding estimate of the Segregation and Other Costs. Purchaser will pay on Closing in accordance with Sellers' direction, the amount that shall represent [*] of all Segregation and Other Costs incurred by Providers after the date of the ASA up to Closing; provided however that such amount, together with [*] of all Segregation and Other Costs (excluding those costs set out in paragraph (d) of the definition of Segregation and Other Costs) incurred by Providers after the Closing Date, which Purchaser shall pay as Charges from Provider, shall not represent more than an aggregate total of [*] (excluding those costs set out in paragraph (d) of the definition of Segregation and Other Costs). For clarity, the cost of any audit conducted pursuant to Section 7(c)(i) or 7(c)(ii) of Schedule D (Governance) shall be treated as a Segregation and Other Cost.

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(iii) Except for Segregation and Other Costs, which may commence on the date of the ASA (but shall not be payable until on or after the Closing), Charges payable under this Agreement shall commence on the first calendar day after the Closing Date. Charges payable under Work Orders shall commence on the effective date of the applicable Work Order.

(iv) In the event that Purchaser issues a purchase order or other similar documentation in connection with the ordering of Services, any terms, conditions, limitations, assumptions or the like in such documentation shall be of no force or effect to the extent they conflict with, limit, expand, or otherwise impact the interpretation of any provision of this Agreement. Similarly, the Parties intend that if the invoices issued by the Sellers or a Provider contain any terms, conditions, limitations, assumptions, or the like, they shall be of no force or effect to the extent they conflict with, limit, expand, or otherwise impact the interpretation of any provision of this Agreement.

(v) In the event that a Services Schedule or Work Order, or any portion thereof, is terminated or expires in accordance with Section 3, the Charges shall be reduced to reflect such termination or expiration.

(A) If such terminated or expired Services constitute a line item cost or collection of line item costs in the Fee Schedule, then the Charges shall decrease by an amount equal to such line item(s) as of the date of such expiration or termination.

(B) To the extent the terminated or expiring Services constitute a portion of a line item cost in the Fee Schedule, Provider(s) will provide Purchaser with an estimate of proposed changes to the Charges in accordance with Section 5(c) of Schedule D (Governance), taking into consideration Purchaser's reasonable comments and objections; the Parties shall resolve any dispute as to the appropriate change to the Charges in accordance with Section 9 of Schedule D (Governance).

(b) Review for Change in Product Volume

If, at any time during the Term, Purchaser revises the Product Volume Plan such that the revised plan deviates from the last Product Volume Plan expressly approved by the Parties (as indicated by being attached hereto or as subsequently revised in accordance with Section 5 of Schedule D (Governance)) by [*], then in accordance with Section 5 of Schedule D (Governance), Provider will propose to Purchaser Changes to the Services, if any, necessary to accommodate such revised volume and the changes in Charges for the Services and Service Levels, if any, that will result from such revised volume. Purchaser may elect to accept such proposed Changes, advise Provider of any reasons for disagreement with Provider's proposal, or revise the plan (in which latter case Provider will update its proposal in this Section 4(b) if the revised Product Volume Plan still deviates from the prior Product Volume Plan by more than [*]). If Purchaser accepts the Changes, the Parties will revise the Fee Schedule as provided in the Change Control Procedures set forth in Section 5 of Schedule D (Governance).

(c) Review for Change in Headcount

If, at any time during the Term, Purchaser revises the Headcount Plan such that the revised plan deviates from the last Headcount Plan expressly approved by the Parties (as

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indicated by being attached hereto or as subsequently revised in accordance with Section 5 of Schedule D (Governance)) by [*], then in accordance with Section 5 of Schedule D (Governance), Provider will propose to Purchaser any Changes to the Services, if any, necessary to accommodate such revised Headcount Plan and the Changes in Charges for the Services and Service Levels, if any, that will result from such revised headcount. Purchaser may elect to accept such proposed Changes, advise Provider of any reasons for disagreement with Provider's proposal, or revise the forecast (in which latter case Provider will update its proposal in this Section 4(e) if the revised Headcount Plan still deviates from the prior Headcount Plan by more than [*]). If Purchaser accepts the Changes, the Parties will revise the Fee Schedule as provided in the Change Control Procedures set forth in Section 5 of Schedule D (Governance).

(d) Updates

Purchaser shall update both the Product Volume Plan and Headcount Plan every quarter during the Term. Purchaser shall further revise the relevant plan promptly if actual headcount or volume exceeds the then-current plan by more than [*]. In such circumstances, Sellers shall use commercially reasonable efforts to support actual headcount and volume increases (it being understood that efforts to address excess volume and headcount are not commercially reasonable to the extent that they jeopardize Sellers' ability to comply with the Service Levels set forth in Section 2(f)(iv) (Financial Close Service Level and Service Credit)). Except for the Service Levels required by Section 2(f)(iv), the Parties acknowledge and agree that the relevant Performance Standards required by Section 2(f)(i) and Charges shall be adjusted by agreement of the Parties, with retrospective effect, to accommodate the reasonable impact of such unforeseen changes in headcount or volume and the consequences of any resulting Changes on the Services, the Charges, and associated Service Levels. If the relevant Parties fail to agree on revisions to plans necessitated as aforesaid, the Parties hereby empower any arbitrator appointed in accordance with the dispute resolution process set forth in Section 9 of Schedule D (Governance), to make such revisions as may be commercially reasonable. For purposes of clarity, Sellers shall meet the Service Levels set forth in Section 2(f)(iv) (Financial Close Service Level and Service Credit), and be liable for associated Service Credits, regardless of the actual headcount or volume serviced during the relevant period. For purposes of clarity, Purchaser may make a claim against the General Service Level Escrow for perceived Service Level failures within the time frames set forth in Section 2(f)(iii) for any period affected by the update process in this Section 4(d), but may not draw down from the General Service Level Escrow until after any adjustment provided for above has been settled in accordance with this Section 4(d).

(e) Invoices

(i) Sellers shall provide Purchaser a consolidated invoice for all Services on a monthly basis in arrears. Such invoice shall be of such form and detail as to be reasonably acceptable to Purchaser, provided that the Purchaser agrees that it shall be constituted by multiple invoices from certain Providers, including each of the Main Sellers and the TSA EMEA Sellers, directed to the Recipients receiving Services delivered by those Providers (or by other Providers on whose behalf they are collecting payment) at the address specified in Section 4(a)(vii). Invoices will include reasonable documentation on allocation of Pass Through Expenses. Notwithstanding the preceding sentences, it is agreed that a Recipient shall be entitled to promptly receive from a Provider, and a Provider shall be entitled to issue to a Recipient, any

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invoices necessary (including VAT invoices) for the relevant Recipient (or the relevant Provider) to comply with its obligations or to claim any refund or credit from a Tax Authority, in each case under applicable Tax Law.

(ii) Subject to Section 4(a)(v), Purchaser shall pay, or cause the appropriate Recipient to pay, all Invoices issued pursuant to Section 4(a)(i) which relate to Fees, the Purchaser's share of Segregation and Other Costs and Pass Through Expenses (other than those which relate to freight charges) within thirty (30) days following the date of the applicable invoice.

(iii) At the beginning of each month the Seller will invoice the Purchaser for Pass Through Expenses (other than those which relate to freight charges) it paid on behalf of the Purchaser in the previous month. The Purchaser shall implement commercially reasonable procedures designed to cause invoices issued pursuant to this section to be paid, subject to Section 4(a)(v), within ten (10) days following the date of the applicable invoice. Such efforts shall include configuring Purchaser's accounts payable system to schedule the payment of such invoices on such basis. No failure to make a payment in accord with the accelerated schedule set forth in this Section 4(a)(iii) shall constitute a default or breach of this Agreement.

(iv) For Pass Through Expenses related to freight charges, each of Nortel Networks Inc. and Nortel Networks UK Limited shall on Monday each week provide Purchaser with a weekly estimate, via e-mail, of the freight charges to be paid on behalf of Purchaser that week with agreed-upon supporting documentation, and Purchaser shall pay such estimated amounts so that Nortel Networks Inc. and Nortel Networks UK Limited (as the case may be) receives payment accordingly by 5:00pm (local time) on Friday that week (or, if such Friday is not a Business Day, by 5:00pm (local time) next Business Day). Each invoicing Provider, other than Nortel Networks Inc and Nortel Networks UK Limited, shall issue monthly an aggregate and consolidated freight invoice to Purchaser which invoice shall be payable in accordance with the provisions of Section 4(e)(iii); Nortel Networks Inc. and Nortel Networks UK Limited shall issue monthly aggregate and consolidated freight invoices which invoices shall show amounts paid in respect of weekly freight invoices that month and shall set out the true-up adjustment payments necessary to reconcile any differences between that month's accumulated weekly payments and the actual freight Pass Through Expenses for such month; the relevant Parties shall pay such true-up payments in accordance with the provisions of Section 4(e)(iii).

(v) [*].

(vi) All amounts referenced in this Agreement, and all amounts invoiced and paid under this Agreement, shall be in U.S. dollars, save that (i) invoices issued by NNUK shall be issued and paid in pounds sterling, (ii) invoices issued by NN Ireland shall be issued and paid in euros and (iii) the Parties may mutually agree and specify in invoices alternative currency arrangements.

(vii) Unless otherwise directed by Purchaser in writing, Sellers shall deliver all invoices under this Agreement to Ciena Corporation, Accounts Payable (NBS), 1201 Winterson Road, Linthicum, Maryland 21090 or, for freight invoices to be delivered by email, to NBSFreightInvoices@ciena.com with a copy to jdonley@ciena.com.

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(viii) Unless otherwise directed by Sellers in writing, Purchaser shall pay all amounts in accordance with the payee details set out on each invoice.

(f) Taxes

(i) Except as otherwise provided below in Section 4(f)(iii) and (v), charges for Services are exclusive of Taxes, and in particular (without limitation) are expressed to be exclusive of VAT. If the provision of Services is subject to or would give rise to or gives rise to any sales Tax, use or service Tax, excise Tax, VAT, goods and services Tax or any other, similar Tax (together, a "Sales Tax"), then the applicable Recipient shall:

(A) where the provision of Services is subject to VAT in the European Union and the liability to account for such VAT to a Tax Authority is a liability of a Provider, in addition to the fee payable for the provision of such Services, pay to the relevant Provider a sum equal to the amount of such VAT (but for the avoidance of doubt excluding any interest or penalties thereon) upon the relevant Provider delivering an appropriate valid VAT invoice to the applicable Recipient;

(B) where the provision of Services is subject to VAT in the European Union and the liability to account for such VAT to a Tax Authority is a liability of the Recipient (whether under section 8 of the United Kingdom Value Added Tax Act 1994 or similar or equivalent provisions in any member state of the European Union or elsewhere), the Purchaser shall or shall procure that the Recipient shall promptly account for all applicable VAT to the relevant Tax Authority;

(C) in respect of any VAT not described in Section 4(f)(i)(A) and (B), account for any such VAT directly to the applicable Tax Authority or, if such VAT is payable by, or is to be collected by, a Provider, shall pay the Provider such amount of VAT as is due (but for the avoidance of doubt excluding any interest or penalties thereon) upon the relevant Provider delivering an appropriate valid VAT invoice to the applicable Recipient; and

(D) in respect of any such Sales Taxes other than VAT, pay the amount of any such Sales Taxes directly to the applicable Tax Authority or, if such Sales Taxes are payable by, or are to be collected by, a Provider, shall pay the Provider such amount of Sales Taxes as is due. Such Provider shall identify any such Tax as a separate line item on each invoice, unless Taxes are required under the Law of the relevant jurisdiction to he included in the price. Upon request from a Provider, a Recipient shall submit to such Provider an original receipt (or such other evidence as shall be reasonably satisfactory to such Provider) evidencing the payment of Taxes by the Recipient to the applicable Tax Authority under this Section 4(f)(i)(D).

(ii) A Recipient and a Provider will cooperate reasonably with one another to reduce or eliminate, or maximize the potential for the refund or recovery of, any applicable Sales Taxes to the extent allowed under applicable law, including through the provision by either Party to the other Party any certification, form, legally valid invoice or other documentation reasonably requested by such other Party to allow for such reduction, elimination, refund or recovery of

such Sales Taxes, provided that, this clause shall not apply to a TSA EMEA Seller to the extent that the provisions of this Section 4(f)(ii) are inconsistent with the provisions in Clauses 11.20.3 and 11.20.4 of the EMEA ASA when read together with the exclusions to those provisions in Clause 11.20 (A) to (G) of the EMEA ASA

(iii) If any Taxes, other than Sales Taxes, are required to be deducted or withheld under applicable law from any payments made by a Recipient to a Provider hereunder, then such Recipient shall withhold the required amount and promptly pay such Taxes to the applicable Tax Authority. The amounts withheld pursuant to this Section 4(f)(iii), except to the extent a Gross-Up Amount is paid with respect to such amounts under Section 4(f)(v), shall be treated for all purposes of this Agreement as having been paid to the relevant Provider in respect of whom such deduction and withholding was made by such Recipient.

(iv) A Recipient and a Provider will cooperate reasonably with one another to reduce or eliminate any applicable withholding taxes to the extent allowed under applicable Law. Without prejudice to the generality of the foregoing sentence, the Provider shall provide to Recipient (and/or file with a Tax Authority as appropriate under applicable Law) any certification, form or other documentation (appropriately completed) that it is legally entitled to provide (or file) and which under applicable law would reduce or eliminate any requirement of the Recipient to deduct or withhold Taxes from payments made to the Provider under this Agreement, provided for the avoidance of doubt that no Gross-Up Amount shall be required to be paid under Section 4(f)(v) hereof to the extent that any Provider fails to comply with its obligation under this sentence.

(v) In the event Taxes, other than Sales Taxes, are withheld by the Recipient from any payment for Services hereunder, then after the filing of the tax return for the taxable year in which the relevant payment was made by the relevant Provider or the tax group of which such Provider was a member (such tax group, the "Provider Group"), an officer of the relevant Provider or, if applicable, the Provider Group, shall be entitled to deliver to the withholding Recipient a written certification representing to the withholding Recipient whether and to what extent the taxes withheld from payments for Services during such taxable year were creditable or deductible against taxes to be paid by such Provider or, if applicable, such Provider Group for such year and the extent to which they were not (the "Creditable Amount" and the "Un-creditable Amount", respectively), together with supporting information reasonably necessary to permit the confirmation of the degree of creditability or deductibility asserted and a calculation of the "Gross-Up Amount" (as defined below) (the "Withholding Tax Information Certificate"). In the case in which the relevant Provider or, if applicable, the relevant Provider Group has more tax attributes available to it than necessary to reduce taxes payable to zero in any given tax year in which any taxes are withheld under this Section 4(f)(v), the order of deemed use of such attributes shall be determined by applicable law to the extent it so provides and otherwise by using the credit for tax withheld under this Section 4(f)(v) ratably by value with other tax attributes available to reduce taxes payable. If the withholding Recipient disagrees with the calculation of the Creditable Amount, Un-creditable Amount or Gross-Up Amount, it shall notify the relevant Provider of such disagreement in writing, setting forth in reasonable detail the particulars of such disagreement, within thirty (30) days after their receipt of the Withholding Tax Information Certificate. In the event that the withholding Recipient does not provide such a notice of disagreement within such thirty (30) day period, it shall be deemed to have accepted the

Withholding Tax Information Certificate and the calculation of the Creditable Amount, Un-creditable Amount or Gross-Up Amount delivered by the relevant Provider, which shall be final, binding and conclusive for all purposes hereunder and shall be treated as a final determination made on the day falling immediately after the end of such thirty (30) day period. In the event any such notice of disagreement is timely provided, the relevant Provider and Recipient shall use commercially reasonable efforts for a period of thirty (30) days (or such longer period as they may mutually agree) to resolve any disagreements with respect to the calculations of the Creditable Amount, Un-creditable Amount or Gross-Up Amount. If, at the end of such period, they are unable to resolve such disagreements, then the Independent Auditor as arbitrator (or such other independent accounting firm of recognized national standing as may be mutually selected by the Provider and the Recipient) (the "Accounting Arbitrator") shall resolve any remaining disagreements. The Accounting Arbitrator shall determine as promptly as practicable, but in any event within thirty (30) days of the date on which such dispute is referred to the Accounting Arbitrator, only with respect to the remaining disagreements submitted to the Accounting Arbitrator, whether and to what extent (if any) the Creditable Amount, Un-creditable Amount or Gross-Up Amount require adjustment. The fees and expenses of the Accounting Arbitrator shall be paid by the Provider and the Recipient equally. The determination of the Accounting Arbitrator shall be final, conclusive and binding on the Parties. The date on which the Creditable Amount, Un-creditable Amount and Gross-Up Amount is finally determined in accordance with this Section 4(f)(v) is hereinafter referred as to the "Determination Date." Within 10 business days of the Determination Date, the withholding Recipient shall pay to the relevant Provider by wire transfer of immediately available funds the Gross-Up Amount. For purposes of this Section 4(f)(v), the "Gross-Up Amount" shall mean such additional amounts so that the net amount actually received by the Provider that was subject to the withholding or deduction is equal to (i) the amount that such Provider would have received had no such withholding or deduction been required minus (ii) the Creditable Amount. In the event that in any taxable year subsequent to the year in which any amount is withheld from payment by a Recipient hereunder all or any portion of any amount withheld that was previously an Un-creditable Amount becomes creditable against taxes, then the relevant Provider who previously received a payment pursuant to this Section shall refund to the withholding Recipient the Gross- Up Amount attributable to the newly creditable amount.

(vi) Where any adjustment is made to the price or charge for a Service subject to VAT after an invoice has been issued, then either (i) the applicable Recipient shall pay to the applicable Provider an amount equal to any additional VAT that becomes due to be accounted for by the relevant Provider to a Tax Authority as a result of such increase, with payment to be made by the applicable Recipient upon the relevant Provider delivering an appropriate valid VAT invoice to the applicable Recipient (where the price or charge is adjusted upwards) or (ii) the applicable Provider shall issue a valid VAT credit note or equivalent to the applicable Recipient in respect of the adjustment (where the price or charge is adjusted downwards) and to the extent any Excess VAT is actually recovered and retained by a Provider (it being the obligation of any Provider having received Excess VAT and accounted for such Excess VAT to a Tax Authority to use reasonable efforts to seek a refund or a credit) or is creditable by a Provider (or a VAT group of which a Provider is a member) against any VAT liability, pay such Excess VAT to the relevant Recipient, and for the purposes of this Section 4(f)(vi), "Excess VAT" means the VAT actually paid (after deducting any previous refund under this Section 4(f)(vi)) by the Recipient that would not have been payable had the price or charge for the

Service at all times reflected the relevant adjustment, provided that no payment shall be due under this Section 4(f)(vi) from a Provider where any part of the consideration (inclusive of VAT) payable pursuant to the invoice which is subject to adjustment under this Section 4(f)(vi) remains outstanding.

5. Indemnity and Disclaimer of Warranty

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(f) Notwithstanding anything herein to the contrary, no Person may first make any claim under this Agreement more than sixty (60) days after the termination or expiration of the Term.

(g) [*]

(h) In the event that Sellers are finally determined by an arbitrator or court of competent jurisdiction to be liable to Purchaser for funds under this Agreement, Purchaser shall have the option of withdrawing such amount from the Transition Services Escrow Amount (subject to the limitations in Section 2(g)(iv)), to the extent such liabilities remain unsatisfied despite Purchaser's reasonable attempts to collect such funds from the applicable Seller or Provider, and such funds remain available in the Transition Services Escrow Amount. This Section 5(h) shall not be construed as limiting Seller's liability to Purchaser to such amounts as may remain in the Transition Services Escrow Amount. For purposes of clarity, Sellers may exercise their rights to draw down the Transition Services Escrow Amount in accordance with Section 2(g) to the extent that the draw down amounts exceed the value of any outstanding claims Purchaser may have at the time such Sellers' right to draw down arises (for example, if Sellers are otherwise entitled to a draw down amount of [*], and Purchaser has outstanding claims under the Agreement in the amount of [*] at such time, then Sellers may draw down [*]).

[*]

6. Disclaimer of Warranty

There are no warranties, representations or conditions, express or implied, statutory or otherwise between the Parties under this Agreement except as specifically set forth in this Agreement and in any of the other Transaction Documents. EACH PARTY EXPRESSLY DISCLAIMS ALL WARRANTIES AND CONDITIONS NOT EXPRESSLY PROVIDED UNDER THE TRANSACTION DOCUMENTS, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OR CONDITION OF, NON-INFRINGEMENT, MERCHANTABILITY, FITNESS OR SUITABILITY FOR ANY PARTICULAR PURPOSE (EVEN IF ON NOTICE OF SUCH PURPOSE), CUSTOM OR USAGE IN THE TRADE.

7. Confidentiality

(a) Confidential Information

Secret or confidential information, including any business, marketing, technical, scientific, manufacturing, financial, orders, forecasts, plans, design, drawings and specifications

[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

or other information of the Providers, Purchaser or their respective Affiliates (the "Disclosing Party") which, at the time of disclosure, is designated as confidential (or like designation), is disclosed in circumstances of confidence, or would be understood by the Parties, exercising reasonable business judgment, to be confidential ("Confidential Information") that is or has been provided to Purchaser, Providers or their respective Affiliates, as applicable (the "Receiving Party"), will be treated as confidential and not further disclosed, without the prior written consent of the Disclosing Party, except as provided in this Section 7. Notwithstanding the foregoing, "Confidential Information" shall not include (i) such information that is or becomes available to the general public through no fault of the Receiving Party or its Affiliates or any of their respective Representatives (as defined below), or (ii) such information that is or becomes available to the Receiving Party through other sources without restriction on disclosure or use, provided that the source of such information was not known to the Receiving Party, its Affiliates or their respective Representatives to be bound by a confidentiality agreement with the Disclosing Party, its Affiliates or their respective Representatives with respect to such information, or to be otherwise prohibited from furnishing or making available such information to the Receiving Party, its Affiliates or their respective Representatives by a contractual, legal or fiduciary obligation, or (iii) any information that the Receiving Party can establish that it, its Affiliates or its Representatives independently developed without reference to or use of any Confidential Information of the Disclosing Party or any derivative thereof. Notwithstanding the foregoing, (i) if any Receiving Party is served with a subpoena or other legal process (or a request from applicable regulators) requiring the production or disclosure of, or otherwise on the advice of its counsel is required by Law to disclose, any Confidential Information of the Disclosing Party, then the Receiving Party will, if permitted under applicable Law or legal process, promptly notify the Disclosing Party, and will in good faith attempt to permit the Disclosing Party at the Disclosing Party's expense to intervene and contest such disclosure or production and, if such contest is unsuccessful, will disclose only that portion of the Disclosing Party's Confidential Information as is necessary to comply with the applicable subpoena or other legal process, (ii) if the Receiving Party is a Joint Administrator, the Receiving Party shall be permitted to make any disclosure as may be necessary to comply with legal or other requirements, such as under the Statement of Insolvency Practice or any similar or equivalent practice requirements, or any practice as required by the Joint Administrator's regulatory body as administrators of the TSA EMEA Sellers, or to comply with its duties and obligations as administrators of a TSA EMEA Seller, and (iii) if required under any Bankruptcy Proceeding, any Receiving Party shall be authorized to disclose Confidential Information to (A) any member of any committee of creditors which may include the holders of, or investment managers for holders of, equity or debt securities of the Main Sellers, including those of (x) the Official Committee of Unsecured Creditors in the Chapter 11 Cases and (y) the Ad-Hoc Committee of Bondholders in the Chapter 11 Cases and the CCAA Cases, (B) the United States Trustee for the District of Delaware in the Chapter 11 Cases, (C) any monitor, administrator, trustee or similar appointed official in any foreign proceedings, including (x) the Joint Administrators and (y) Ernst & Young Inc., as the court-appointed monitor in connection with the CCAA Cases, and with respect to each of the foregoing persons described in clauses (A), (B) or (C), any employees, agents, advisors (including attorneys, accountants, investment banks and consultants) and other representatives thereof or (D) as may otherwise be required under any Laws as may be applicable to the Sellers from time to time, any legal process before, or any order of, a Bankruptcy Court or any other court before which bankruptcy or insolvency proceedings related

to the Sellers are held from time to time; provided, that if disclosure of Confidential Information of Purchaser or its Affiliates is made pursuant to clauses (A) or (C) above, such disclosure shall only be made by any Seller or Provider to Persons who are legally bound by confidentiality obligations comparable to those set forth in this Section.

(b) Access to the Providers' Information Systems

The provision of certain Services will allow for Authorized Workers to access Providers' Information Systems, and such access will be governed by the terms and conditions set forth in this Agreement, including Section 7, and in Exhibit D attached hereto. In the event that the provision of a Service requires the Providers' employees to access Purchaser's information systems, such access shall be granted and governed by reciprocal terms and conditions (i.e., reversing the identity of the parties in Exhibit D).

(c) Non-Disclosure

Subject to Section 7(a), Purchaser (if the Receiving Party is Purchaser or its Affiliate) and the Providers (if the Receiving Party is a Provider or its Affiliate) agree that such Receiving Party will (i) allow access to the Disclosing Party's Confidential Information only to the directors, officers, employees, agents and contractors ("Representatives") of the Receiving Party with a need to know such Confidential Information and (ii) take reasonable precautions to maintain the confidentiality of the Disclosing Party's Confidential Information, which in no event will be less than those precautions that such Receiving Party employs to protect its own proprietary information. Confidential Information belonging to any Party that is not related to the Transactions or the provision of Services hereunder but is unintentionally disclosed to a Representative of the other Parties during the Term of this Agreement as an unintended result of the provision of the Services shall not be further disclosed by such Representative to any other Representative of such Receiving Party.

8. Relationships Between the Parties

Nothing in this Agreement shall cause the relationship between any Provider and any Recipient to be deemed to constitute a partnership or joint venture between them. No Provider and no Recipient shall have any authority, express or implied, to bind, commit or act as agent for the other in any way except as provided herein (including the Exhibits and Schedules hereto). Each Recipient and each Provider shall be responsible for the salaries, payroll taxes, severance costs and benefits of its own employees. Each of the Parties agrees that the provisions of this Agreement as a whole are not intended to, and do not, constitute control of other Parties or provide it with the ability to control such other Parties, and each Party hereto expressly disclaims any right or power under this Agreement to exercise any power whatsoever over the management or policies of any other Party. Nothing in this Agreement shall oblige any Party hereto to act in breach of the requirements of any Law applicable to it.

9. Access and Cooperation

(a) Access

Purchaser shall, without charge, provide such reasonable access to its premises and/or personnel, and such reasonable assistance as may be required for the Providers to perform their obligations under this Agreement, to (i) the Providers, (ii) any Affiliate of the Providers and/or (iii) a third-party provider of the Services with whom the Providers have contracted for such Service, provided in all cases that such parties have agreed to confidentiality restrictions at least as rigorous as those required under Section 7. The Purchaser acknowledges that, especially at the outset of the Term, it will be important to afford the Sellers as much access as reasonably practicable to relevant Transferred Employees and Business NPWs. If any Party has access (either on-site or remotely) to any other Party's computer systems and/or information stores in relation to the Services, such access shall be in accordance with Section 7(b). Each Party shall limit such access to those of its Representatives with a good faith need to have such access in connection with the Services and who, if required by the provisions of this Agreement, have been duly authorized or approved to have such access, and shall follow all of the other Parties' security rules and procedures for restricting access to their computer systems. All user identification numbers and passwords disclosed by any Party to another Party and any information obtained by any Party as a result of such Party's access to and use of another Party's computer systems shall be deemed to be, and treated as, Confidential Information of the Disclosing Party hereunder in accordance with the provisions set forth in Section 7, with the same degree of care as such Receiving Party uses for its own information of a similar nature, but in no event a lower standard than a reasonable standard of care. The Providers and Purchaser shall cooperate in the investigation of any apparent unauthorized access to any computer system and/or information stores of any Party. These provisions concerning computer access shall apply equally to any access and use by a Party of another Party's electronic mail system, electronic switched network, either directly or via a direct inward service access or calling card feature, data network or any other property, equipment or service of another Party, and any third-party software that may be accessible by any Party in connection with this Agreement.

(b) Cooperation

Each Party shall use commercially reasonable efforts, and shall use commercially reasonable efforts to cause its respective Affiliates and third-party service providers, to timely cooperate with the other Party in all matters relating to the provision and receipt of the Services, and shall perform all obligations hereunder in good faith and in accordance with principles of fair dealing. Each Recipient, at its own cost, shall: (i) comply with its duties to cooperate as set forth in this Agreement or any subsequent Work Orders, (ii) notwithstanding any Provider's obligation to provide any Services under this Agreement, use its reasonable endeavors to become self-sufficient in respect of the Services as soon as practical following the Closing, and (iii) comply with all reasonable operating standards and policies prescribed in writing by the other Party (acting reasonably) with respect to any Service, to the extent that such operating standards and policies are not otherwise in conflict with this Agreement.

(c) Firewall Protection

Prior to performance of certain Services, and/or in connection with the termination of Services hereunder, action may need to be taken to insulate the Providers' or the Recipient's, as applicable, and/or their respective Affiliates' operations, assets, proprietary information, software, equipment or data from that of the other Parties (such insulation being referred to

hereinafter as a "Firewall"). Each Party shall give notice to the other Parties indicating what aspects of the notifying Party's business information, if any, need to be isolated, the nature of the activities necessary to accomplish such isolation and the expected time involved. Nothing in this Section 9 shall relieve the Parties of their obligations pursuant to this Agreement.

10. Regulatory Matters

The Sellers will reasonably cooperate with Purchaser and any regulatory authorities that supervise Purchaser in order to assist Purchaser in satisfying any regulatory requirements applicable to entities that provide services to Purchaser. To the extent that such cooperation necessitates a Change, it will be so treated pursuant to Section 5 of Schedule D (Governance).

11. Assignment

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12. Force Majeure/Delay

Except for the obligation to pay money, and notwithstanding any other provision of this Agreement, no Party will be responsible for delays in or suspension of performance caused by a Force Majeure Event that occurs after the date of this Agreement. Each Party shall use commercially reasonable efforts to remedy as soon as practicable the situation caused by such Force Majeure Event and remove, so far as possible and as soon as practicable, the cause of its inability to perform or comply. The affected Party will promptly notify the other Party, either orally or in writing, upon learning of the occurrence of such Force Majeure Event.

13. Entire Agreement

This Agreement (which includes all Work Orders, Schedules Exhibits, and any Annexes to Schedules), together with the ASA, the EMEA ASA and the other Transaction Documents set forth the understanding of the Parties relating to the subject matter hereof, and all prior or contemporaneous understandings and agreements, whether written or oral, among the Parties are superseded by this Agreement, the ASA, the EMEA ASA and the other Transaction Documents, and all such prior or contemporaneous understandings and agreements are hereby terminated.

14. Conflicts

To the extent the ASA or EMEA ASA, or any other document or other agreement executed in connection with the ASA or EMEA ASA, is in conflict with any term or provision of this Agreement with respect to any Service expressly described in an Exhibit, Schedule or Work Order, this Agreement will take precedence (except for the provisions contained in Section 5.28 of the Sellers Disclosure Schedule, which will take precedence). To the extent of any conflict between any Exhibit, Schedule and/or Work Order and any provision contained in the Terms and Conditions of this Agreement, the provision contained in the Terms and Conditions of this Agreement will take precedence to the extent of such conflict.

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

15. Third-Party Rights

The acknowledgements, rights, undertakings, representations or warranties contained in this Agreement and expressed to be for the benefit of the Joint Administrators or a Provider who is not a Seller (including without limitation by reference to such persons directly or indirectly by means of other defined terms) (collectively, the "Third Party Provisions") shall inure to, are expressly intended to be for the benefit of, and shall be enforceable by, each of the Joint Administrators or the Providers who are not a Seller and their successors, permitted assigns or representatives (collectively, the "Third Party Beneficiaries"), as applicable, and shall be binding on the Purchaser and its successors and permitted assigns. In the event that the Third Party Beneficiaries seek to enforce the Third Party Provisions they shall: (A) first notify the Sellers that they intend to bring such claim; and (B) agree to notify the Sellers and liaise with the appropriate Sellers regarding the conduct of the claim and agree to adhere to any reasonable request of any Seller in relation to the conduct of those claims, save that any such Seller shall not prevent the claim being brought or require an unreasonable settlement of the claim. The Sellers shall use reasonable endeavours to co-ordinate multiple claims by Third Party Beneficiaries which arise out of the same circumstances or events.

In the event that any Party or any of its successors or permitted assigns (A) consolidates with or merges into any other Person and shall not be the continuing or surviving corporation or entity in such consolidation or merger, or (B) transfers all or a majority of its properties and assets to any Person, as permitted under this Agreement, then, and in each such case, proper provision shall be made so that the successors and permitted assigns of such Party, assume the obligations thereof contained in the Third Party Provisions or otherwise in this Agreement. Except as provided in this Section 15, this Agreement is for the sole benefit of the Parties and their permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

16. Notices

All legal notices and claims required or permitted to be given hereunder shall be in writing and shall be delivered to the Service Coordinators and, where the communication is to a Seller or Purchaser, in accordance with the notice provisions set forth in Section 11.7 of the ASA and Clause 17 of the EMEA ASA for the applicable Seller or Purchaser. All business and commercial notices, requests, instructions, demands or other communications shall be delivered to the Service Coordinators and any primes that may be listed in the appropriate Schedules.

17. Counterparts

This Agreement may be executed by the Parties hereto in one or more counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.

18. Amendment; Waiver

Any provision of this Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed, in the case of an amendment, by the Parties, or in

the case of a waiver, by the Party against whom the waiver is to be effective. No failure or delay by any Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. Except as otherwise provided herein, the rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by Law.

19. Severability

The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

20. Survival

Section 1 (Definitions), Section 2(i) (Intellectual Property, Technology, and Data) except Section 2(i)(iv)(a), Section 3(i) (Payment upon Termination of Agreement), Section 4(a) (Charges), Section 4(e) (Invoices), Section 4(f)(v), Section 5 (Indemnity and Disclaimer of Warranty) subject to the sixty (60) day timing limit in Section 5(f), Section 7 (Confidentiality), Section 14 (Conflicts), Section 16 (Notices) and Section 24 (Governing Law) shall survive any termination or expiration of this Agreement. Such sections shall also survive any termination of the ASA or the EMEA ASA.

21. Certain Phrases; Calculation of Time; Consents and Approvals

In this Agreement (a) the words “including” and “includes” mean “including (or includes) without limitation”, (b) the terms “hereof,” “herein,” and “herewith” and words of similar import shall, unless otherwise stated, be construed to refer to this Agreement and not to any particular provision of this Agreement, and Section, Exhibit and Schedule references are to the Sections, Exhibits and Schedules to this Agreement unless otherwise specified, and (c) in the computation of periods of time from a specified date to a later specified date, unless otherwise expressly stated, the word “from” means “from and including” and the words “to” and “until” each mean “to but excluding”. If the last day of any such period is not a Business Day, such period will end on the next Business Day. Where any Party’s consent or approval is required by this Agreement, such Party shall not unreasonably delay or deny such consent or approval unless such consent or approval is expressly stated to be in such Party’s sole discretion. Words and abbreviations used herein which have well-known technical or trade meanings are used in accordance with such recognized meanings.

22. Headings

Headings contained in this Agreement are for reference purposes only. They shall not affect in any way the meaning or interpretation of this Agreement.

23. Work Orders, Schedules and Exhibits

All Work Orders, Schedules and Exhibits to this Agreement (together with any annexes to such Work Orders, Schedules and Exhibits) are incorporated into and are hereby made a part of this Agreement, including the following Exhibits and Schedules:

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| Exhibit A | IT Spaces |
| Exhibit B | Additional Employees |
| Exhibit C | Form of Work Order |
| Exhibit D | Access to Providers' Information Systems |
| Exhibit E | Headcount Plan |
| Exhibit F | Product Volume Plan |
| Exhibit G | Object Code Licensed Software |
| Exhibit H | Purchaser Third Party Consents |

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| Schedule B | Services |
| Schedule C | Service Levels |
| Schedule D | Governance |
| Schedule E | Charges |
| Schedule F | Migration |

24. Governing Law

(a) Any questions, claims, disputes, remedies or Actions arising from or related to this Agreement, and any relief or remedies sought by any Parties, shall be governed exclusively by the Laws of the State of New York without regard to the rules of conflict of laws of the State of New York or any other jurisdiction; provided, however, that any questions, claims, disputes, remedies or Actions arising from or related to Sections 5(i), (j) and (k) and any questions, claims, disputes, remedies or Actions arising from or related to (i) the capacity of the Joint Administrators to act as agents of the TSA EMEA Sellers, (ii) the personal liability of the Joint Administrators, their firm, partners, employees, advisors, representatives or agents, (iii) their qualification to act as insolvency practitioners in accordance with Part XIII of the Insolvency Act, (iv) their appointment as joint administrators of the TSA EMEA Sellers and their status as such, or (v) the statutory duties of the Joint Administrators or the legal obligations solely in relation to the exercise of their powers, duties or functions as administrators of the TSA EMEA Sellers under the Insolvency Act or any other applicable legislation or statutory instrument, shall be governed by English law and subject to the exclusive jurisdiction of the English courts.

(b) Except for questions, claims, disputes, remedies or actions arising from or related to items (i) through (v) of Section 24(a), which shall be subject to the exclusive jurisdiction of the English courts, all disputes under this Agreement, including with respect to the interpretation

of any provision of the Agreement and with respect to the performance by Provider or Purchaser, shall be resolved in accordance with Section 9 of Schedule D (Governance)

(c) The Parties agree that irreparable damage may occur in the event that any of the provisions of this Agreement are not performed in accordance with their specific terms or are otherwise breached. Subject to the prior exhaustion of the escalation procedures set forth in Section 9(a) of Schedule D (Governance) it is accordingly agreed that, in addition to any other remedy available at Law, each of the Parties shall be entitled to seek equitable relief to prevent or remedy breaches of this Agreement, without the proof of actual damages, including in the form of an injunction or injunctions or orders for specific performance in respect of such breaches. Each Party agrees to waive any requirement for the security or posting of any bond in connection with any such equitable remedy. For clarity, the Parties agree that nothing in this paragraph shall be interpreted to increase the liability of any Party or other Person hereunder beyond the scope of the limitations set forth in this Agreement.

(d) EACH PARTY HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY. EACH PARTY (I) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF ANY ACTION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (II) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 24(d).

25. No Joint Liability

Notwithstanding anything herein to the contrary, the obligations of each Seller hereunder shall be several and not joint. The failure of any Seller to provide, or to cause any Provider to provide, any Service hereunder shall not relieve any other Seller of its obligation to provide Services hereunder, and no Seller shall be responsible for the failure of any other Seller to provide the Services or Losses incurred by Purchaser, or any Affiliates thereof, as a result of or in connection with such failure.

26. IT Spaces

(a) Purchaser acknowledges that certain equipment (including but not limited to voice and data networking, and midrange computing) owned by the Providers or affiliates of Providers (the “NBS Equipment”) will remain at sites occupied by Recipients or tenants or subtenants of Recipients post-Closing (the “Equipment Premises”) during the Term and that the Providers’ employees and Providers’ Third Party contractors or service providers will utilize such equipment to fulfill the obligations of Sellers to Purchaser under this Agreement and to provide services to Sellers or affiliates of Sellers and Third Parties. Providers or affiliates of Providers shall retain title to the NBS Equipment and Purchaser and Recipients shall not sell, transfer, lease, mortgage, borrow against, pledge or otherwise transfer or create a legal or equitable

interest by any Third Party in the NBS Equipment. At the end of the Term, Providers shall have a reasonable period and Recipients shall permit Providers to have reasonable access to the Equipment Premises to relocate the NBS Equipment.

(b) The Providers' employees and Providers' Third Party contractors or service providers will have sole and exclusive access to the NBS Equipment and the space within the Equipment Premises where the NBS Equipment is located, including but not limited to wiring rooms, data centers, and other equipment rooms, as specified in Exhibit A (the "Equipment Rooms"), and shall be permitted uninterrupted access to the Equipment Rooms as necessary in order to maintain and operate the NBS Equipment as herein contemplated. It is understood and agreed that Recipients and its employees, agents, invitees (including building janitorial and maintenance workers), customers and guests shall not be permitted to access or use the NBS Equipment, except in the event of an emergency or in the presence of, and with the consent and assistance of, the Providers' employees, subject to any security procedures which the Providers may from time to time reasonably require. Purchaser (a) shall use commercially reasonable efforts to ensure that the environment maintained in the Equipment Rooms, including the continued supply of any electricity, cleaning, heating, ventilation and air conditioning services in such areas, will at all times be substantially the same as such conditions exist as of the Closing Date, and (b) will not charge Providers rent or the cost of any building-supplied electricity, cleaning, heating, ventilation and air conditioning services. Recipients shall not be liable for any damage or loss to the NBS Equipment except to the extent such damage or loss is caused by the Recipients' employees and agents.

***[Remainder of page intentionally left blank]***

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

**NORTEL NETWORKS CORPORATION,**
on its own behalf and on behalf of the Other Sellers listed in Section 11.15(a)(i) of the Sellers Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS LIMITED,**
on its own behalf and on behalf of the Other Sellers listed in Section 11.15(a)(ii) of the Sellers Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel-Corporate and Corporate Secretary

By: /s/ John Doolittle
Name: John Doolittle
Title: Senior Vice-President, Finance and Corporate Services

**NORTEL NETWORKS INC.,**
on its own behalf and on behalf of the Other Sellers listed in Section 11.15(a)(iii) of the Sellers Disclosure Schedule

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: Chief Legal Officer

*[Signature page to Transition Services Agreement]*

NORTEL NETWORKS UK LIMITED (in administration) by Alan Bloom, as Joint Administrator (acting as agent only and without any personal liability whatsoever)

By: /s/ Alan Bloom
Name: Alan Bloom
Title: Joint Administrator

NORTEL NETWORKS (IRELAND) LIMITED (in administration) by Alan Bloom, as Joint Administrator (acting as agent only and without any personal liability whatsoever)

By: /s/ Alan Bloom
Name: Alan Bloom
Title: Joint Administrator

Signed in his own capacity and for and on behalf of the Joint Administrators without personal liability and solely for the benefit of the provisions of this Agreement expressed to be conferred on or given to the Joint Administrators:

By: /s/ Alan Bloom
Name: Alan Bloom
Title: Joint Administrator

**CIENA CORPORATION**

By: /s/ Gary B. Smith
Name: Gary B. Smith
Title: President and Chief Executive Officer

By: /s/ David M. Rothenstein
Name: David M. Rothenstein
Title: Senior Vice President, General Counsel and Secretary

*[Signature Page to Transition Services Agreement]*

# INTELLECTUAL PROPERTY LICENSE AGREEMENT

THIS AGREEMENT made and entered into as of the 19th day of March, 2010, by and among Nortel Networks Limited, a corporation incorporated under the laws of Canada, having its executive offices at 5945 Airport Road, Suite 360, Mississauga, Ontario, L4V 1R9, Canada (hereinafter "Nortel"), on its behalf and on behalf of its Affiliates, Ciena Luxembourg S.a.r.l., a Societée à responsabilité limitée organized under the laws of the Grand Duchy of Luxembourg (hereinafter "Licensee"), on behalf of itself and its Affiliates, and, only with respect to the sections of the Agreement in which it is expressly named, Ciena Corporation**,** a corporation incorporated under the laws of the State of Delaware having its executive offices at 1201 Winterson Road, Linthicum, Maryland 21090 ("Ciena Corporation").

WHEREAS, on January 14, 2009 (the "Petition Date"), Nortel and certain of its Affiliates (defined below) filed an application for protection under the Companies' Creditors Arrangement Act (the "CCAA") and an order was issued on such date under the CCAA by the Superior Court of Justice of the Province of Ontario Canada (the proceeding commenced by such application, the "Canadian Case" and the Court in which such proceeding was commenced hereinafter the "CCAA Court");

WHEREAS, on the Petition Date, Nortel Networks Inc. ("NNI"), an Affiliate of Nortel, and certain of its Affiliates (collectively the "U.S. Debtors") filed voluntary petitions pursuant to title 11 of the United States Code (the "U.S. Bankruptcy Code" and the cases commenced by such petitions, the "Chapter 11 Cases") in the United States Bankruptcy Court for the District of Delaware (the "U.S. Bankruptcy Court");

WHEREAS, on January 15, 2009, Nortel Networks UK Limited ("NNUK") and certain other entities obtained orders from the English High Court of Justice for the appointment of administrators pursuant to the Insolvency Act of 1986;

WHEREAS Nortel and certain of its Affiliates, on the one hand, and Ciena Corporation, on the other hand, have entered into an amended and restated asset sale agreement dated as of November 24, 2009 as amended from time to time (hereinafter the "Asset Sale Agreement") for the sale by Nortel to Ciena Corporation, or a purchaser designated by Ciena Corporation, of certain assets and an assumption of certain liabilities of Nortel relating to the optical networking solutions and carrier ethernet switching segments of Nortel's Metro Ethernet Networks business (the "MEN Business") as conducted as of the Closing Date by Nortel and its Affiliates, and concurrently therewith, the Parties have entered into certain ancillary agreements ("Transaction Documents") including the agreement between the EMEA Sellers and Ciena Corporation, as amended (the "EMEA Asset Sale Agreement");

WHEREAS, Ciena Corporation has designated Licensee to acquire, Nortel intends to assign to Licensee, and Licensee intends to acquire, certain intellectual property assets, in each case pursuant to the Asset Sale Agreement and the EMEA Asset Sale Agreement.

WHEREAS, pursuant to this Agreement and as further described herein, Nortel intends to license to Licensee certain intellectual property assets and receive from Licensee a license of

certain intellectual property (including certain assets expected to be assigned to purchasers of businesses of Nortel and its Affiliates other than the MEN Business); and

WHEREAS, pursuant to this Agreement and as further described herein, Licensee intends to license to Nortel certain intellectual property assets (including certain assets expected to be licensed to purchasers of businesses of Nortel and its Affiliates other than the MEN Business) and receive in consideration for such license a license of equivalent value of certain intellectual property from Nortel.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

**ARTICLE ONE — DEFINITIONS**

1.01 The following terms shall have their respective meanings as set forth in this Section 1.01 below.

(a) "Additional Licensed Patents" means the Patents listed in Exhibit VI.

(b) "Affiliate" means Affiliate as defined in the Asset Sale Agreement, except that solely for the purposes of this Agreement, Affiliates of Nortel shall include the EMEA Sellers and their Affiliates and, in relation to Nortel Ukraine Limited, such entity shall continue to be an "Affiliate" for the purposes of this Agreement after the time at which any insolvency proceedings are opened in respect of it.

(c) "Agreement" means this Intellectual Property License Agreement, as modified, amended or supplemented upon written agreement of the Parties from time to time.

(d) "Become Infected" means [*].

(e) "Business" means the Business as defined in the Asset Sale Agreement.

(f) "Carrier Ethernet Products" means [*].

(g) "Carrier Ethernet Switching Product" means [*].

(h) "Carrier Ethernet Network Management Product" means [*].

(i) "CDMA/LTE Field" has the meaning set out in Schedule 1.01.

(j) "Confidential Information" means any business, marketing, technical, scientific or other information disclosed by any Party which, at the time of disclosure, is designated as confidential (or like designation), is disclosed subject to a confidentiality agreement, nondisclosure agreement or other written agreement pursuant to which the party which receives such information is required to keep the information confidential or is otherwise disclosed in circumstances of confidence

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that should be understood by the receiving Party, exercising reasonable business judgment, to be confidential.

(k) "Contractor" means, with respect to a Party, a third party contracted by such Party or any of its Affiliates to perform the following types of services for and on behalf of that Party or its Affiliates: resale, development, design, manufacturing, production, testing, importing, distribution, product service and support, and any other comparable services to any of the foregoing.

(l) "Controlled" means, with reference to any Patents, copyrights or other Intellectual Property, other than Trademarks, that such Patents, copyrights or other Intellectual Property are licensable or sub-licensable by a Party or any of its Affiliates (excluding joint ventures) without the need to obtain consent of any third party (or if third party consent is required, after obtaining such consent), and without relinquishing or otherwise losing any rights of such Party or Affiliate or providing consideration to any third party, unless the other Party compensates such consideration in full. Notwithstanding the foregoing, neither Nortel nor any Nortel Affiliate shall be obligated to obtain any consent of any third party or to assume or maintain any agreement under which such Intellectual Property is licensed to, or co-owned by, Nortel or such Affiliate. Notwithstanding anything to the contrary (including the statement "excluding joint ventures" in the definitions of Controlled, Exclusively Licensed Intellectual Property, Licensed Intellectual Property, and Licensed Patents), any Intellectual Property (other than Trademarks) licensed to Nortel by a joint venture is deemed "Controlled" by Nortel to the extent it can be sublicensed by Nortel under the conditions mentioned above.

(m) "CVAS Field" has the meaning set forth in Schedule 1.01.

(n) "Documentation" means all user and operator manuals and architectural or design specifications relating to the use, development or support of the Licensed Software.

(o) "EMEA Sellers" means the EMEA Sellers as defined in the Asset Sale Agreement.

(p) "End User License Agreement" means a license agreement with any end user customer or any reseller or other intermediary in connection with sale of products or services to any end user customer.

(q) "Ethernet" means the family of computer networking technologies for local area networks covered by the IEEE 802.3x standard (or any successor thereto), regardless of data rate.

(r) "Enterprise Business" means [*].

(s) "Enterprise Field" has the meaning set forth in Schedule 1.01.

(t) "Enterprise Products" means those products set forth on Exhibit VII.

(u) "Enterprise Services" means [*].

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(v) “Exclusive Field of Use” means the commercialization and sale of the Exclusively Licensed Products, but excludes the products and services in the field of the Nortel Retained Businesses and natural evolutions of such field, and further excludes the following: [*].

(w) “Exclusively Licensed Intellectual Property” means [*].

(x) “Exclusively Licensed Products” means [*].

(y) “French Irrevocable Offer” has the meaning given to it in the EMEA Asset Sale Agreement.

(z) “GSM Access Field” has the meaning set out in Schedule 1.01.

(aa) “GSM Core Field” ” has the meaning set out in Schedule 1.01.

(bb) “Improvement” means any improvement, enhancement, modification, derivative work or upgrade made from and after the Closing Date to any Intellectual Property and includes all Intellectual Property therein.

(cc) “Integration Rights” means the right to integrate any products or services (the “Integrating Items”) with or to existing or independently provided customer infrastructure or products for interoperability purposes, as well as to connect any such Integrating Items to independently provided external network infrastructure, products or services for interoperability purposes, and to use such integrated and/or connected products, services and infrastructure, to the extent such integration and/or connection is required for interoperability and all services relating to the foregoing.

(dd) “Intellectual Property” shall have the meaning set forth in the Asset Sale Agreement.

(ee) “Licensee Improvement” means any Improvement made by or for Licensee to any of the Transferred Intellectual Property or Licensed Intellectual Property.

(ff) “Licensed Intellectual Property” means (i) all Intellectual Property (excluding any Patents, Trademarks, and Software) to the extent such Intellectual Property covers or is embodied in, in whole or in part, the Licensed Products of the Business, as such Intellectual Property exists as of the Closing Date, which Intellectual Property is Controlled or exclusively owned by Nortel or its Affiliates (excluding joint ventures) as of the Closing Date, (ii) the Licensed Software, and (iii) the Licensed Patents. Licensed Intellectual Property includes Tools, but excludes the Transferred Intellectual Property, the Trademarks, and any Intellectual Property included in, or used to provide, the Overhead and Shared Services.

(gg) “Licensed Patents” means [*].

(hh) “Licensed Products” means [*].

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(ii) "Licensed Software" means [*].

(jj) "LTE Access Field" has the meaning set out in Schedule 1.1.

(kk) "NNSA" means Nortel Networks SA, a company incorporated in accordance with the laws of France and with registered number 389 516 741.

(ll) "Nortel Improvement" means any Improvement made by or for Nortel or its Affiliates to any of the Transferred Intellectual Property or Licensed Intellectual Property.

(mm) "Nortel Proposed Divestitures" means the following Nortel Retained Businesses: (i) the wireless CDMA and LTE businesses as currently planned for sale to Telefonaktiebolaget L M Ericsson (publ) pursuant to the Asset Sale Agreement entered into as of July 24, 2009, as such agreement may be amended from time to time, (ii) the Enterprise Business, (iii) the CVAS business including the design, development, manufacture, assembly, testing, marketing, sale, distribution and supply of the products and provision of the services within the CVAS Field, (iv) the GSM Access business including the design, development, manufacture, assembly, testing, marketing, sale, distribution and supply of the products and provision of the services within the GSM Access Field, (v) the GSM Core business including the design, development, manufacture, assembly, testing, marketing, sale, distribution and supply of the products and provision of the services within the GSM Core Field, (vi) the Passport business including the design, development, manufacture, assembly, testing, marketing, sale, distribution and supply of the products and provision of the services within the Passport Field, (vii) the LTE Access business including the design, development, manufacture, assembly, testing, marketing, sale, distribution and supply of the products and provision of the services within the LTE Access Field, and (viii) the Packet Core business including the design, development, manufacture, assembly, testing, marketing, sale, distribution and supply of the products and provision of the services within the Packet Core Field, in each case together with the products and services associated with or ancillary to such businesses in their respective fields or other assets of such businesses if sold separately.

(nn) "Nortel Retained Businesses" means the businesses (other than the Business) of Nortel, its Affiliates, the EMEA Sellers and Affiliates of the EMEA Sellers, existing as of January 14, 2009. For the avoidance of doubt, any product, service or activity of the businesses of Nortel, its Affiliates, the EMEA Sellers or Affiliates of EMEA Sellers (other than the Business) as of January 14, 2009 shall be deemed included in the Nortel Retained Businesses irrespective of whether it is or was also included in the Business. Nortel Retained Businesses shall include the performance by the Sellers, the EMEA Sellers and their Affiliates (to the extent contemplated under the Asset Sale Agreement and the EMEA Asset Sale Agreement) under (a) the Bundled Contracts, Non-Assignable Contracts, Excluded 365 Contracts, and the Excluded Other Customer Contracts; (b) any contracts, arrangements or agreements of the EMEA Sellers or their Affiliates which do not transfer to the Licensee under

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the EMEA Asset Sale Agreement; and (c) any contracts, arrangements or agreements of NNSA which do not transfer to the Licensee under the French Irrevocable Offer.

(oo) "Open Source Software License" shall mean [*].

(pp) "Optical Field" means [*].

(qq) "Optical Network Management Product" means [*].

(rr) "Optical Switching and Multiplexing Products" means [*].

(ss) "Other Tools" means the specified versions of the items listed under "Other Tools" in Exhibit I.

(tt) "Packet Core Field" has the meaning set out in Schedule 1.01.

(uu) "Packet Optical Transport Products" means [*].

(vv) "Party" means either Nortel or Licensee.

(ww) "Patents" means Patents as defined in the Asset Sale Agreement.

(xx) "Passport Field" has the meaning set out in Schedule 1.01.

(yy) "Plan of Record" means Plan of Record as defined in the Asset Sale Agreement

(zz) "Product Development Tools" means the specified versions of the items listed under "Product Development Tools" in Exhibit I.

(aaa) "Software" means Software as defined in the Asset Sale Agreement.

(bbb) "Tools" means Other Tools and Product Development Tools.

(ccc) "Trademarks" means Trademarks as defined in the Asset Sale Agreement.

(ddd) "Transferred Intellectual Property" means the Transferred Intellectual Property as defined in the Asset Sale Agreement.

(eee) "WDM Transport Products" means [*].

1.02 Capitalized terms used in this Agreement not otherwise defined in Section 1.01 shall have the meaning ascribed to them in the Asset Sale Agreement.

**ARTICLE TWO- GRANT OF RIGHTS**

2.01 Non-exclusive License. Subject to the terms and conditions of this Agreement, Nortel, on behalf of itself and its Affiliates, hereby grants to Licensee a perpetual, irrevocable,

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non-assignable (except as specifically provided in Section 4.06), non-sublicensable (except as specifically provided in Sections 2.06 and 4.06), non-exclusive, worldwide, royalty-free, fully paid-up license [*].

2.02 Exclusive License. Subject to the terms and conditions of this Agreement, Nortel, on behalf of itself and its Affiliates, hereby grants to Licensee a perpetual, irrevocable, non-assignable (except as specifically provided in Section 4.06), non-sublicensable (except as specifically provided in Sections 2.06 and 4.06), exclusive, worldwide, royalty-free, fully paid-up license [*].

2.03 Have Made Right. The licenses granted in Section 2.01 and Section 2.02 also include the right of Licensee to have products and services manufactured and rendered for it by one or more Contractors for subsequent commercialization by Licensee in its ordinary course of business.

2.04 Other Tools. Subject to the terms and conditions of this Agreement, Nortel hereby grants to Licensee a perpetual, irrevocable, non-assignable (except as specifically provided in Section 4.06), non-sublicensable (except as specifically provided in this Section and Section 2.06 and in Section 4.06), non-exclusive, worldwide, royalty-free, fully paid-up license under the Licensed Intellectual Property to use and copy (but not to make derivative works or modify), in object code form only (to the extent the Other Tools are in the form of Software), the Other Tools in connection with Licensed Products, and to sublicense to Contractors the use of, the Other Tools, solely for the purpose of and to the extent required, to exercise Licensee's rights under this Section 2.

2.05 Software Provided to End Users. Licensed Software that is sublicensed to end users by Licensee, and Software included in the Transferred Intellectual Property licensed back to Nortel under Section 2.07 hereof ("Licensed-Back Software") that is sublicensed to end users by Nortel, shall be provided to such end users under an End User License Agreement and shall be provided to end users only in object code form or other form in which the source code of such Licensed Software or Licensed-Back Software is not visible to or accessible by an end user. Each such End User License Agreement will contain terms substantially similar to (but no less protective of the Software than) those set forth in Exhibit II. [*]

2.06 Sublicensability. The licenses granted in Section 2.01, 2.02 and 2.04 to Licensee include the right to grant sublicenses only within the scope of such licenses [*].

2.07 Nortel License to Transferred Intellectual Property. Subject to the terms and conditions of this Agreement, Licensee hereby grants Nortel a non-assignable (except as specifically provided in Section 4.05), non-sublicensable (except as specifically provided in this Section 2.07 and Section 4.05), fully paid-up, royalty-free, non-exclusive, perpetual, irrevocable, worldwide license [*].

2.08 Ownership of Improvements. All Licensee Improvements and any Intellectual Property arising therefrom or embodied therein shall be owned exclusively by Licensee, and are not included within the scope of the license to Nortel under Section 2.07. Licensee shall

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have no obligation to provide Nortel with the physical embodiment of any Licensee Improvement. All Nortel Improvements and any Intellectual Property arising therefrom or embodied therein shall be owned exclusively by Nortel, and are not included within the scope of the licenses to Licensee. Nortel shall have no obligation to provide Licensee with the physical embodiment of any Nortel Improvement.

2.09 Prohibited Uses. All rights not expressly granted by one Party to another herein are reserved by the first Party. Neither Party shall use any Intellectual Property licensed to it under this Agreement except as permitted by this Agreement. Licensee and Ciena Corporation acknowledges that the Licensed Intellectual Property including the Exclusively Licensed Intellectual Property includes Nortel's Confidential Information, including the Licensed Software and the Tools. Nortel acknowledges that the Transferred Intellectual Property includes Licensee's Confidential Information. Licensee shall not reverse engineer, disassemble, reverse translate, decompile, or in any other manner decode any Software provided or licensed to it hereunder in order to derive the source code form or to decrypt or defeat any security measures or codes contained in such Software, except where such rights cannot be excluded under the Council of the European Communities Directive on the legal protection of Computer Programs dated 14th May 1991 (91/250/EEC). Neither Party in its capacity as a licensee nor Ciena Corporation shall include, integrate, embed, combine or use the Licensed Software or Licensed-Back Software, as applicable, in a manner that would cause such Software to Become Infected without the consent of the owner of such Software. For the avoidance of doubt, the owner of any Software licensed pursuant to this Agreement may, at its sole discretion, subject any such Software to any Open Source Software License.

2.10 Modifications to Fields of Nortel Proposed Divestitures. Nortel will be permitted to modify the definitions of the fields of use of each of the Nortel Proposed Divestitures (other than the CDMA/LTE Field and the Enterprise Field) in the course of its negotiations of such divestitures provided that:

(i) any such modification that results in a material expansion of the purchaser's rights with respect to the proposed grant back to Nortel (or any of its permitted assigns and sublicensees) of any rights to the Transferred Intellectual Property within the scope of the Optical Field will require Licensee's consent, such consent not to be unreasonably withheld; and

(ii) Nortel will provide Licensee with written notice by facsimile of any modification to the field of use of a Nortel Proposed Divestiture (other than the CDMA/LTE Field and the Enterprise Field) by the later (a) of at least two (2) Business Days prior to the date of the U.S. Sale Hearing (or if no U.S. Sale Hearing is required in connection with such transaction, then at least two (2) Business Days prior to the date of execution of the agreement defining the fields of the Nortel Proposed Divestitures differently than in this Agreement) or (b) the conclusion of any auction in connection therewith.

Notwithstanding the foregoing, in the event the Enterprise Business is not sold to Avaya Inc. for any reason, then the Enterprise Field will be subject to the provisions of this Section 2.10.

2.11 No Trademark Licenses. No rights to Nortel's Trademarks are granted to Licensee pursuant to this Agreement. No rights to Licensee's Trademarks are granted to Nortel pursuant to this Agreement.

2.12 Delivery. As promptly as reasonably practicable after the Closing Date, Nortel shall provide, and cause its Affiliates to provide, a copy to the Licensee or Ciena Corporation of the Licensed Software and the Tools, to the extent in its or their possession or control, together with their respective Documentation identified prior to or within a reasonable period after Closing (and in such regard, Nortel shall use reasonable efforts to identify any such Documentation prior to or as promptly as reasonably practicable after the Closing Date), and such other embodiments of the Licensed Intellectual Property (e.g., designs) as Licensee may reasonably require in order to exercise its licenses hereunder, to the extent in Nortel's or its Affiliates' possession or control, in such manner and on such media as reasonably requested by Licensee. If any of the items required to be provided to Licensee by the foregoing sentence are not in Nortel's possession or control, Nortel shall use reasonable efforts (without further cost to Nortel) to obtain such items so as to be able to provide them to Licensee or Ciena Corporation. Except as set forth in this Section 2.12, Nortel shall not be obligated to deliver any further information, physical embodiments or tangible materials to Licensee or Ciena Corporation under this Agreement (such requirements being set forth in the Asset Sale Agreement). For clarity, nothing in this Agreement will limit or relieve Nortel from any obligation under the Asset Sale Agreement with respect to delivery of software, Documentation or other materials. Nortel and its Affiliates shall have the right to retain a copy of any Software or non-Patent Transferred Intellectual Property that is embodied in written or electronic form and related documentation included in the Transferred Intellectual Property for their use in accordance with the license grant in Section 2.07, however, all such Software, non-Patent Transferred Intellectual Property and documentation is Confidential Information of Licensee and shall be treated as such by Nortel and any sublicensees.

2.13 Reservation of Rights; Ownership. Each Party and Ciena Corporation reserves all rights and licenses not expressly granted in this Agreement, and nothing in this Agreement shall be construed as implying or giving rise to any implied grant or license of any right not expressly set forth in this Agreement. As between the Parties and Ciena Corporation, the Licensed Intellectual Property including the Exclusively Licensed Intellectual Property is owned or Controlled by Nortel. The Transferred Intellectual Property and the Licensee Improvements are and shall continue to be owned exclusively by Licensee.

2.14 Court Approval. As set forth in the recitals hereto, the Parties acknowledge that certain Nortel and certain Affiliate entities are currently subject to the CCAA or chapter 11 of the U.S. Bankruptcy Code and that this Agreement is subject to approval by the CCAA Court and the U.S. Bankruptcy Court.

**ARTICLE THREE — CONFIDENTIAL INFORMATION**

3.01 Any Confidential Information received by either Party pursuant to this Agreement shall be used, disclosed, or copied only for the purposes of, and only in accordance with, this Agreement. Each Party shall use, at a minimum, the same degree of care as it uses to protect its own Confidential Information of a similar nature, but no less than reasonable care, to prevent the unauthorized use, disclosure or publication of Confidential Information. Without limiting the generality of the foregoing;

(a) each Party shall only disclose Confidential Information to its employees or any individual or entity which (i) has entered into a written agreement with such Party containing obligations of confidence substantially similar to (but no less protective of the Confidential Information than) those contained in this Agreement and (ii) has a bona fide need to access the Confidential Information consistent with the receiving Party's rights under this Agreement;

(b) neither Party shall make or have made any copies of Confidential Information except those copies which it determines in good faith are necessary or useful to fulfill its obligations and exercise its rights and licenses under this Agreement; and

(c) each Party shall affix to any copies it makes of the Confidential Information, all proprietary notices or legends affixed to the Confidential Information as they appear on the copies of the Confidential Information originally received from the disclosing Party.

3.02 Exclusions. Licensee shall not be bound by obligations restricting disclosure set forth in this Agreement with respect to any Confidential Information and Nortel shall not be bound by obligations restricting disclosure set forth in this Agreement with respect to Confidential Information which;

(a) without obligation of confidentiality was rightfully known by the recipient prior to disclosure, as evidenced by its business records;

(b) was lawfully in the public domain prior to its disclosure, or lawfully becomes publicly available other than through a breach of this Agreement or any other confidentiality obligation on behalf of any third party;

(c) was disclosed to the recipient by a third party provided such third party, or any other party from whom such third party receives such information, is not in breach of any confidentiality obligation in respect of such information;

(d) is independently developed by the recipient, as evidenced by its business records; or

(e) is disclosed when such disclosure is compelled pursuant to legal, judicial, or administrative proceedings (including in connection with the Bankruptcy

Proceedings), or otherwise required by law, court or governmental or regulatory authority, but solely to the extent required thereby.

Notwithstanding the foregoing, the exclusions set forth in clauses (a) and (d) above shall not apply to any Confidential Information of Licensee conveyed by Nortel or its Affiliates to Licensee or its Affiliates as part of the transactions contemplated by the Asset Sale Agreement, the EMEA Asset Sale Agreement or any of the Transaction Documents. The Party from whom disclosure is compelled pursuant to (e) shall use reasonable efforts to advise the other Party of any such disclosure in a timely manner prior to making any such disclosure (so that either Party can apply for such legal protection as may be available with respect to the confidentiality of the information which is to be disclosed), and provided that the Party from whom such disclosure is compelled shall use reasonable efforts to apply for such legal protection as may be available with respect to the confidentiality of the Confidential Information which is required to be disclosed.

**ARTICLE FOUR- MISCELLANEOUS PROVISIONS**

4.01 Term. This Agreement shall be effective during the term commencing on the Closing Date and shall continue unless terminated by mutual agreement between the Parties. The obligations contained in Article Three shall survive termination of this Agreement for any reason unless otherwise agreed to by the Parties in writing.

4.02 Licenses Irrevocable. Notwithstanding anything in this Agreement to the contrary, the licenses granted by each Party hereunder shall be irrevocable and perpetual and shall continue in full force and effect notwithstanding any material breach by a Party of any term herein. Except as may be pursued in connection with the Asset Sale Agreement, each Party irrevocably waives the right to seek any remedy that would involve rescission or other termination of the licenses granted hereunder.

4.03 Disclaimer of Warranties. There are no warranties, representations or conditions, express or implied, statutory or otherwise between the Parties (which for purposes of this Section 4.03 shall include Ciena Corporation) under this Agreement except as specifically set forth in any of the other Transaction Documents. **EACH PARTY EXPRESSLY DISCLAIMS ALL WARRANTIES AND CONDITIONS NOT EXPRESSLY PROVIDED UNDER THE TRANSACTION DOCUMENTS, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OR CONDITION OF, NON-INFRINGEMENT, MERCHANTABILITY, FITNESS OR SUITABILITY FOR ANY PARTICULAR PURPOSE (EVEN IF ON NOTICE OF SUCH PURPOSE), CUSTOM OR USAGE IN THE TRADE.**

EXCEPT FOR BREACHES OF OBLIGATIONS OF CONFIDENTIALITY AND MISAPPROPRIATION OF A PARTY'S INTELLECTUAL PROPERTY, IN NO EVENT SHALL EITHER PARTY BE LIABLE HEREUNDER FOR ANY INDIRECT, OR INCIDENTAL, OR SPECIAL, OR CONSEQUENTIAL OR EXEMPLARY DAMAGES OF ANY KIND, OR ANY LOST BUSINESS, OR LOST SAVINGS, OR LOSS OR DAMAGE TO DATA, OR LOST PROFITS, OR OTHER DAMAGES

BASED ON (A) THE AMOUNT OF USE OF, OR THE AMOUNT OF REVENUES OR PROFITS EARNED OR OTHER VALUE OBTAINED BY, THE USE OF ANY LICENSED INTELLECTUAL PROPERTY OR A LICENSED PRODUCT OR SERVICE; OR (B) THE LOST REVENUES OR PROFITS OF ANY THIRD PARTY ARISING FROM ANY USE OF ANY LICENSED INTELLECTUAL PROPERTY OR A LICENSED PRODUCT OR SERVICE, REGARDLESS OF THE CAUSE AND WHETHER ARISING IN CONTRACT (INCLUDING FUNDAMENTAL BREACH), TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

4.05 Assignment or Sublicense by Nortel. Except as provided herein and in Section 2.07, Nortel shall not have a right to assign or transfer, or to grant sublicenses under, this Agreement, in whole or in part, without the prior written consent of Licensee. Notwithstanding the foregoing, Nortel shall have the right to assign (or sublicense) its rights hereunder in whole or in part, after such rights are conveyed to it under the terms hereof, without the consent of Licensee:

(i) to the purchaser (including any subsequent purchaser) of all or substantially all of the assets of Nortel or any of its Affiliates, provided that the purchaser shall then be bound by the same restrictions as Nortel with respect to assigning, transferring or granting sublicenses hereunder;

(ii) to the purchaser (including any subsequent purchaser) of any portion of the Nortel Proposed Divestitures, provided that the field of use in which the purchaser of a portion of the Nortel Proposed Divestiture may exercise a sublicense of rights granted to Nortel under Section 2.07 shall be limited to the field of the business that has been sold or divested to such purchaser and natural evolutions of such fields and no broader than the fields of each of the relevant Nortel Proposed Divestitures as set out in Schedule 1.01 (unless such fields are modified in accordance with Section 2.10) and natural evolutions of such fields [*];

(iii) to the purchaser (including any subsequent purchaser) of any product lines, operating units or business divisions of Nortel (including Nortel Proposed Divestitures) belonging to the Nortel Retained Businesses, provided that the field of use in which the purchaser of the product lines, operating units or business divisions may exercise a sublicense of rights granted to Nortel under Section 2.07 shall expressly exclude the Optical Field;

(iv) to the purchaser (including any subsequent purchaser) of any of the product lines, operating units or business divisions of Nortel (including Nortel Proposed Divestitures) belonging to the Nortel Retained Businesses, other than in accordance with Section 4.05(iii), provided that the field of use in which the purchaser of such product lines, operating unit or business division may exercise a sublicense of rights granted to Nortel

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[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

under Section 2.07 shall be limited to the products and services of the business that has been sold or divested to such purchaser and natural evolutions of such products and services and provided further that such right to assign or sublicense may be exercised only once by each of Nortel and the purchaser (including any subsequent purchaser) per product line, operating unit or business division, except where multiple product lines, operating units or business divisions within Nortel (as of the closing of each such sale) make, develop, sell, support or service the same product or service and Nortel sells such multiple businesses (in which case the purchaser of each such product line, operating unit or business division may exercise such license with respect to the relevant product and/or service sold to it);

(v) to an Affiliate of Nortel, with the right to assign or sublicense as set forth in Sections 2.07 and 4.05; or

(vi) upon internal reorganization or restructuring of Nortel (including assumption in the context of any bankruptcy proceedings) to a successor of Nortel;

provided that in each of (i)-(vi) above: (1) such assignee (or sublicensee) shall agree to assume all applicable obligations of Nortel hereunder and to be subject to the terms of this Agreement with respect to the assigned rights hereunder; and (2) in the case of an assignment or sublicense to an Affiliate of Nortel, Nortel shall not be relieved of any of its obligations hereunder.

4.06 Assignment or Sublicense by Licensee. Except as provided herein, Licensee shall not have a right to assign or transfer, or to grant sublicenses under, this Agreement, in whole or in part, without the prior written consent of Nortel. Notwithstanding the foregoing, Licensee shall have the right to assign (or sublicense) its rights in whole or in part, hereunder, without the consent of Nortel [*].

4.07 Notices. All demands, notices, communications and reports provided for in this Agreement shall be in writing and shall be sent by facsimile transmission with confirmation to the number specified below, or personally delivered or sent by reputable overnight courier service (delivery charges prepaid) to a Party at the address specified below, or at such address, to the attention of such other person, and with such other copy, as the recipient Party has specified by prior written notice to the sending Party pursuant to the provisions of this Section.

If to Licensee or to Ciena Corporation, as applicable, to:

Ciena Luxembourg S.a.r.l. / Ciena Corporation
1201 Winterson Road
Linthicum, Maryland 21090
Attention: David Rothenstein, General Counsel
Facsimile: +1-410-865-8001

With copies (that shall not constitute notice) to:

Latham & Watkins LLP

[*] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

555 Eleventh Street, NW
Suite 1000
Washington, DC 20004
Attention: David S. Dantzic
Kieran Dickinson
Facsimile: +1-202-637-2201

Stikeman Elliott LLP
5300 Commerce Court West
199 Bay Street
Toronto, Ontario M5L 1B9
Attention: Brian M. Pukier
Stuart McCormack
Facsimile: +1-416-947-0866

If to Nortel, to:

Nortel Networks Limited
5945 Airport Road
Suite 360
Mississaugua, Ontario L4V 1R9
Facsimile: +1-905-863-7739
Attention: Chief Intellectual Property Officer

with a copy to:

Nortel Networks Limited
5945 Airport Road
Suite 360
Mississaugua, Ontario L4V 1R9
Facsimile: +1-905-863-7739
Attention: Vice-President,
Mergers & Acquisitions

Any such demand, notice, communication or report shall be deemed to have been given pursuant to this Agreement when delivered personally, when confirmed if by facsimile transmission, or on the business day after deposit with a reputable overnight courier service, as the case may be.

4.08 Confidentiality of the Agreement. The provisions of this Agreement shall be held in confidence by each Party and Ciena Corporation and only disclosed (i) as may be agreed to by the other Party or Ciena Corporation, (ii) as may be required by applicable law, court or governmental or regulatory authority, (iii) in connection with a change in control of a Party or any of its Affiliates, the offer for sale of all or substantially all of the assets of a Party or any of its Affiliates, or the offer for sale or divestiture of any of the product lines, operating units, business divisions or assets of a Party or any of its Affiliates, (iv) in connection with the Bankruptcy Proceedings or (v) as provided in Section 3.02. If disclosure is required by any applicable laws, the Disclosing Party shall consult in

advance with the other Party and attempt in good faith to reflect such other Party's concerns in the required disclosure. Neither Party shall make public statements nor issue publicity or media releases with regard to this Agreement without the prior written approval of the other Party, except that each Party may disclose publicly or to others the existence and general nature of this Agreement provided that such Party does not disclose any of the detailed terms and provisions herein.

4.09 Expenses. Except as otherwise expressly provided herein, all costs and expenses (including the fees and disbursements of legal counsel, investment advisers and auditors) incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the Party incurring such expenses.

4.10 No Third Party Beneficiaries. The Parties (which for purposes of this Section 4.10 shall include Ciena Corporation) intend that this Agreement shall not benefit or create any right, remedy or claim under or in respect of this Agreement or any provision hereof, or cause of action in or on behalf of any person other than the Parties hereto, their respective successors and permitted assigns, and no person, other than the Parties hereto, their respective successors and their permitted assigns shall be entitled to rely on the provisions hereof in any action, suit, proceeding, hearing or other forum. This Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns.

4.11 Severability. If any provision, clause, or part of this Agreement or the application thereof under certain circumstances, is held invalid, illegal or unenforceable, by a court of competent jurisdiction the remainder of the Agreement or the application of such provision, clause or parts under other circumstances, shall not be affected thereby unless such invalidity, illegality or unenforceability materially impairs the ability of the Parties to consummate the transactions contemplated by this Agreement.

4.12 Amendments. This Agreement may only be amended, modified or supplemented by a written agreement signed by all the Parties hereto.

(a) No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other provision (whether or not similar), nor shall such waiver constitute a waiver or continuing waiver unless otherwise expressly provided in writing duly executed by the Party to be bound thereby.

(b) No failure on the part of either Party to exercise, and no delay in exercising any right under this Agreement shall operate as a waiver of such right, nor shall any single or partial exercise of any right preclude any other or further exercise of any other right.

4.13 Specific Performance. Subject to Section 4.02, each Party acknowledges that a breach by such Party of any of its obligations herein may cause the other Party irreparable harm which cannot adequately be remedied by damages in an action at law and in the event of such breach, the other Party shall be entitled to equitable relief in the nature of an

injunction or specific performance as well as all other remedies available at law and/or in equity.

4.14 Guarantee. In order to induce Nortel to enter into this Agreement with Ciena Luxembourg S.a.r.l., and as an essential condition of this Agreement, Ciena Corporation hereby absolutely, unconditionally and irrevocably guarantees, as a primary obligor and not merely as a surety, the due and punctual performance of the obligations and liabilities of Ciena Luxembourg S.a.r.l. under this Agreement. Ciena Corporation acknowledges that it is responsible for and assumes all risks and liabilities arising out of the use of the Licensed Intellectual Property by Ciena Luxembourg S.a.r.l. and shall ensure that Ciena Luxembourg S.a.r.l. complies with the terms and conditions of this Agreement. The failure of Ciena Luxembourg S.a.r.l. to comply with any terms or obligations of this Agreement or the breach of this Agreement by Ciena Luxembourg S.a.r.l. shall be deemed a failure or breach attributable jointly and severally to Ciena Luxembourg S.a.r.l. and Ciena Corporation as though Ciena Corporation had committed the act or omission of Ciena Luxembourg S.a.r.l. and shall entitle Nortel to take action against Ciena Corporation. The obligations of Ciena Corporation pursuant to this Section 4.14 shall not be subject to any defense or setoff, counterclaim, recoupment or termination whatsoever by reason of the invalidity, illegality or unenforceability of such obligations or liabilities or otherwise; provided, however, that Ciena Corporation shall be entitled to assert any defense or right that Ciena Luxembourg S.a.r.l. would be entitled to assert. Ciena Corporation agrees that its guarantee hereunder shall continue to be effective or be reinstated, as the case may be, if at any time performance of any such obligation or liability is rescinded, or must otherwise be restored by Nortel, upon the bankruptcy or reorganization of Ciena Luxembourg S.a.r.l., Ciena Corporation, any of its Affiliates or otherwise.

4.15 Entire Agreement. This Agreement and the other the Transaction Documents set forth the entire agreement and understanding between the Parties as to the subject matter hereof, and merge all prior discussions between them, and neither Party hereto shall be bound by any conditions, definitions, warranties, understandings, or representations with respect to such subject matter other than as expressly provided herein or therein, or as duly set forth on or subsequent to the date hereof in writing, signed by duly authorized officers of the Parties. In the event of a conflict, between this Agreement and the Asset Sale Agreement, this Agreement shall govern.

4.16 Governing Law. Any questions, claims, disputes, remedies or matters arising from or related to this Agreement, and any relief or remedies sought by any Parties, shall be governed exclusively by the Laws of the State of New York without regard to the rules of conflict of laws of the State of New York or any other jurisdiction.

4.17 Jurisdiction and Venue. To the fullest extent permitted by applicable law, each Party (i) agrees that, during the pendency of the application of the CCAA to Nortel (the “CCAA Pendency Period”), any claim, action or proceeding by such Party seeking any relief whatsoever arising out of, or in connection with, this Agreement or the transactions contemplated hereby shall be brought only in the CCAA Court in the Province of Ontario, Canada and shall not be brought, in any State or Federal court in the United

States of America or any court in any other country, (ii) during the CCAA Pendency Period, each Party agrees to submit to the exclusive jurisdiction of the CCAA Court for purposes of all legal proceedings arising out of, or in connection with, this Agreement or the transactions contemplated hereby, (iii) waives and agrees not to assert any objection that it may now or hereafter have to the laying of the venue of any such Action brought in the CCAA Court or any claim that any such Action brought in such a court has been brought in an inconvenient forum, (iv) agrees that mailing of process or other papers in connection with any such action or proceeding in the manner provided in Section 4.07 or any other manner as may be permitted by law shall be valid and sufficient service thereof, and (v) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by applicable law. After the CCAA Pendency Period, the Parties agree to the exclusive jurisdiction of the Superior Court of Justice of the Province of Ontario or the Federal Courts of the State of New York in the United States of America or if necessary because of the continued bankruptcy of NNI, the U.S. Bankruptcy Court, to the extent of the involvement of NNI.

4.18 VAT. Where anything under this agreement gives rise to a supply for VAT (as that term is defined in the EMEA Asset Sale Agreement) purposes, on which VAT is due, the recipient of such supply shall, in addition to any consideration due for such supply under this Agreement or otherwise, (x) pay to the supplier an amount equal to any VAT chargeable thereon on receipt of a valid VAT invoice; or if relevant, (y) account for any VAT chargeable thereon to the appropriate tax authority.

4.19 Waiver of Right to Trial by Jury. EACH PARTY HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, ANY TRANSACTION DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY. EACH PARTY (I) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (II) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTION DOCUMENTS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 4.19.

4.20 Counterparts. The Parties may execute this Agreement in two or more counterparts (no one of which need contain the signatures of all Parties), each of which will be an original and all of which together will constitute one and the same instrument.

4.21 Construction. (a) Words in the singular shall include the plural and vice versa, and words of one gender shall include the other genders as the context requires, (b) the terms “hereof,” “herein,” and “herewith” and words of similar import shall, unless otherwise stated, be construed to refer to this Agreement and not to any particular provision of this

Agreement, and Article and Section references are to the Articles and Sections to this Agreement unless otherwise specified and (c) the word "including" and words of similar import when used in this Agreement shall mean "including, without limitation," unless otherwise specified.

4.22 Headings. The headings used in this Agreement are for the purpose of reference only and shall not affect the meaning or interpretation of any provision of this Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties hereto have signed and executed this Intellectual Property License Agreement on the date first above mentioned.

**NORTEL NETWORKS LIMITED**

By: /s/ Paviter S. Binning
Name: Paviter S. Binning
Title: Executive Vice President, Chief Financial Officer and Chief Restructuring Officer
Date:

By: /s/ Anna Ventresca
Name: Anna Ventresca
Title: General Counsel – Corporate and Corporate Secretary
Date:

*[Signatures continue of the following page]*

*[Signature Page to Intellectual Property License Agreement]*

**Ciena Luxembourg S.a.r.l.**

By: /s/ David M. Rothenstein
Name: David M. Rothenstein
Title: Type A Member

**Ciena Corporation** (only with respect to the sections of the Agreement in which it is expressly named)

By: /s/ David M. Rothenstein
Name: David M. Rothenstein
Title: Senior Vice President, General Counsel and Secretary

*[Signature Page to Intellectual Property License Agreement]*

**EXHIBIT 31.1**

**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.

Date: June 10, 2010

/s/ Gary B. Smith

Gary B. Smith
President and Chief Executive Officer

**EXHIBIT 31.2**

**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: June 10, 2010

/s/ James E. Moylan, Jr.

James E. Moylan, Jr.
Senior Vice President and Chief Financial Officer

**EXHIBIT 32.1**

**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 April 30, 2010 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
Gary B. Smith
President and Chief Executive Officer
June 10, 2010

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.

**EXHIBIT 32.2**

**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 April 30, 2010 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.

James E. Moylan, Jr.
Senior Vice President and Chief Financial Officer
June 10, 2010

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.