



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

Mail Stop 3720

August 11, 2009

Mr. James E. Moylan, Jr.
Senior Vice President and Chief Financial Officer
Ciena Corporation
1201 Winterson Road
Linthicum, MD 21090-2205

Re: Ciena Corporation
Form 10-K for the Fiscal Year Ended October 31, 2008
and Documents Incorporated by Reference
Filed December 23, 2008
File No. 000-21969

Dear Mr. Moylan:

We have reviewed your supplemental response letter filed on July 17, 2009 and have the following comments. You should comply with these comments in all future filings, as applicable. Please confirm in writing that you will do so and also explain to us how you intend to comply. Please understand that after our review of all of your responses, we may raise additional comments.

If you disagree with any of these comments, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended October 31, 2008

Backlog and Seasonality, page 10

1. We note your response to prior comment one in our letter dated June 24, 2009. Based on a review of your call transcripts (particularly the quarter ended April 30, 2009), it appears that your order flow constitutes important information for your

investors. In several instances, you referred to “increased orders,” “improved order flow,” and “long haul wins.” Additionally, per your statements in that earnings call, push outs and delays, not cancellations, appear to be the norm in your business. Accordingly, we believe that you should disclose your backlog, funded and unfunded, from your customers (government and commercial combined), as required by Item 101(c)(1) (viii) of Regulation S-K. Please advise or revise.

Management’s Discussion and Analysis..., page 28

2. We note your response to comment four from our letter dated June 24, 2009. We further note your statement on page 29 of your Form 10-K that your concentration in revenue “can exacerbate [y]our exposure to reductions in spending or changes in network strategy” involving one or more of your significant customers. Management’s discussion and analysis should describe any known trends or uncertainties that you expect may reasonably have a material impact on your operations. In light of the recent market conditions addressed on pages 28-29, such disclosure should also address the risk that your contracts with material customers do not obligate such customers to purchase any minimum or specific amounts of equipment or services. In future filings, as applicable, please revise your management’s discussion and analysis to discuss the material terms of your contracts with significant customers. For further guidance, please refer to Item 303 Regulation S-K and the Commission’s Interpretive Release on Management’s Discussion and Analysis of Financial Condition and Results of Operation on our website at: <http://www.sec.gov/rules/interp/33-8350.htm>.

(1) Ciena Corporation and Significant Accounting Policies and Estimates

Segment Reporting, page 62

3. We note your responses to comments nine and 10 of our letter dated June 24, 2009 and the information presented to your chief operating decision maker. It appears you have more than one operating segment under SFAS 131. In this regard, we refer to each of the product and service groups presented on page 5 and the information by regions presented on page 6. Since the chief operating decision maker regularly reviews the operating results of both sets of components and financial information is available for both, the components based on products and services would constitute your operating segments. Refer to paragraph 15 of SFAS 131. Accordingly, we believe that each of these components on page 5 constitute separate operating segments as discrete financial information is presented to your chief operating decision maker on a monthly basis. We note that this information contains revenue and margin percentages in which the chief

operating decision maker can make decisions about resources to be allocated and assess performance.

If you believe any of the above operating segments can be aggregated under paragraph 17 of SFAS 131, please provide us your analysis and financial information for all periods presented in your filing. In addition to your analysis of paragraphs 17.a through 17.e, please provide us with an analysis that includes historical and projected revenues, gross margins and gross margin percentages, along with any other information you believe would be useful for each of your operating segments to help us understand how these operations are economically similar. Please also address any differences in the trends these financial indicators depict (e.g. if gross profit margin is decreasing for one operation and increasing for another).

Similarly, if you believe any of these operating segments are not required to be reported separately under paragraphs 18 – 21 of SFAS 131, please provide us an analysis to support your position.

4. We note that you had a significant goodwill balance at October 31, 2008 and that you recorded no impairment charge until the quarter ended April 30, 2009. We further note that you only had one reporting unit as of each of these testing dates. It appears that your reporting units as of October 31, 2008 and April 30, 2009 under SFAS 142 should be re-evaluated based on the fact that you appear to have several operating segments. Note that a reporting unit is an operating segment or one level below an operating segment, referred to as a component. Please revise or advise. Also, provide us with your detailed analysis of paragraph 30 of SFAS 142 and EITF D-101.

Definitive Proxy Statement filed on February 2, 2009

5. We have considered your response to comment 13 from our letter dated June 24, 2009. Please provide further analysis as to why disclosure of the target gross margin dollars recognized for the last fiscal year would cause you competitive harm when disclosure of the performance targets will occur after the actual gross margin has been disclosed in your Forms 10-Q and Form 10-K. In the alternative, confirm in your response letter that in future filings you will disclose the target gross margin performance objectives that must be reached for payment to Mr. Aquino or other executives, as applicable. Refer to Item 402(b)(2)(v) of Regulation S-K

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Kathryn Jacobson, Senior Staff Accountant, at (202) 551-3365 or Kyle Moffatt, Accountant Branch Chief, at (202) 551-3836 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Plowgian, Attorney-Advisor at (202) 551-3367, Kathleen Krebs, Special Counsel at (202) 551-3350 or me at (202) 551-3350 with any other questions.

Sincerely,

/s Kyle Moffat, for

Larry Spigel
Assistant Director