



DIVISION OF
CORPORATION FINANCE

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

MAIL STOP 3720

September 22, 2008

Yaron Eitan
Chief Executive Officer
Vector Intersect Security Acquisition Corp.
65 Challenger Road
Ridgefield Park, NJ 07660

**RE: Vector Intersect Security Acquisition Corp.
Revised Preliminary Proxy Statement on Schedule 14A
Filed September 12, 2008
File No. 000-52247**

Dear Mr. Eitan:

We have reviewed your revised filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, 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. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments. 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.

Summary, page 9

The Acquisition, page 10

1. We note the newly-disclosed subscription agreement on page 12 with Catalyst Equity Management, pursuant to which Vector may use the funds from the sale of securities to purchase shares of its common stock in private transactions and will name Yair Shamir to Vector's board. Please disclose why Vector would purchase its shares prior to the closing of the transaction. Disclose whether Vector intends to use any such repurchases to help secure approval of the business combination with Cyalume and, if so, how.

2. Disclose the material terms of the warrants to be issued pursuant to the subscription agreement with Catalyst Equity Management. Update your disclosure throughout the proxy statement regarding these warrants, including shares eligible for future sale, and the description of Vector's securities.
3. It appears that Yair Shamir is a former outside director of Mercury Interactive LLC. Please refer to <http://www.sec.gov/litigation/litreleases/2008/lr20724.htm> and revise your disclosure for Mr. Shamir with respect to Items 401(e) and (f) of Regulation S-K, or advise us why no revision is necessary.
4. We note your response to comment one from our letter dated September 4, 2008, the revised disclosure on beginning on pages 13 and 45, and your disclosed definition of affiliate. Please revise to disclose whether Vector views the duties and responsibilities, compensation, and investment interest noted in subparts (b), (c), and (d) of bullet point three to indicate control, control by, or common control between Mr. Dunaway and SCP Partners, Selway Partners, or any of their respective affiliates.

We also note your disclosure on page 44 that the resignation of Cyalume's previous Chief Executive Officer and the appointment of Mr. Dunaway as Cyalume's current Chief Executive Officer both occurred at the request of Vector and were agreed to by Cyalume prior to the signing of the stock purchase agreement. Please revise to disclose whether Vector views such events as an indication of control, control by, or common control between Cyalume and SCP Partners, Selway Partners, or any of their respective affiliates.

5. We note your response to comment three from our letter dated September 4, 2008. Please revise your proxy statement, particularly the summary, management's discussion and analysis, and risk factor sections, to disclose all material financial covenants and conditions precedent contained in the TD Banknorth commitment letter and to discuss their impact on the combined company after the acquisition. In addition, please provide a copy of the term sheet for the subordinated debt.
6. We note your response to comment 14 from our letter dated September 4, 2008 and your revised disclosure on pages 13 and 111 that the warrants purchased by SCP Private Equity Management Company could be used to induce stockholders who indicate their intention to vote against the transaction with Cyalume to sell their shares to Vector's management team. Please include this disclosure on

pages 18-19 and 31 where you discuss Mr. Eitan's and Mr. Churchill's proposed efforts to purchase shares from stockholders who otherwise would have voted against the Cyalume transaction.

Vector's Reasons for the Acquisition and Its Recommendation, page 47

7. We note your response to comment eight from our letter dated September 4, 2008 and the disclosure added to pages 10 and 35 that TD Banknorth would not lend the remaining amount needed to close this transaction (approximately \$7 million) due to the financial position of the company post-transaction. Please revise your discussion of the TD Banknorth commitment letter in this section to include the statement contained on pages 10 and 35 and discuss any material financial covenants and conditions precedent contained in the commitment letter which would materially affect the combined company's financial condition going forward. Emphasize in your discussion of the TD Banknorth commitment letter that the final terms of any loan actually made have yet to be determined.
8. Revise this section to discuss whether Vector's Board considers TD Banknorth's determination not to lend the entire amount needed to close this transaction based on a total purchase price of \$120 million to be a material factor in its recommendation to shareholders, particularly in light of your disclosure on page 49 that the purchase price already represents a discount from the \$165 million valuation that Vector's management arrived at with the assistance of Rodman & Renshaw.

Negotiations with Cyalume, page 49

9. We note your response to comment 20 from our letter dated September 4, 2008 and the disclosure added to pages 49 and 50. We continue to believe that disclosure of projections relating to the individual sectors also would appear to be warranted.

Disclose all financial projections exchanged between Vector and Cyalume and all projections reviewed by Vector's advisors, or advise us why they are not material. Also disclose the bases for and the nature of the material assumptions underlying the projections.

Guideline Public Company Analysis, page 53

10. We note your response to comment 22 from our letter dated September 4, 2008. Please revise your disclosure to provide a descriptive cross-reference to the more detailed information contained in the fairness opinion attached as Schedule C to

the proxy statement under the comparable company analysis and the comparable transaction analysis.

Beneficial Ownership of Securities, page 117

Security Ownership of Combined Company After the Acquisition, page 119

11. Please revise to include beneficial holdings related to warrants exercisable within 60 days of any consummation of the Cyalume transaction.

As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Claire DeLabar, Staff Accountant, at (202) 551-3349 or Terry French, Accountant Branch Chief, at (202) 551-3810, if you have questions regarding comments on the financial statements and related matters. Please contact John Zitko, Staff Attorney, at (202) 551-3399, Kathleen Krebs, Special Counsel, at (202) 551-3350, or me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spiegel
Assistant Director

cc: Mitchell S. Nussbaum (by facsimile)
(212) 407-4990