



DIVISION OF
CORPORATION FINANCE

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

April 24, 2013

Via Email

Pardeep Kohli
Chief Executive Officer
Mavenir Systems, Inc.
1700 International Parkway, Suite 200
Richardson, Texas 75081

**Re: Mavenir Systems, Inc.
Amendment No. 3 to Confidential Draft Registration Statement on Form S-1
Submitted April 10, 2013
CIK No. 1361470**

Dear Mr. Kohli:

We have reviewed your letter dated April 9, 2013, and the above-referenced draft registration statements, and have the following comments. Where we reference prior comments, we are referring to our February 21, 2013 letter.

Risk Factors

“Our revenue growth will be limited if mobile service providers choose...” page 14

1. Please quantify the “relatively small” number of mobile service providers and the number of these providers that are currently your customers. Discuss the related risks. See Item 503(c) of Regulation S-K.

“Our future license, maintenance and support revenue is dependent...” page 15

2. On pages 83 and 84, you state that you plan to focus on expanded sales to existing customers to grow your business. Please clarify this, and discuss the associated risks. See Item 503(c) of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations — Summary

Comparison For the Years Ended December 31, 2011 and 2012

Revenue, page 52

3. Please include a more detailed discussion of the extent that expansion of existing customer relationships, additional sales opportunities generated by product launches, and ownership of Airwide Solutions for a full year, individually contributed to the 49% increase in revenue from fiscal 2011 to fiscal 2012. See Item 303(a) of Regulation S-K.

Critical Accounting Policies and Significant Judgments and Estimates

Stock-Based Compensation

Determination of the Fair Value of Common Stock on Grant or Modification Dates, page 64

4. We have reviewed the disclosure added in response to prior comments 6 and 7. Please note that we may have further comments with regards to your stock valuation analysis once the IPO price has been determined.

Executive Compensation

Cash Awards under the 2012 Executive Bonus Plan, page 109

5. Please provide a more detailed discussion of the individual management objectives for Messrs. Kohli and Hungle, and how your Board of Directors determined to award each of them a full payout with respect to that portion of their respective incentive payments.

Cash Awards under the 2012 Sales Commission Plan, page 110

6. Please discuss how your Board of Directors determined the additional amounts awarded to Mr. Jalalizadeh for new accounts and channel development objectives. In addition, disclose whether he received a proportional upward adjustment for bookings in excess of \$30 million.

Pardeep Kohli
Mavenir Systems, Inc.
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You may contact Jaime John, Staff Accountant, at (202) 551-3446 or Patrick Gilmore, Accounting Branch Chief, at (202) 551-3406 if you have questions regarding comments on the financial statements and related matters. Please contact Evan S. Jacobson, Attorney-Advisor, at (202) 551-3428 or me at (202) 551-3735 with any other questions.

Sincerely,

/s/ Barbara C. Jacobs

Barbara C. Jacobs
Assistant Director

cc: Via Email
Alan Bickerstaff, Esq.
Andrews Kurth LLP