



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

October 3, 2008

W. Kirk Patterson
Senior Vice President and Chief Financial Officer
Entorian Technologies, Inc.
8900 Shoal Creek Boulevard
Austin, Texas 78757

Via U S Mail and FAX [(512) 454-2598]

**Re: Entorian Technologies, Inc.
Form 10-K for the fiscal year ended December 31, 2007
Amendment No. 1 to Form 8-K filed September 26, 2008
File No. 0-50553**

Dear Mr. Patterson:

We have reviewed these filings and have the following comments. Where indicated, we think you should revise your documents 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. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. 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.

Amendment Number 1 to Form 8-K Filed September 26, 2008

1. Please tell us, with a view towards improved disclosure, the following:
 - The percentage ownership of Augmentix and the registrant by Austin Ventures (before and after the transaction) and the percentage interest held by the minority shareholders of Augmentix.
 - The amounts of the purchase price allocation in Note (h) attributed to the minority interest holders and the amounts attributed to the common control group. In addition, clarify whether Austin Ventures or the minority shareholders received the convertible notes and indicate the terms of the notes.
 - How you determined the amount of the return of capital to the common control owner in Note (h), and what this represents.
 - How you applied the guidance in FTB 85-5 and paragraphs A5 to A7 and D11 to D13 of SFAS 141.
 - How your purchase price allocation considers the incentive options issued to the employees of Augmentix pursuant to the purchase agreement. In, addition, clarify how these options were valued.
 - How you considered the repayment of \$3.2 million of Augmentix debt in your purchase price allocation.
 - Clarify whether the assets and liabilities in Note (h) are presented at fair value. In addition, indicate how you determined the estimated fair values of each of the intangible assets included in the purchase price allocation in Note (h) and whether these values only relate to the acquisition of the minority interest.
 - Whether you have separately disclosed each of the pro forma adjustments as required by Article 11 of Regulation S-X. The pro forma adjustments in notes (j) and (k) appear to include several components, which have not been separately discussed and disclosed.

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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 furnish a response letter 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 responses to our comments.

You may contact Jeanne Bennett at (202) 551-3606, or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Thomas Jones at (202) 551-3602 or Timothy Buchmiller, Senior Attorney, at (202) 551-3635 with any other questions.

Sincerely,

Brian R. Cascio
Accounting Branch Chief