

**Mail Stop 4561**  
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October 16, 2009

Varda Sagiv  
Chief Financial Officer  
BluePhoenix Solutions LTD.  
8 Maskit Street  
Herzlia 46733 Israel

**Re: BluePhoenix Solutions LTD.**  
**Form 20-F for the Fiscal Year Ended December 31, 2008**  
**Filed on March 31, 2009**  
**Form 6-Ks Filed on February 17, 2009 and May 12, 2009**  
**File No. 333-06208**

Dear Ms. Sagiv:

We have reviewed your response letter dated September 30, 2009 in connection with the above-referenced filings and have the following comment. If indicated, we think you should revise your document in response to this comment. 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 our comment, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may raise additional comments. Unless otherwise noted, where prior comments are referred to they refer to our letter dated August 6, 2009.

Form 20-F for the Fiscal Year Ended December 31, 2008

Item 5. Operating and Financial Review and Prospects

Overview, page 38

1. We note your response to prior comment 2 and your proposed revisions to the Overview discussion as provided in Exhibit A. Please revise your tabular presentation to reconcile adjusted EBITDA to net income (loss) rather than operating income (loss) disclosure of non-GAAP EBITDA pursuant to Questions 14 and 15 of our Frequently Asked Questions Regarding the Use of Non-GAAP

Financial Measures. Further, it appears that you use adjusted EBITDA as both a performance measure and a liquidity measure and therefore you should also provide a reconciliation to operating cash flows. Please revise accordingly.

Item 18. Financial Statements

Note 1. Summary of Significant Accounting Policies

I. Goodwill and Other Purchased Intangible Assets, page F-11

2. We note from your response to prior comment 6 that your 42% control premium was calculated based on recent mergers and acquisitions in Israel and abroad involving similar companies that took place during the six months ended March 31, 2009. We also note the three example transactions included in this data. Please revise your disclosures to describe the total data set used in further detail (e.g. the total number of transactions, how you selected “similar companies”, etc.). Also, please describe how you used that data to determine the 42% control premium for the Company.

\* \* \* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. If you amend your filing(s), you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter that keys your response 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 any amendment and your response to our comments.

You may contact Melissa Feider, Staff Accountant, at (202) 551-3379 or me at (202) 551-3499 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Michael Johnson, Staff Attorney, at (202) 551-3477 or Maryse Mills-Apenteng, Special Counsel, at (202) 551-3457.

Sincerely,

Kathleen Collins  
Accounting Branch Chief