

Room 4561

May 15, 2006

Ms. Iris Yahal
Chief Financial Officer
BluePhoenix Solutions USA Inc.
8000 Regency Parkway
Cary, North Carolina 60661

**Re: BluePhoenix Solutions Ltd.
Registration Statement on Form F-3 filed April 17, 2006
File No. 333-133330**

**Form 20-F for the year ended December 31, 2005
File No. 0-06208**

Dear Ms. Yahal:

This is to advise you that we have limited our review of the above filings to the matters addressed in the comments below. 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.

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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement on Form F-3

Selling Shareholders, page 19

1. Please disclose the individual or individuals who exercise the voting and/or dispositive powers with respect to the securities to be offered for resale by Israel Infinity. Please see Interpretation I.60 of our July 1997 Manual of Publicly Available Telephone

Interpretations and Interpretation 4S of the Regulation S-K portion of the March 1999 Supplement to our July 1997 Manual of Publicly Available Telephone Interpretations.

2. Please confirm whether any selling stockholder is an affiliate of a registered broker-dealer. If a selling stockholder is an affiliate of a registered broker-dealer, please expand the prospectus disclosure to indicate whether such selling stockholder acquired the securities to be resold in the ordinary course of business. Also indicate whether at the time of the acquisition such selling stockholder had any agreements, understandings or arrangements with any other persons, either directly or indirectly, to dispose of the securities.

Form 20-F for the year ended December 31, 2005

Item 15. Controls and Procedures, page 96

3. Your disclosure indicates that management may have evaluated your internal control over financial reporting as of the end of your fiscal year. As a foreign private issuer that is not an accelerated filer, your requirement to comply with Items 15(b) and (c) of Form 20-F has been extended to your annual report for your first fiscal year ending on or after July 15, 2007. Please see Release No. 33-8618. Accordingly, please clarify whether management has conducted a separate evaluation of your internal control over financial reporting and, if so, revise your disclosure to indicate management's conclusion upon such evaluation, what such evaluation consisted of and whether it differed from the evaluation requirements set forth in Items 15(b) and (c). Please note that if your evaluation of internal control over financial reporting differed from the requirements set forth in Items 15(b) and (c), your conclusion should be characterized as interim and not the result of an evaluation meeting all necessary requirements. If your evaluation met all necessary requirements, please revise to provide all the necessary disclosure pursuant to Items 15(b) and (c) and fully provide the certifications set forth in Instruction 12 as to Exhibits to Form 20-F and required by Rule 13a-14(a) under the Exchange Act. Please confirm that you will note this comment with respect to preparing future reports.
4. Your disclosure suggests that your disclosure controls and procedures are effective, but only to the extent of "assuring that all material information relating to [the] company is made known to [your officers]." This definition of your disclosure controls and procedures appears to vary from the definitional requirements of Rule 13a-15(e) under the Exchange Act. As a result, your disclosure does not appear to address the effectiveness of your disclosure controls and procedures with respect to whether "information required to be disclosed by [you] in the reports that [you] file[] or submit[] under the [Exchange] Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms" and whether such information "is accumulated and communicated to [your] management, including [your] principal executive and principal financial officers, or persons performing similar

functions, as appropriate to allow timely decisions regarding required disclosure.” Please advise us whether your chief executive officer and chief financial officer has determined your disclosure controls and procedures pursuant to the definition set forth in Rule 13a-15(e) to be effective. Please confirm that you will note this comment with respect to preparing future reports.

5. You indicate that since the end of your fiscal year there have been no significant changes in your internal control over financial reporting. Please note that Item 15(d) of Form 20-F requires the disclosure of “any” change in your internal control over financial reporting that occurred during “the period covered by [your] annual report” that has materially affected, or is reasonably likely to materially affect, your internal control over financial reporting. In light of the foregoing, please advise us with respect to changes in your internal control over financial reporting for the year ended December 31, 2005. Confirm that you will note this comment with respect to preparing future reports.

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As appropriate, please amend your filings in response to this comment. 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 comment and provides any requested supplemental 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.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include all information required under the Securities Act and Exchange Act and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comment, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

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- the company may not assert the staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of your registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act and the Exchange Act as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rule 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Daniel Lee at (202) 551-3477 with any questions. If you need further assistance, you may contact me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs
Assistant Director

cc: Via Facsimile
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