

Mail Stop 4561

May 28, 2010

Victor T. Limongelli
President and Chief Financial Officer
Guidance Software, Inc.
15 North Marengo Avenue
Pasadena, CA 91101

**Re: Guidance Software, Inc.
Form 10-K for the Year Ended December 31, 2009
Filed February 26, 2010
File No. 001-33197**

Dear Mr. Limongelli:

We have reviewed the above-referenced filing and have the following comments. Please note that we have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. If 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 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.

Form 10-K for the Year Ended December 31, 2009

General

1. You state on pages 6 and 10 that you operate in, among other geographical areas of the world, Africa and the Middle East, regions generally understood to include Sudan, Syria, and Iran. Also, it appears that a dropdown menu on your website allows nationals of Iran and Sudan to request demonstration disks of your software solutions and subscribe to your mailing lists. Iran, Sudan, and Syria are

identified by the State Department as state sponsors of terrorism, and are subject to U.S. economic sanctions and export controls. We note that your Form 10-K does not include disclosure regarding contacts with Iran, Sudan, or Syria.

Please describe to us the nature and extent of your past, current, and anticipated contacts with Iran, Sudan, and Syria, if any, whether through subsidiaries, strategic partners, distributors, resellers, or other direct or indirect arrangements. Your response should describe any products, technology, software, or services that you have provided into Iran, Sudan, or Syria, directly or indirectly, and any agreements, commercial arrangements, or other contacts you have had with the governments of those countries or entities controlled by those governments.

Exhibits 31.1 and 31.2

2. We note that the identification of the certifying individual at the beginning of each of the certifications required by Exchange Act Rule 13a-14(a) also includes the title of the certifying individual. We also note similar references in the certifications included in your Form 10-Q for the quarterly period ended March 31, 2010. Please note that the language of the certifications required by Item 601(B)(31) of Regulation S-K must be provided exactly as stated therein. In future filings, the identification of the certifying individual at the beginning of the certifications should be revised so as not to include the individual's title.

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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.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

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- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments 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 our review of your filing or in response to our comments on your filing.

You may contact David Edgar, Staff Accountant, at (202) 551-3459 or me at (202) 551-3406 if you have any questions regarding the above comments.

Sincerely,

Patrick Gilmore
Accounting Branch Chief