



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

Mail Stop 3030

April 27, 2009

Via Facsimile and U.S. Mail

Mr. Rajat Bahri
Chief Financial Officer
Trimble Navigation Limited
935 Stewart Drive
Sunnyvale, CA 94085

**Re: Trimble Navigation Limited
Form 10-K for the Year Ended January 2, 2009
Filed March 3, 2009
Form 8-K Dated February 3, 2009
File No. 001-14845**

Dear Mr. Bahri:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your documents in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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 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, 2008

Index to Financial Statements, page 45

Notes to Consolidated Financial Statements, page 50

Note 7. Reporting Segment and Geographic Information, page 67

1. We note from your Form 8-K Dated February 3, 2009 that you present non-GAAP measures for your segments entitled “operating income before corporate allocations,” which is your segment operating income without stock-based compensation. However, we note here that you present your operating income by segment and do not adjust your segment measure for stock-based compensation. Please explain to us why you believe that the current presentation within this note complies with paragraphs 25-31 of SFAS 131. If management uses more than one measure of segment profit, please explain to us how you considered the guidance in paragraph 30 of SFAS 131.

Item 11 Executive Compensation, page 88

2. We note in your Compensation Discussion and Analysis on page 24 of your proxy statement that you have incorporated by reference into your Form 10-K you state that the committee uses data supplied by “Radford Data and other publicly available data such as proxy data from our compensation peer group” and that you establish salaries within a “range of salaries.” In future filings, please identify each surveys you used as well as their components, including component companies, and the elements of compensation that are benchmarked and how such benchmarks are determined. For example, please disclose whether you compared yourself to the 50th percentile benchmark, a range of benchmarks or otherwise.
3. We note your disclosure about your incentive bonus program from the top of page 25 of your proxy statement, but we do not see a quantitative discussion of the performance measures such as the “target incentives” including the “Company’s quarterly and annual operating income” to be achieved for your executive officers to earn their discretionary annual bonuses. In future filings, please provide such disclosure or alternatively tell us why you believe that the disclosure of such information would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b). Further, qualitative goals generally need to be presented to conform to the requirements of Item 402(b)(2)(v). To the extent that it is appropriate to omit specific targets, discuss how difficult it would be for the executive or how likely it will be for the registrant to achieve the target levels or other factors. Please see Instruction 4 to Item 402(b).
4. In future filings, please include in your disclosure about your incentive bonus program a discussion of how the executive’s actual bonus amounts for were calculated. For example, you should include a discussion of the reasons why the bonus amounts for this

fiscal year were significantly lower than prior years. Also, you should describe the reasons the committee decided to increase the annual incentive target opportunities as you identify in the fourth paragraph of this section.

5. We note your disclosure about the size of stock option grants being “determined by the Compensation Committee’s evaluation of each executive’s ability to influence the Company’s long term growth and profitability” In future filings, please explain with specificity how you determined the amounts of stock options to be granted for each executive officer. Your revised disclosure also should clarify the reasons for the relative size of the grants among the officers. See Item 402(b)(2)(vii) of Regulation S-K.

Certain Relationships and Related Transactions, page 88

6. We note your disclosure on page 41 of your proxy statement that you have incorporated by reference into your Form 10-K. In future filings, please provide the information requested by Item 404(b) of Regulation S-K.

Exhibits

7. We note your disclosure on page 18 that you are “substantially dependent” upon Flextronics International Limited as a preferred manufacturing partner for many of your GPS products. We also note your disclosure on pages 14 and 18 regarding particular contract terms, including termination and order placement provisions. As it appears Item 601(b)(10) of Regulation S-K would require you to file your agreement with Flextronics as an exhibit, please file the agreement or provide us a detailed legal analysis why such filing is not required.

Form 8-K Dated February 3, 2009

8. We note that you present the reconciliation of your non-GAAP measures in the form of an income statement entitled “condensed consolidated statements of income.” This format may be confusing to investors since it reflects non-GAAP measures such as revenue that have not been identified or described to investors. In fact, it appears that management does not use all of these non-GAAP measures but they are shown here as a result of the presentation format. Please note that Instruction 2 to Item 2.02 of Form 8-K requires that when furnishing information under this item you must provide all the disclosures required by paragraph (e)(1)(i) of Item 10 of Regulation S-K and FAQ 8 Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003 for each non-GAAP measure presented. Specifically, you should provide a reconciliation of each non-GAAP measure to the most directly comparable GAAP measure and explain why you believe each measure provides useful information to investors. To eliminate investor confusion, please remove the non-GAAP statements of operations format from all future filings. Instead, only disclose those non-GAAP measures used by management and

which you intended to provide to investors with the appropriate reconciliations to the most directly comparable GAAP measure.

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 cover letter that keys your responses to our comment 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.

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:

- 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 Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Joe McCann, Staff Attorney, at (202) 551-6262, or Jay Mumford, Reviewing Attorney, at (202) 551-3637 if you have questions on any other comments. In this regard, do not hesitate to contact me or Kevin Vaughn, Accounting Branch Chief, at (202) 551-3643 with any questions.

Sincerely,

Lynn Dicker
Reviewing Accountant