



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

March 27, 2009

By Facsimile ((650) 463-2600) and U.S. Mail

Alan C. Mendelson, Esq.
Latham & Watkins LLP
140 Scott Drive
Menlo Park, CA 94025

**Re: Mellanox Technologies, Ltd.
Schedule TO-I filed March 24, 2009, amended on March 25, 2009
File No. 005-83178**

Dear Mr. Mendelson:

We have reviewed your filing and have the following comments. 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 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.

Offer to Exchange

1. We note on the second slide of your presentation filed as exhibit (a)(1)(xi) that you instruct optionholders to read the offer document on Internet websites. Please tell us how you complied with the dissemination requirements of Rule 13e-4(e).

Cover Page

2. We note that option holders will be eligible to participate in the offer only if they remain employed or have a contract service relationship with the bidder through the date you grant the new options, which is expected to be the business day after the expiration of the offer. Please be advised that all conditions to the offer, other than those subject to applicable law, must be satisfied or waived before the expiration of the offer. Please revise each instance in which this language appears

- in the offer document and in the ancillary documentation filed as exhibits to the Schedule TO. Also, tell us what consideration you have given to distributing a revised letter similar to the one filed as exhibit (a)(1)(iii) to the Schedule TO.
3. We note your disclosure that states if you “determine that this Offer is infeasible and impractical in any such jurisdiction under local regulations, then residents of such jurisdiction shall not be eligible to participate” in the offer. The right to terminate the offer based on feasibility or practicality appears to render the offer illusory. Please revise to eliminate this right or clarify.
 4. It appears that the company is relying upon the global exemptive order issued by the Commission on March 21, 2001 with respect to “option exchange offers.” In your response letter, explain how this offer meets all of the conditions outlined in the global order. In particular, us why the new options will have an exercise price that will not be determined until after expiration of the exchange offer. We refer you to the fourth condition of the global order, Rule 13e-4(d)(1)(ii) and Item 1004 of Regulation M-A.
 5. On a related note, your disclosure in the Schedule TO states that the offer is made to “certain of [your] contractors who reside in” various foreign jurisdictions. Please tell us how you determine which contractors are eligible to participate in the offer and how you are complying with the requirements of the global exemptive order in this respect. We note an apparent discrepancy in that your offer document does not restrict eligibility to “certain” contractors, only requiring their residence in a specific country and their continued provision of services through the grant date of the new options.

Summary Term Sheet, page 1

6. Refer to Q30 on page 7. We note you have reserved the right to not grant exchange options after having accepted tenders if you are “prohibited by applicable law or regulations from doing so, or until all applicable legal and regulatory issues are addressed.” This disclosure suggests that conditions to the offer may be asserted after expiration of the offer. Please be advised that all conditions to the offer, other than those subject to applicable law, must be satisfied or waived before the expiration of the offer. Please revise the disclosure to make clear that all conditions to the offer, other than those dependent upon receipt of necessary government approvals, must be satisfied or waived on or before the expiration of the offer.

Purpose of the Offer, page 11

7. We note your disclosure in the third full paragraph of page 12 that you have no plans “except as otherwise disclosed in our filings with the [SEC].” Please

revise your disclosure to comply with Item 6 of Schedule TO and Item 1006(c) of Regulation M-A, which require disclosure of any plans in the offer document.

Withdrawal Rights, page 13

8. Please revise your disclosure to describe the withdrawal rights required by Rule 13e-4(f)(2)(ii).

Information Concerning Mellanox, page 16

9. It appears you have incorporated by reference the financial information required by Item 1010(a) of Regulation M-A. We note, however, that you have not provided the summary information required by Item 1010(c)(1)-(3). Please revise to provide that disclosure or your analysis as to why such disclosure is not necessary.

Miscellaneous, page 27

10. We note your statement in the last sentence of the first paragraph that you “undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.” This statement is inconsistent with your obligation to amend and promptly disseminate revised information in the event that your existing disclosure materially changes. Revise accordingly.

Schedule A. Conditions of this Offer

11. We note your disclosure that you may assert a condition “regardless of the circumstances giving rise thereto.” A tender offer may be conditioned on a variety of events and circumstances, provided that they are not within the direct or indirect control of the bidder. With this in mind, please revise your disclosure to clarify that your actions or omissions to act will not give rise to a condition.
12. Note that a tender offer may only be subject to conditions that are drafted with sufficient specificity so as to be understandable and to allow for objective verification that the conditions have been satisfied. In the absence of any objective criteria, such as a standard of reasonableness, satisfaction of a condition in the company’s sole judgment or sole discretion may be deemed the equivalent of a waiver of the condition which may require that at least five business days remain in the tender offer. Accordingly, please revise condition (f) of this section.
13. Refer to the last paragraph of this section relating to your failure to exercise any of the rights described in this section. This language suggests that once an offer condition is triggered, you must decide whether or not to waive the condition.

Note that when a condition is triggered and you decide to proceed with the offer anyway, we believe that this constitutes a waiver of the triggered condition(s). Depending on the materiality of the waived condition and the number of days remaining in the offer, you may be required to extend the offer and recirculate new disclosure to security holders. You may not, as this language seems to imply, simply fail to assert a triggered offer condition and thus effectively waive it without officially doing so. Please confirm your understanding supplementally.

14. We also note the language in the last paragraph in this section that the company's "failure at any time to exercise any of these rights shall not be deemed a waiver of any such rights." If an event triggers a listed offer condition, and the company determines to proceed with the offer anyway, it has waived the offer condition. When an offer condition is triggered by events that occur during the offer period and before the expiration of the offer, the company should inform holders of eligible options how it intends to proceed promptly, rather than waiting until the end of the offer period, unless the condition is one where satisfaction of the condition may be determined only upon expiration. Please confirm the company's understanding in your response letter.

Closing Information

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. 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 comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments 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 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and

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- 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 filings or in response to our comments on your filings.

Please direct any questions to me at (202) 551-3619. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Daniel F. Duchovny
Special Counsel
Office of Mergers & Acquisitions