



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3720

July 12, 2010

Mr. Morteza Ejabat
Chief Executive Officer
Zhone Technologies, Inc.
7001 Oakport Street
Oakland, California 94621

RE: Zhone Technologies, Inc.
Form 10-K for the year ended December 31, 2009
Filed March 16, 2010

Definitive Proxy Statement on Schedule 14-A
Filed April 1, 2010
File No. 000-32743

Dear Mr. Ejabat:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your filings 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 on 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 fiscal year ended March 31, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Cost of Revenue and Gross Profit, page 37

1. We note that the total cost of revenue decreased \$20 million or 20%, which resulted in an increase in gross profit percentage from 31% in 2008 to 36% in 2009. Tell us more in

detail the nature of the change in product mix which accounted for most of the increase in the gross profit percentage. In this regard, we further note on page 78, that the gross profit percentage during the fourth quarter of 2009 increased to 40%. Tell us to what extent the improved margin is associated with your new MXK product offering as described on page 3. If not, please identify the pertinent product offerings that were the primary drivers of your fourth quarter gross margins.

Operating Activities, page 42

Future Requirements and Funding Sources, page 43

2. As disclosed herein, the increase in accounts receivable was primarily due to the aging of Etisalat. Tell us the nature of your credit terms with Etisalat, if other than customary. Revise your disclosures accordingly.

(f) Revenue Recognition, pages 57-58

3. We note your disclosure on page 57 that revenue is deferred if “collection is not considered reasonably assured at the time of sale.” However, on page 58, you stated that in a multiple element revenue arrangement, “when collectability is not reasonably assured, revenue is recognized when cash is collected,” implying that you do not record deferred revenue and an offsetting entry to accounts receivable in such transactions since there are collectability issues. Please clarify the inconsistencies in your disclosure.
4. We note that you make certain sales to product distributors. Please tell us the following:
 - The proportion or significance of your sales to distributors in relation to total sales;
 - To what extent sales are recognized upon shipment to the distributor;
 - The return privileges that you grant to your product distributors;
 - Why it is appropriate to recognize revenues upon shipment to distributors including your basis in the accounting literature; and
 - Your basis for determining distributor sell-throughs to their end customers for revenue recognition purposes.

Definitive Proxy Statement Incorporated By Reference Into Part III of Form 10-K

General

5. We note your disclosure on page 21 that you have determined that none of your compensation policies or programs create risks that are reasonably likely to have a material adverse effect on the company. Please advise us of the basis for your conclusion and describe the process you undertook to reach that conclusion.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please file your letter over EDGAR. 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 filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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
- 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.

You may contact Inessa Kessman, Staff Accountant, at (202) 551-3371, or Kyle Moffatt, Accounting Branch Chief, at (202) 551-3836 if you have questions regarding comments on the financial statements and related matters. Please contact John Zitko, Attorney-Advisor, at (202) 551-3399, or me at (202) 551-3350 with any other questions.

Sincerely,

Larry Spiegel
Assistant Director