



DIVISION OF
CORPORATION FINANCE

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

Via Fax (781) 221-5215

July 13, 2010

Mark P. Sullivan
SVP and Chief Financial Officer
Aspen Technology, Inc.
200 Wheeler Road
Burlington, MA 01083

**Re: Aspen Technology, Inc.
Form 10-K and 10-K/A for the Fiscal Year Ended June 30, 2009
Filed November 9, 2009 and April 22, 2010, respectively
Form 10-Q for Fiscal Quarter Ended December 31, 2009
Filed on February 9, 2010
File No. 000-24786**

Dear Mr. Sullivan:

We have reviewed your response letter dated June 25, 2010 in connection with the above-referenced filings and have the following comments. 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 comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In 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. Unless otherwise noted, where prior comments are referred to they refer to our letter dated June 15, 2010.

Form 10-Q for the Fiscal Quarter Ended December 31, 2009

Condensed Consolidated Statements of Operations, page 2

1. In your response to comment 6 in your letter dated May 27, 2010 you indicate that you concluded it is appropriate to use optional renewals of SMS on legacy term license arrangements to support VSOE for SMS bundled in your new co-terminus arrangements. Please clarify whether you use this methodology solely for income statement allocation purposes or whether you also apply such methodology for purposes of recognizing revenue on your fixed-point term product arrangements. If the latter is the case, then explain further how you applied the guidance in ASC 985-605-55-67 in concluding that you could apply VSOE of fair value of SMS services from

your legacy term license arrangements to your new fixed-point term product arrangements.

2. You further indicate that VSOE of fair value for SMS services in your legacy term licenses was based upon an analysis of stand-alone SMS renewals using the bell-shaped curve approach. Please describe the process you use to evaluate the various factors that affect your VSOE, including customer type and other pricing factors and address the issue that if VSOE varies from customer to customer, how you can reasonably estimate fair value. In addition, please explain further how you applied the bell-shaped curve approach in establishing VSOE of fair value for your SMS services included in your legacy term licenses. In this regard, quantify the results of your analysis, such as the range of renewal rates and the percentage of customers that fall within such range. We refer you to ASC 985-605-25-6.

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.

You may contact Melissa Feider, Staff Accountant, at (202) 551-3379 or me at (202) 551-3499 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Katherine Wray, Staff Attorney, at (202) 551-3483.

Sincerely,

Kathleen Collins
Accounting Branch Chief