



DIVISION OF
CORPORATION FINANCE

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

MAIL STOP 3030

August 3, 2009

David P. Vieau
Chief Executive Officer
A123 Systems, Inc.
Arsenal on the Charles
321 Arsenal Street
Watertown, Massachusetts 02472

Re: A123 Systems, Inc.
Amendment No. 5 to Registration Statement on Form S-1
Filed July 30, 2009
File No. 333-152871

Dear Mr. Vieau:

We have reviewed your filing and have the following comment.

Prospectus Summary

We note the reference to industry information and projections of A.T. Kearney in the second paragraph and the supporting supplemental information furnished to the staff. It appears that this information was commissioned by the underwriter on behalf of the registrant for use in this registration statement. Please file the consent of A.T. Kearney as an exhibit to the registration statement. If the data from IHS Global Insight was prepared for the registrant for use in this registration statement, please also file a consent for that entity. See Rule 436 of Regulation S-K.

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 Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact at Jeanne Bennett at (202) 551-3606 or Kaitlin Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann at (202) 551-6262 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher
Assistant Director

cc (via fax): John H. Chory, Esq., Wilmer Cutler Pickering Hale and Dorr LLP