



DIVISION OF
CORPORATION FINANCE

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

May 11, 2011

Via E-mail

Terren S. Peizer, Chief Executive Officer
Catasys, Inc.
11150 Santa Monica Blvd. Suite 1500
Los Angeles, California 90025

RE: Catasys, Inc.
Registration Statement on Form S-1
Filed April 21, 2011
File No. 333-173659

Dear Mr. Peizer:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1

Plan of Distribution, page 15

1. You state on page 15 that you “intend to engage one or more underwriters, broker-dealers or selling agents to sell the securities.” Please confirm that you will file a post-effective amendment with revised disclosure and exhibit under Item 601(b)(1) of Regulation S-K in the event you engage a selling agent.

Signatures

2. Please include the signature of your controller or principal accounting officer as required by Form S-1.

Form 10-K for Fiscal Year Ended December 31, 2010

General

3. Please amend your Form 10-K to include a Management's Annual Report on Internal Control over Financial Reporting that contains an effectiveness conclusion, as required by Item 308(a) of Regulation S-K.

Closing 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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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 you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Terren S. Peizer
Catasys, Inc.
May 11, 2011
Page 3

Please contact Janice McGuirk, examiner at (202) 551-3395 or Jim Lopez at (202) 551-3536 with any questions.

Sincerely,

/s/ James Lopez (for)

John Reynolds,
Assistant Director