



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0303

Mail Stop 4561

December 22, 2006

James P. DeBlasio
President and Chief Executive Officer
Internap Network Services Corporation
250 Williams Street
Atlanta, Georgia 30303

Re: Internap Network Services Corporation
Registration Statement on Form S-4
Filed November 29, 2006
File No. 333-138993

Internap Network Services Corporation
Form 10-K for the fiscal year ended December 31, 2005
Filed March 10, 2006
File No. 1-31989

VitalStream Holdings, Inc.
Form 10-K for the fiscal year ended December 31, 2005
Filed April 3, 2006
File No. 1-10013

Dear Mr. DeBlasio,

We have limited our review of the above referenced filing to the matters identified below and have the following 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.

Form S-4

Where You Can Find More Information, page 113

1. Please revise the prospectus to incorporate by reference all filings required by Item 11 of Form S-4. See Item 15 to Part I, Section C of Form S-4. In this regard, we note that VitalStream filed Form 8-Ks on November 20, 2006, November 24, 2006 and December 11, 2006. We also note that VitalStream filed a Form 8-K/A on November 28, 2006. Please tell us why the above referenced current reports have not been included in the list of filings to be incorporated by reference or otherwise revise your prospectus to properly incorporate these filings.

Part II, page II-1

Item 21. Exhibits and Financial Statement Schedules, page II-3

2. We direct your attention to Exhibit 8.1. Counsel has assumed that “[t]he Merger will qualify as a merger under the laws of the State of Nevada.” The opinion should not assume a legal conclusion that results in or is a condition to the tax consequences that are the subject of the tax opinion. Rather, the opinion should address whether the transaction will qualify as a merger under the laws of the State of Nevada, if a determination in that respect is necessary to render the tax opinion or if that determination affects the opinion being given. Please file a revised tax opinion. We also note that Exhibit 8.2 contains a similar assumption regarding the same legal conclusion. Please similarly revise.

Internap Network Services Corporation Form 10-K for the fiscal year ended December 31, 2005

Item 9A. Controls and Procedures, page 31

3. We note your statement that a “control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Please confirm that if you continue to provide this disclosure in your future reports that you will disclose, if true, that your disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives and that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at that reasonable assurance level. In the alternative, remove the reference to the level of assurance of your disclosure controls and procedures in your future reports. Please refer to II.F.4 of Management’s Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, SEC Release No. 33-8238, available on our website at www.sec.gov.

VitalStream Holdings, Inc. Form 10-K for the fiscal year ended December 31, 2005

Item 9A. Controls and Procedures.

4. You recite only a portion of the definition of “disclosure controls and procedures” as set forth in Exchange Act Rule 13a-15(e). Please provide the entire definition specified in that Rule, i.e., that the disclosure controls and procedures are effective in ensuring that the information required to be disclosed is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rule and forms and is accumulated and communicated to the issuer’s management, including its principal executive and principal financial officer as appropriate to allow timely decisions regarding required disclosure. Alternatively, you may cite to the Exchange Act rule without reciting the rule itself. Please confirm that VitalStream’s disclosure controls and procedures were effective as defined in paragraph (e) of rules 13a-15 and 15d-15 for the year ended December 31, 2005 and provide us with a representation that you will conform your disclosure to these rules in all applicable future filings.
5. We note that you disclose that “[t]here were no significant changes . . . in [y]our internal controls over financial reporting that occurred during the fourth quarter of fiscal 2005 that has materially affected, or is reasonably likely to materially affect, [y]our internal control over financial reporting. Item 308(c) of Regulation S-K requires that you disclose “any change” in your internal controls over financial reporting that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect the registrant’s internal control over financial reporting. Please confirm that VitalStream did not have “any change” in its internal control over financial reporting that occurred during its last fiscal quarter and provide us with a representation that the company will confirm its disclosure with this rule in all applicable future filings.

* * * *

As appropriate, please amend your registration statement in response to these comments. 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 amendment and responses to our 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 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 Rule 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.

Please contact Jeffrey Werbitt at (202) 551-3456 or me at (202) 551-3730 with any

James P. DeBlasio
Internap Network Services Corporation
December 22, 2006
Page 5

questions.

Sincerely,

Mark P. Shuman
Branch Chief-Legal

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James P. DeBlasio
Internap Network Services Corporation
December 22, 2006
Page 6