

Room 4561

December 20, 2007

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

Re: Internap Network Services Corporation
Form 10-K for the fiscal year ended December 31, 2006
Filed March 13, 2007
Form 10-Q for the quarterly period ended September 30, 2007
Filed November 9, 2007
File No. 001-31989

Dear Mr. DeBlasio:

We have reviewed 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 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 10-K for the fiscal year ended December 31, 2006

Item 1. Business

1. Please advise us whether you have considered expanding your disclosure in this section to discuss your dependence on Internet network service providers. See Item 101(c) of Regulation S-K.

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

Results of Operations, page 33

2. We note instances where two or more sources of a material change have been identified, but the quantification of the contribution for each source that contributed to the change is not disclosed. For instance, for the year ended December 31, 2006, you disclose an overall pricing increase for Data Center services but there does not appear to be a discussion that quantifies how this pricing increase impacted revenues. Further, your disclosure indicates that IP services volume increased while prices declined, but you have not quantified how these factors impacted revenues. Your disclosure also indicates that IP services and Data Center services increased as a result of new and existing customers, without providing the additional analysis that quantifies the amount revenue increased from new and recurring customers. Tell us what consideration you gave to quantifying the extent of contribution of each source of a material change pursuant to the requirements of Item 303(a)(3)(iii) of Regulation S-K, Instruction 4 to Item 303(a) of Regulation S-K and the related interpretive guidance in Section III. D of SEC Release 33-6835 Interpretation: Management's Discussion and Analysis of Financial Condition and Results of Operations when preparing your MD&A discussion.
3. Please advise us whether you have considered expanding your discussion of your results of operations to address the effects of pricing and other competitive pressures in your industry. We note that you disclose elsewhere in your Form 10-K that pricing for Internet connectivity services has declined significantly in recent years and may decline in the future. Your MD&A disclosure should include discussion and analysis of known trends, demands, commitments, events and uncertainties that may have a material impact on the company's liquidity, capital resources or results of operations. See Item 303 of Regulation S-K and Section III.B.3 of SEC Release 34-48960.

Liquidity and Capital Resources, page 39

4. Your current disclosure in this section appears to be largely a recitation of line item changes in your financial statements. Please consider the guidance provided in Section IV of SEC Release 34-48960 and Item 303 of Regulation S-K.

Part III.

Item 11. Executive Compensation, page 46

5. Help us to understand your Summary Compensation Table appearing on page 22 of your Definitive Proxy Statement filed on April 25, 2007 relative to your discussion of compensation received by your named executive officers in 2006. For example, the

Summary Compensation Table indicates that no bonuses were awarded to your named executive officers in 2006. However, on page 18 of the Definitive Proxy Statement you disclose cash bonuses awarded to your executives on March 15, 2007 for performance in 2006. Please advise.

Consolidated Financial Statements

Notes to the Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies

Costs of Computer Software Development, page F-12

6. Your disclosure states that the capitalized software as of December 31, 2006 and 2005 has not been placed in service and therefore you have not recorded amortization expense. Please clarify how your policy complies with paragraph 38 of SOP 98-1, which states, "amortization should begin when the computer software is ready for its intended use, regardless of whether the software will be placed in service in planned stages that may extend beyond a reporting period." In addition, we note that the majority of the software development costs were capitalized in fiscal year 2004. Please clarify how you have overcome the rebuttable presumption that this software has zero fair value as it appears you have experienced programming difficulties that were not resolved on a timely basis; we refer you to paragraph 35.b of SOP 98-1.

Revenue Recognition and Concentration of Credit Risk, page F-14

7. Please address the following with respect to your accounting policy for Flow Control Platform revenues:
 - Please clarify whether the software contained in the Flow Control Platform is more than incidental to the product or service as a whole pursuant to paragraph 2 of SOP 97-2. Please describe your consideration of each of the factors identified in the second footnote of SOP 97-2, as well as any other factors that you consider to be relevant in supporting your determination.
 - Your disclosure on page 8 indicates that Flow Control Platform sales contain hardware, annual maintenance fees, professional fees for installation and on-going network configuration. We further note that post customer support related to Flow Control Platform sales is deferred and amortized over a contract period of usually one year. Please describe how you allocate revenue to each element and how you determined the existence of fair value of each element, or, in the case of software arrangements, how you have established VSOE of fair value for each element. Your response should include a discussion of your consideration of the relevant allocation provisions of SOP 97-2 and EITF 00-21.

- Please clarify the amount of Flow Control Platform sales you recognized in the nine months ended September 30, 2007 and the fiscal year ended December 31, 2006.
8. Your disclosures on page 26 state that your service agreements with your customers guarantee the performance of your service. Please clarify the rights that this contractual guarantee provides to your customers and how you have determined that your fees are fixed and determinable. Specifically, clarify whether your customers have the right to receive refunds in the event your service is not provided as guaranteed. Tell us how you have considered the recognition guidance in SAB Topic 13, Section A.4.a.
9. We note from your disclosures that you began offering content delivery network (“CDN”) services subsequent to your merger with VitalStream, which can include sales of the MediaConsole content management software. Please explain your revenue recognition policy for content delivery network services. In this regard, please tell us the guidance that you apply when recognizing revenues for sales of CDN products and services (e.g., SOP 97-2 or SAB 104). In addition, please clarify whether these arrangements contain multiple-elements, and if so, how you allocate revenue to each element and how you establish fair value of each element. Your response should include a discussion of your consideration of the relevant allocation provisions of SOP 97-2 and EITF 00-21.

Note 14. Stock-Based Compensation Plans

Stock Compensation and Option Plans, page F-32

10. We note from your disclosure that you identified an error in your prior stock option granting practices, but concluded that the error was not material to your financial statements for any prior period. Please provide your complete materiality analysis in accordance with SAB 99, which supports your conclusion. As part of your response, please clarify how you determined that the effect of the error was not material to the financial statements in the period which the error was corrected.

Note 17. Unaudited Quarterly Results, page F-36

11. We note that in your June 26, 2006 response letter to the staff you asserted that you would revise your presentation of selected quarterly financial data on a prospective basis to include cost of revenues pursuant to Item 302(a)(1) of Regulation S-K. However, it does not appear that you have provided the disclosure. Please clarify why you have not provided this disclosure and tell us how you plan to comply with the disclosure requirement of Item 302(a)(1) of Regulation S-K.

Form 10-Q for the quarterly period ended September 30, 2007

Note 1. Nature of Operations and Basis of Presentation

Revisions, page 8

12. Your disclosure states that you revised the classification of your auction rate securities acquired in the nine months ended September 30, 2007 from reporting them as cash and cash equivalents in the balance sheet to reporting them as short-term investments. Please explain to us how you determined that prospective disclosure of these changes was appropriate and tell us what consideration you gave to characterizing these changes as restatements and amending previously filed interim Exchange Act reports. Tell us your consideration of disclosing the impact of the revision on the consolidated balance sheets and statements of cash flow in your previously filed Exchange Act reports. In addition, please clarify whether any similar auction rate securities were classified as cash and cash equivalents in the balance sheet and statements of cash flows as of December 31, 2006.

Note 2. Business Combination

Purchase Price Allocation, page 9

13. Explain the factors that contributed to a purchase price that resulted in a significant amount of goodwill being recorded for the acquisition of VitalStream. Describe your process for ensuring that each acquired intangible asset was properly identified and how you determined the fair value of each identified intangible asset. Please explain in sufficient detail the fair value model you applied when determining the fair value of the acquired intangible assets, including a description of all significant assumptions. In addition, please tell us your consideration for providing disclosure of the factors that contributed to a purchase price that resulted in recognition of goodwill pursuant to paragraph 51(b) of SFAS 141.

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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 filings, you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter 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 any amendment and your 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 Exchange Act of 1934 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.

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 filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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 filing or in response to our comments on your filing.

You may contact Morgan Youngwood at 202-551-3479 or Chris White at 202-551-3461, if you have questions regarding comments on the financial statements and related matters. Please address all other comments to Matthew Crispino at 202-551-3456. If you require further assistance you may contact the undersigned at 202-551-3730.

Sincerely,

Stephen Krikorian
Accounting Branch Chief