

Mail Stop 4561

September 8, 2007

Philip E. Soran
Chairman, President and Chief Executive Officer
Compellent Technologies, Inc.
7625 Smetana Lane
Eden Prairie, Minnesota 55344

**Re: Compellent Technologies, Inc.
Amendment No. 1 to Form S-1
Filed on August 13, 2007
File No. 333-144255**

Dear Mr. Soran:

We have reviewed your responses and amended Form S-1 and have the following comments.

General

1. While your initial filing noted that you had applied for listing of your common stock on the Nasdaq Global Market the current amendment indicates that you have applied for listing on the NYSE Arca. Please advise.

Risk Factors, page 8

2. Please refer to prior comment 9 of our letter dated August 2, 2007. We note that you have changed many of the general conclusions cited in our prior comment with the general conclusion that your business or revenues may be “adversely affected” and similar terms. Please revise to eliminate all such general conclusions and replace them with specific disclosure as to how the cited risk would harm or adversely affect your business or revenues.

Our auditors have identified significant deficiencies, page 20

3. Please refer to prior comment 14 of our letter dated August 2, 2007. We you’re your revised disclosure in risk factors and management’s discussion and analysis. Please clarify whether management believes the deficiencies still exist or have been effectively addressed by the remedial measures taken.

Management's Discussion and Analysis

Comparison of Years Ended December 31, 2005 and 2006, page 47

4. Please refer to prior comment 25 of our letter dated August 2, 2007. To the extent the disclosure regarding the amount of revenue per megabyte offset by increased capacity affects an understanding of your revenues for the relevant period, it would appear that this information should be retained despite the difficulty you cite with regard to quantifying such information. With regard to quantifying the information, consider whether you can estimate by what percent reduced revenue is offset by the increased capacity or provide some other measure of the offset.

Compensation Discussion and Analysis, page 81

5. We reissue prior comments 39 and 40 of our letter dated August 2, 2007. Please provide us with your analysis of the competitive harm that would result from disclosing the corporate performance targets for the historical period and for the current year. Your response that "quantitative corporate targets under the 2006 and 2007 Incentive Plans are confidential and commercial information" is conclusory does not demonstrate why you believe this to be so. With respect to historical periods, we believe it would be difficult to show the competitive harm that that would result from disclosure of such targets. Moreover, the revised disclosure on pages 83-84 describes individual performance goals on a general basis. This disclosure should be provided on an individualized basis. Finally, to the extent you have provided us with a sufficient basis for concluding that the corporate performance targets constitute confidential information, your statement that the revenue targets "were designed to be difficult to achieve" does not adequately explain the level of difficulty associated with achieving the targets. Please revise.

If you have any questions regarding these comments, please contact me at 202-551-3735.

Sincerely,

Barbara C. Jacobs
Assistant Director

cc: Via facsimile: 650-849-7400
Mark P. Tanoury, Esq.
John T. McKenna, Esq.

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