

June 15, 2012

VIA EDGAR AND OVERNIGHT COURIER

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: ANSYS, Inc.
Form 10-K for Fiscal Year Ended December 31, 2011
Filed February 23, 2012
File No. 000-20853

Dear Ms. Collins:

This letter is submitted on behalf of ANSYS, Inc. (the “Company”), in response to the comments of the staff of the Division of Corporation Finance (the “Staff”) of the U.S. Securities and Exchange Commission (the “Commission”) raised in your letter of June 4, 2012 to Maria T. Shields, Chief Financial Officer of the Company (the “Comment Letter”) regarding the Company’s Annual Report on Form 10-K filed February 23, 2012 (the “Annual Report”).

For your reference, the text of each of the Staff’s comments is reproduced below in italics, which are numbered to correspond with the numbers set forth in the Comment Letter. The Company’s responses to each comment immediately follow the reproduced text in regular typeface.

Form 10-K for the Fiscal Year Ended December 31, 2011

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 24

Comment No. 1

In subsequent filings, consider expanding the discussion in the overview to MD&A to discuss any known material trends and uncertainties relating to geographies and industries for which your products are provided. We refer to your fourth quarter earnings call where you discuss trends in the telecom industry, the automotive sector and industrial and electrical segments. Your overview should include economic or industry-wide factors relevant to your operations. For guidance, see Section III.A of SEC Release No. 33-8350.

Response 1:

The Company acknowledges the Staff's comment and will expand its discussion of any known material trends or uncertainties relating to geographies and industries in which its products are provided in subsequent filings in accordance with the guidance provided in Section III.A of SEC Release No. 33-8350.

Results of Operations

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010, page 29

Comment No. 2

You state your annual lease and maintenance contracts are generally renewed on an annual basis and "typically have a high rate of customer renewal." Please tell us what the customer renewal rates were for the periods covered by your financial statements and tell us your consideration to quantify the renewal rates for these contracts in future filings to provide readers with a better understanding of your operations

Response 2:

[Confidential Treatment Requested by ANSYS, Inc., ANSS-0001]

As part of the Company's continuous efforts to provide technical enhancements and cross-platform integration, it has occasional new product offerings to which customers may migrate. Such migrations are considered to be "upgrades" or "new" product contracts and are not captured as "renewals" in the Company's customer relationship management and financial databases. Inclusion of migration contracts as "renewals" would have a positive impact on the percentages presented above, particularly relating to annual leases. Given the number of transactions involved and how the data is entered and stored in the Company's databases, the calculation of an "all-inclusive renewal rate" is not practicable.

The Company believes that the quantitative measures above would not be useful in providing readers with a better understanding of its operations. There are a multitude of complex variables that may impact the renewal rates of annual lease and maintenance contracts in any reporting period, including, but not limited to, customers who decide to convert from a time-based model to a perpetual license and maintenance arrangement, product upgrades, product migrations, currency fluctuations and the underlying renewal terms of specific customer contracts. Additionally, we periodically experience customers who may elect to delay or accelerate their renewal to be in line with their own internal budgeting and operational cycles, or to realign annual leases and maintenance contracts to be coterminous. Seasonal fluctuations in the calculated renewal rate may not necessarily indicate a future trend in the Company's recurring revenues.

For these reasons, the Company includes the qualitative discussion of contract renewals that the Staff referenced above.

As requested in the Comment Letter, the Company hereby acknowledges 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.

If you should have any questions concerning the enclosed matters, please contact the undersigned at (724) 514-2949 or by facsimile at (724) 514-3623 or Joseph L. Johnson III, Esq. of Goodwin Procter LLP, outside counsel to the Company, at (617) 570-1633 or by facsimile at (617) 523-1231.

Very truly yours,

/s/ Sheila S. DiNardo, Esq.

Sheila S. DiNardo, Esq.
ANSYS, Inc.

cc: Joseph L. Johnson III, Esq., *Goodwin Procter LLP*