

April 16, 2015

VIA EDGAR AND FEDERAL EXPRESS

Patrick Gilmore
Accounting Branch Chief
Securities and Exchange Commission
100 F. Street, N.E.
Washington, DC 20549-3628

Re: Ansys, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2014
Filed February 26, 2015
File No. 000-20853

Dear Mr. Gilmore:

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 April 3, 2015 to Ms. Maria T. Shields of Ansys, Inc. (the "Comment Letter") regarding the Company's Annual Report on Form 10-K filed February 26, 2015 (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.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Year Ended December 31, 2014 Compared to Year Ended December 31, 2013

Revenue, page 29:

In your 2014 Investor Day Executive Summary and fourth quarter 2014 Investor presentation, you indicate that increasing the number of users and usage density and intensity are significant growth opportunities. Please tell us how you monitor your ability to expand your user base and increase usage density and intensity and what consideration was given to disclosing any related metrics, if available. Refer to Item 303(a) of Regulation S-K and Section III.B of SEC Release 33-8350.

Response 1:

The Company believes that discussing number of users, usage density and intensity of usage is a useful way to explain to its investors the different reasons and avenues for the Company to grow revenue, both through new customers and expansion within existing customers. However, the Company is not able to reliably calculate information or metrics related to these growth opportunities. The Company thinks this presentation of its longer-term growth opportunity, even without the corresponding tracking metrics, is a helpful presentation tool as part of its ongoing dialogue with its investors around the total potential addressable market and opportunities for growth, and accordingly, the Company included a discussion of these items in its Investor Day presentation and executive summary.

No information on number of users, density or intensity is provided to the Company's Board of Directors as part of their monthly or quarterly informational packages, nor are they discussed in board meetings as an important indicator of the Company's progress or sales efforts. None of these indicators are used in determining or evaluating any compensation for the Company's management or employees. Rather, the Company focuses on sales broadly, and by geography, industry, sales channel, type of revenue, etc., all of which are discussed in the Company's filings with the Commission, and believes these are the material indicia of the Company's performance.

The Company is not able to track its user base, usage density and intensity with any degree of precision. For example, while the Company can track the number of licenses granted to any particular customer, it cannot precisely monitor and track the number of individual users utilizing a given license because the Company utilizes a concurrent licensing model rather than a named user model. Additionally, data concerning the number of software users would typically be accumulated over time as additional licenses are sold each year. The Company has acquired many companies over its history and it has no way of confirming that user information or license account accumulated pre-acquisition is accurate. Similarly, while the Company can track aggregate usage of simulation, it cannot track the time allocation of usage of particular modules, so density information cannot be precisely followed or compared between periods. While

thinking about business opportunities along user and usage dimensions can provide helpful context in understanding the revenue and revenue growth that the Company has historically discussed in its filings with the Commission, the Company is not able to provide any metrics regarding dimensions of growth that are accurate and consistently trackable enough to provide any material benefit to its investors, even with significant context around those metrics. The Company notes that it did not provide specific numbers in its Investor Day presentation (other than the approximate number of undergraduate students trained on ANSYS software or the number of doctoral candidates that used ANSYS software in dissertations, which encompass only a small segment of the Company's user population and is not necessarily reflective of current users).

As a result of the imprecise means of tracking any metrics related to number of users, usage intensity or usage density, and because the Company does not rely on any such metrics, regardless of precision of tracking, in its compensation decisions or strategic planning and review, the Company does not believe that any disclosure in its filings with the Commission would be material or beneficial to its investors.

Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 1, Organization, page 62

We note your disclosure that the company operates as three segments which are sufficiently similar and aggregated. We further note that you identified two operating segments in your Form 10-K for the fiscal year ended December 31, 2013. Please tell us what your operating segments are and provide us with your analysis of how you concluded that aggregation is appropriate under ASC 280-10-50-11, including an analysis such as gross margins and sales trends, supporting the conclusion that the operating segments are expected to have similar long-term economic characteristics.

Response 2:

Background on Company's Historical Approach to Identifying Segments

Since its founding in 1970, ANSYS has focused solely on providing engineering simulation software and services to its customers. The Company's software enables users to analyze product designs in a virtual environment rather than building physical prototypes. While the Company has consummated many acquisitions over the last 15 years, the businesses acquired have never deviated from the Company's core competency of engineering simulation. Every acquisition has supported the Company's strategy of enabling Simulation Driven Product Development™. The Company's Chief Operating Decision Maker ("CODM") is its Chief Executive Officer. He is responsible for key business decisions and the allocation of resources. The senior manager leaders of each of the Company's key functions, including Sales, Marketing, Finance, Human Resources, Legal, and Research and Development all report directly to the Chief Executive Officer.

Because of the Company's single focus on engineering simulation, the CODM makes decisions based on the Company's consolidated results rather than results that are disaggregated into regional, product, industry or subsidiary profitability. As one example, when hiring quotas are provided to the product development teams or sales teams, a single hiring quota is provided that applies to all products, geographies and subsidiaries. Hiring quotas are not disaggregated based on results. As another example, instructions to reduce costs are made to the leaders of entire functions (Sales, Marketing, Research and Development, etc).

It has been common for the Company to maintain separate financial information for certain acquisitions during the year of the acquisition, and periodically for a two- to three-year period beyond the acquisition. This is particularly true in situations that involve contingent consideration, such as the Company's August 2011 acquisition of Apache Design. In these circumstances, the monthly financial package provided to the CODM will include separate financial information regarding the acquired company. These circumstances result in the Company's temporary determination that it has more than one operating segment during the post-acquisition period in which the financial information of the acquired entity is presented separately.

The post-acquisition period during which separate financial information is provided and, therefore, additional operating segments exist, is always temporary, and the Company always reverts back to a single segment that is consistent with the manner in which the CODM makes key decisions regarding the business. This reversion back to a single segment is often accompanied by the elimination of acquired legal entities via merger or dissolution and the transition of employees from the former entities into the existing ANSYS legal entities and, in certain cases, the relocation of acquired employees into existing ANSYS facilities.

Discussion of 2013 Segment Reporting

The Company's two operating segments as of December 31, 2013 were ANSYS and Apache. The Apache segment relates to the separate business that was acquired in August 2011. The remaining activities in the Company's consolidated financial statements for the year ended December 31, 2013 comprised the ANSYS segment.

The Company determined that these two operating segments, ANSYS and Apache, were sufficiently similar to meet the aggregation requirements under ASC 280 based on the Company's assessment that they have the same economic characteristics, including similar long-term average gross margins, as well as the Company's evaluation of the specific aggregation criteria in ASC 280-10-50-11.

Other Aggregation Criteria

The Company also believes that the future sales prospects and growth rates are similar for these two units. This is further discussed in the following evaluation of the specified aggregation criteria of ASC 280-10-50-11:

a) The nature of the products and services are similar

The Company continues to focus on its core competency of providing engineering design and simulation software and services. The Company's products and services meet the similarity hurdle because all products are used to help engineers design and simulate the impact of various parameter changes on their products to determine how they will perform in a real-world environment.

b) The nature of the production process is similar

The research and development activities are similar for each operating segment, with both involving the development, analysis and testing of software code. These activities for both segments are led by a single Chief Product Officer and often involve significant cross-segment collaboration.

c) The type or class of a customer for their products and services are similar

Software products and services from each operating segment are widely used by engineers and designers across a broad spectrum of industries. The most significant customers for each operating segment are represented by middle- to large-sized global companies. Given the integrated approach to the problem-solving needs of the Company's customers, a single sale of software may contain components or modules from multiple product areas and include combined technologies. As a result, there is a correlation and overlap between the customer bases of each operating segment. This correlation and overlap is particularly strong between the Apache segment's power analysis technology and the ANSYS segment's electronics technology. In fact, one of the Apache segment products that was managed by the Apache team in 2014 is now being managed within the ANSYS segment.

d) The methods used to distribute their products or provide their services are similar

The Company sells products from both operating segments through its direct sales force as well as through a network of independent channel partners. The direct sales force and the channel partners approach end user sales to the Company's customers similarly and both the direct sales force and the independent channel partners utilize the same geographic price list. The order fulfillment, licensing approach and distribution methods for each operating segment are the same. Software products for both segments are provided on a USB drive or via electronic download.

Both segments have a technical staff that provides technical support to customers in a similar manner. The customers purchase technical support either through a maintenance contract that is sold with a perpetual license, or through a service that is embedded in the Company's time-based licenses. The maintenance contract that is sold separately or embedded in the time-based license has the same contractual terms for both segments, including the right to unspecified upgrades.

Evaluation of 2013 Segment Disclosure

The Company's determination that the ANSYS and Apache operating segments should be aggregated into a single reportable segment as of December 31, 2013 is consistent with its belief that separate reporting of segment information will not add significantly to an investor's understanding of the Company's business because its operating segments have characteristics so similar that they can be expected to have essentially the same future prospects.

Discussion of 2014 Segment Reporting

In April 2014, the Company acquired SpaceClaim Corporation ("SpaceClaim"). Because of the manner in which the separate results of SpaceClaim were included in the financial package of the CODM, the Company concluded that it had a third operating segment in 2014.

The Company's analysis in 2014 regarding the aggregation of the ANSYS and Apache segments is consistent with that provided above under the heading "Discussion of 2013 Segment Reporting." As such, the following discussion is limited to the aggregation of SpaceClaim with the ANSYS and Apache segments.

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

Other Aggregation Criteria - SpaceClaim

a) The nature of the products and services are similar

The SpaceClaim products are similar to the ANSYS and Apache products because they help engineers design and simulate the impact of various parameter changes on their products to determine how they will perform in a real-world environment. The SpaceClaim products are very complementary to the ANSYS products in that they help to simplify and automate what has traditionally been a time-consuming process of preparing geometry for use in a simulation system.

b) The nature of the production process is similar

The research and development activities are similar for SpaceClaim and the other segments, with all three involving the development, analysis and testing of software code. These activities for all segments are led by a single Chief Product Officer and often involve significant cross-segment collaboration and sharing of SpaceClaim technology with other existing products or new products that are currently being developed.

c) The type or class of a customer for their products and services are similar

Similar to the Apache and ANSYS segments, software products and services from the SpaceClaim segment are also widely used by engineers and designers across a broad spectrum of industries. The most significant customers for each operating segment are represented by middle- to large-sized global companies. Given the integrated approach to the problem-solving needs of the Company's customers, a single sale of software may contain components or modules from multiple product areas and include combined technologies. As a result, there is a correlation and overlap between the customer bases of the SpaceClaim segment and those of other segments.

This is further evidenced by the fact that ANSYS was a reseller of SpaceClaim products prior to the acquisition. In this arrangement, ANSYS was able to sell the SpaceClaim products into its existing customer base.

d) The methods used to distribute their products or provide their services are similar

The Company sells the SpaceClaim products through its direct sales force as well as through a network of independent channel partners. As mentioned above, the Company and its independent channel partners were selling SpaceClaim products as third party distributors prior to the acquisition. SpaceClaim also has royalty arrangements in which its software is sold with third party products. The direct sales force and the channel partners approach end user sales to the SpaceClaim customers similarly to those of the other segments, and both the direct sales force and the independent channel partners utilize the same geographic price list. The order fulfillment, licensing approach and distribution methods for SpaceClaim are similar to those of the other segments. Software products for the SpaceClaim segment are typically provided via electronic download. This is consistent with the primary delivery mechanism for the other segments.

The SpaceClaim segment also has a technical staff that provides technical support to customers in a similar manner to the other segments. The customers purchase technical support either through a maintenance contract that is sold with a perpetual license, or through a service that is embedded in the Company's time-based licenses. The maintenance contract that is sold separately or embedded in the time-based license has the same contractual terms for all segments, including the right to unspecified upgrades.

Evaluation of 2014 Segment Disclosure

While the Company believes that the SpaceClaim segment has similar long-term economic characteristics when compared to the ANSYS and Apache segments, it acknowledges that the SpaceClaim business is less mature than the other segments and, as a result, the Company has less certainty concerning the longer term convergence of key operating metrics, such as non-GAAP operating margins. As a result, the Company performed a quantitative analysis to determine whether the SpaceClaim segment would meet the quantitative thresholds specified in ASC 280 if it was determined that the segment was not similar.

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

While SpaceClaim was an operating segment in 2014 as a result of the manner in which the business was operated and the financial information was presented to the CODM post-acquisition, it ceased to be an operating segment in 2015 due to the removal of related financial information from the CODM's financial package as a result of its insignificance and the fact that the SpaceClaim technology is also being used in other existing and new products under development.

Discussion of 2015 Segment Reporting

While the Commission's questions were limited to the Company's segment reporting for 2013 and 2014, the Company considers it relevant to provide a further update for changes in its 2015 operating segments. The Company will disclose in its Form 10-Q for the quarter ended March 31, 2015 that it now operates as one segment under guidance provided by ASC 280. As of January 1, 2015, the Apache legal entity in the U.S. merged into ANSYS, Inc. and many elements of the two businesses were combined both operationally and for internal financial reporting. As a result of the merger and related convergence of functional teams, the CODM no longer receives a separate financial package for Apache. As mentioned previously, SpaceClaim is no longer presented separately in the CODM financial package due to its insignificance.

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) 820-3733 or by facsimile at (724) 514-3609 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*