

October 12, 2007

**VIA EDGAR AND FEDERAL EXPRESS**

Mr. Jay E. Ingram  
Division of Corporation Finance  
Securities and Exchange Commission  
100 F Street, N.E.  
Washington, DC 20549

**Re: ANSYS, Inc.  
Definitive 14A  
Filed April 9, 2007  
File No. 0-20853**

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Dear Mr. Ingram:

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 Securities and Exchange Commission (the "Commission") raised in your letter of August 21, 2007 to James E. Cashman III, President and Chief Executive Officer of the Company (the "Comment Letter").

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.

Director Compensation, page 7

Comment 1:

*With respect to the stock awards reported in column (d), it is not clear why you have not disclosed in a footnote the grant date fair value of each award computed in accordance with SFAS 123R and the assumptions made in the valuation(s) by reference to a discussion of those assumptions in Ansys' financial statements, footnotes to the financial statements, or discussion in the Management's Discussion and Analysis. Also disclose the aggregate number of stock awards outstanding at fiscal year end. See the Instruction to Item 402(k)(2)(iii) and (iv) and the Instruction to Item 402(k).*

Response 1:

The Company respectfully advises the Staff that the grant date fair valuations of stock option grants awarded to its non-affiliate independent Directors was \$22.28 and \$22.97 as of June 30, 2006 and November 15, 2007, respectively, and were provided in footnote 3 to the Director Compensation Table on page 7 of the Company's Definitive 14A filed April 9, 2007 (the "Definitive 14A") and that such amounts were computed in accordance with SFAS 123R. The Company will revise its disclosure in future filings to clarify that such valuations were computed in accordance with SFAS 123R.

The Company respectfully advises the Staff that footnote 2 to the Director Compensation Table on page 7 of the Definitive 14A provides that Note 2, "Stock-Based Compensation" beginning on page 44 of the Notes to Consolidated Financial Statements included in the Annual Report on Form 10-K filed on February 28, 2007 provides the relevant assumptions used to determine the valuation of the Company's option awards.

The Company advises the Staff that the aggregate number of stock awards outstanding at fiscal year end was 7,818,561. The Company will revise its disclosure in future filings to include the aggregate number of stock awards.

Compensation Discussion and Analysis, page 11

General

Comment 2:

*Please provide clear disclosure that addresses how you determine the levels of compensation paid and how decisions regarding particular components of your compensation program fit into your overall compensation objectives and affect decisions regarding other elements. See Item 402(b)(1)(vi) of Regulation S-K. From a general standpoint, it appears that the Committee gives some weight to the extent to which compensation of your named executive officers compares to the companies against which you benchmark compensation. Yet your disclosure also indicates that cash and equity awards are made on what appear to be discretionary bases that involve consideration of individual and company performance. Please provide sufficient quantitative or qualitative disclosure of the analyses underlying the Committee's decisions to make compensation awards and describe how decisions regarding one type of award motivate the Committee to award or consider other forms of compensation. Ensure that your Compensation Discussion and Analysis explains and places in context how you considered each element of compensation, how you determined particular payout levels, and why determinations with respect to one element may or may not have influenced the Committee's decisions with respect to other allocated or contemplated awards.*

Response 2:

The Company advises the Staff that, as described in its Definitive 14A, its Compensation Committee of the Board of Directors (the "Committee") has responsibility for establishing, implementing and continually monitoring adherence with the Company's compensation philosophy. The Committee is solely responsible for determining each element of the compensation of the Company's president and chief executive officer ("CEO"), James E. Cashman III. Since each of the other named executive officers ("NEOs") report to Mr. Cashman, he prepares an analysis for the Committee recommending each element of the compensation to be paid to the other NEOs. However, the Committee may accept or adjust such recommendations as it determines in the best interests of the Company and its stockholders and has final approval over all such compensation decisions.

Each element of the Company's compensation program (base salary, cash bonus and equity grants) fits into the Company's overall compensation objectives. As described in the Definitive 14A, the main objective of the Company's executive compensation program is to create a competitive total rewards package based on the attainment of short-term performance objectives and long-term strategic goals and each component of compensation supports that objective. In future filings, the Company will also explain that additional goals of its compensation program are to retain and attract qualified executive officers that will lead to the long-term success of the Company and enhance long-term stockholder value.

The Company has provided additional detail regarding how levels of compensation are determined and how such compensation fits into its overall compensation objectives below.

Base Salary and Cash Bonus: Base salaries are intended to provide a fixed amount of compensation for an executive's regular work and are set at appropriate market levels, while cash bonuses are designed to reward its executives for the achievement of shorter-term financial goals and individual performance objectives.

In setting cash compensation for Mr. Cashman for 2006, the Committee began by analyzing the compensation practices of the peer companies listed in the proxy statement and targeted a mid-point range for base salary and target bonus. The Committee selected the mid-point as the appropriate point of comparison because the Company has moderately conservative compensation practices and wants to balance its goals of retaining and rewarding its executives and serving its stockholders' interests by not being a compensation leader. Mr. Cashman's base salary and target bonus for 2006 were within the mid-point range at 92% of the median. His base salary and actual cash bonus for 2006 were at 104% of the benchmark median. In addition to benchmarking data, Mr. Cashman's target cash bonus is designed to reflect the Company's financial performance and achievement of corporate and individual objectives, which are generally a superset of the other NEO's individual objectives, as well as organizational and strategic goals.

In his analysis for the cash compensation to be paid to the other named executive officers for 2006, Mr. Cashman focused primarily on the following factors: compensation levels of peers, internal compensation comparisons, legacy compensation levels, individual growth rates and growth relative to Company performance. Mr. Cashman then benchmarked each executive against a different set of peer companies consisting of Agile Software Corporation, MAGMA Software, MatrixOne, Aspen Technology, Inc. and Moldflow Corporation to test the reasonableness of his cash compensation recommendations, and adjusted downward for geographic cost of living differences based on Standard Metropolitan Statistical Area metrics based on his belief that the cost of living is lower in the greater Pittsburg, Pennsylvania region. Mr. Cashman selected this set of peer companies because of their similar business characteristics, comparable size and readily available public information. His process for formulating compensation recommendations for the other NEOs is independent of the Committee's process for setting compensation for the CEO and he is not privy to the factors and benchmarks utilized by the Committee. The total cash compensation levels for Ms. Shields, Mr. Fairbanks, Mr. Reid and Mr. Wheeler established for 2006 were all within a mid-point range of the peer group examined by Mr. Cashman. The Committee concurred with Mr. Cashman's recommendations upon review of his analysis.

Cash bonuses principally reflect the Company's financial performance and are adjusted based on individual objectives. For each of the NEOs, cash bonus payments of up to 100% of target are determined based upon the Company's achievement of its revenue, operating profit and earnings per share internal plan goals. Cash bonuses exceeding 100% are determined based upon the Company's overachievement of earnings. Differences in the payment of cash bonuses among executives that exceed 100% of target are determined based upon individual performance factors.

Competitive base salaries allow the Company to attract and retain employees who can contribute to its long-term success. Cash bonuses effectively link individual contributions to overall business and individual performance and encourage executives to increase stockholder value in both the short and long term.

Equity Compensation: Equity compensation is intended to align the interest of executives with long-term stockholder interests and to create incentives for executives to work cooperatively to ensure the Company continues its successful growth.

As described in the Definitive 14A, the Company has no set formula or timeframe for the granting of equity awards to individual executives or employees. In determining equity grants made in 2006, the Committee set aside a pool of options by considering the number of options available for grant under the Company's stock option plan, the addition of employees from the Fluent acquisition and reviewing an analysis prepared by its compensation consultant to determine market and stockholder value transfer levels. The equity grant to Mr. Cashman was within the range identified by the Company's compensation consultant at the 50<sup>th</sup> percentile and the equity grants for the NEOs other than Mr. Cashman were at the 25th percentile, which the Committee determined to be appropriate levels considering the factors noted below as well as the Company's historic equity grant levels and the equity grants to the employee population generally.

In setting the individual equity awards based on the available options, the Committee considered comparisons to the peer group, longer-term performance, leadership potential, the responsibilities to be assumed by each executive in the upcoming fiscal year, the responsibilities of each executive in prior periods, existing option holdings, the size of awards made to each executive in prior years relative to the Company's overall performance, available stock for issuance under its option plan, potential grants in future years and the projected retention incentive profile for each executive beyond 2006. Mr. Cashman received an equity award at the mid-point of the range identified by the compensation consultant, which was larger than the other NEOs because in his role as CEO he bears more of the responsibility for the Company's performance and has a larger variable compensation component that reflects this greater risk. Ms. Shields and Mr. Fairbanks received approximately 18% more stock options than Mr. Reid and Mr. Wheeler primarily as a result of their exceptional performance in connection with the acquisition and integration of Fluent.

The Committee believes that stock option and restricted stock grants help it achieve its compensation goals by giving executives a significant, long-term interest in the Company's success, helping to attract and retain key executives in a competitive market for executive talent and aligning the interests of executives with long-term stockholder interests thereby enhancing stockholder value.

The allocation of an executive officer's compensation among each of the compensation components described above is based on the Company's competitive benchmarking, as appropriate, its recruiting and retention goals, its view of internal fairness and consistency and other considerations that the Company deems relevant, such as extraordinary performance. However, the Company does not structure compensation so that significant compensation derived from one component of compensation negates or offsets compensation from other components. While the Company does not have a policy for determining the appropriate allocation between cash and non-cash compensation, historically the Company has allocated a greater percentage of an employee's total compensation to equity compensation as he or she becomes more senior in the organization.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Comment 3:

*Revise the Compensation Discussion and Analysis to capture material differences in compensation policies with respect to individual named executive officers. See generally Section II.B.1 of Commission Release No. 33-8732A. To this extent, refer to the wide disparities in Mr. Cashman's salary, bonus, and the option award made on November 20, 2006 as compared to the other named executive officers. Provide a more detailed discussion of how and why the compensation of your highest-paid named executive officers differs from that of the other named executive officers. If policies or decisions relating to a named executive officer are materially different than the other officers, please discuss this on an individualized basis.*

Response 3:

The Company advises the Staff that Mr. Cashman is the Company's CEO and President and has primary responsibility for delivering results and managing operations so his compensation is determined based on Company-wide financial, organizational and strategic goals. Mr. Cashman has the highest variable component of his target bonus relative to his base salary, reflecting his overall operational and strategic responsibilities and their direct relationship to stockholder value. The Company enjoyed unprecedented success in 2006 and in years when the Company is performing well he is rewarded for its success, which is consistent with the Committee's compensation philosophy to enhance long-term stockholder value. Based in part on Mr. Cashman's leadership and strategic decision-making, stockholder value has been increasing, and it is the Committee's intent that Mr. Cashman be rewarded for those stockholder gains and his long-term record of delivering value.

As described in Response 2, the Committee also relies on benchmarking data in assessing the reasonableness of the compensation for all of the NEOs. Despite being compensated more highly than the other NEOs, Mr. Cashman's base salary of \$440,000 was at 96% of the median for CEOs in the peer group. Mr. Cashman's target bonus was planned at 91% of base salary as compared to the peer group median of 96% of base salary, although Mr. Cashman was actually awarded a cash bonus of \$506,900, or 115% of base salary, because of achievement of the Company internal revenue and profitability plans, as well as above target achievement of Company earnings plan and his individual goals.

There are also variations among decisions relating to other executive officers based on their respective roles in the organization.

Ms. Shields, the Company's chief financial officer, has a variable component in her target bonus that is principally tied to corporate performance because of her corporate-wide finance and administration responsibilities, including considering any potential acquisitions for the Company. Ms. Shields received more than Mr. Wheeler because of her role in the successful acquisition and integration of Fluent, including heavy involvement in the negotiation of definitive agreements, due diligence, financial modeling and financial reporting system integration.

Mr. Fairbanks, the Company's vice president of worldwide sales and support, has a higher variable component in his target bonus relative to his base salary because of his responsibilities in driving revenue and the heightened risk associated with his role. For example, individual goals for Mr. Fairbanks in 2006 included improvements in the development of a scalable, motivated, effective sales organization, forecast accuracy, services development and marketing integration. Mr. Fairbanks received the largest total compensation following Mr. Cashman because revenue increased in 2006 and the internal revenue plan was exceeded due principally to his efforts.

Mr. Wheeler, the Company's vice president of the mechanical business unit, has variable components that reflect a balance between corporate performance and individual business unit performance. For example, individual goals for Mr. Wheeler in 2006 included improvements in the business unit revenue, expense and contribution margin goals, product development, product management, organization and staff development, key function leadership and third party relationship management. Mr. Wheeler received less total compensation than the other NEOs because he was least involved in major acquisition activities and his business unit delivered less overachievement than other areas of the Company in 2006.

Similar to Mr. Wheeler, Mr. Reid, the Company's vice president of marketing (and for the first part of 2006, vice president of the fluids business unit), has variable components that reflect a balance between corporate performance and individual business unit performance. For example, individual goals for Mr. Reid in 2006 included improvements in the business unit revenue, expense and contribution margin goals, product development, product management, business unit integration, and development of corporate services strategy. Mr. Reid has a relatively higher base salary than other executives because he entered the Company as a result of its acquisition of CFX in 2003 and was being paid a higher rate of compensation than Company executives at the time of the acquisition. While the Company did not reduce his salary following the acquisition, his rate of increase is lower than the rates of base salary increase of other executives to eventually bring his compensation into line with the other NEOs. Mr. Reid's cash compensation is also influenced by currency effects because he is paid in Canadian dollars.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Comment 4:

*With respect to the disclosure relating to competitive benchmarking, please specify where actual payments fall within targeted parameters.*

Response 4:

As described in the Definitive 14A, the Company compares itself to peers in terms of revenue, net income, market capitalization, and 1-year and 3-year total returns. At the start of 2006, the Company was below the 25th percentile in revenue, near the 50th percentile level in net income and market capitalization, and above the 75th percentile in 1-year and 3-year total returns in relation to the peer companies. The Company advises the Staff that in setting executive compensation for 2006, the Company's Compensation Committee established base salaries and target bonus levels at or below a mid-point level in relation to the peer companies. Mr. Cashman was at a mid-point range of the peer companies identified in the Definitive 14A for total cash compensation and equity compensation. Ms. Shields, Mr. Fairbanks, Mr. Wheeler and Mr. Reid were at a mid-point range of the peer companies utilized by Mr. Cashman for total cash compensation and Ms. Shields, Mr. Fairbanks, Mr. Wheeler and Mr. Reid were at the 25<sup>th</sup> percentile range of the peer companies listed in the Definitive 14A for equity compensation in 2006. The Committee determined that the 25<sup>th</sup> percentile range was appropriate considering the factors noted in Response 2, as well as the Company's historic equity grant levels and the equity grants to the employee population generally.

Utilizing the peer companies listed in the proxy statement, Mr. Cashman's targeted total compensation (\$840,000) consisting of base salary (\$440,000) and target bonus (\$400,000) was established at 92% of the median (\$915,000). Base salary (\$440,000) was at 97% of median (\$454,000) and target bonus (\$400,000) was at 88% of median (\$457,000). His actual base salary (\$440,000) plus achieved bonus (\$506,900) resulted in actual total cash compensation (\$946,900) equal to 104% of median for the peer group. Ms. Shields' targeted total cash compensation (\$271,500) was at 95% of the median of the peer group utilized by Mr. Cashman, and her actual total cash compensation (\$346,630) was at 121% of that median. Mr. Fairbanks' targeted total cash compensation (\$311,300) was at 135% of the median of the peer group utilized by Mr. Cashman, and his actual total cash compensation (\$401,480) was at 175% of that median. Mr. Reid's targeted total cash compensation (\$334,373) was 110% of the median of the peer group utilized by Mr. Cashman, and his actual total cash compensation (\$460,525) was at 152% of that median. Mr. Reid's cash compensation is also impacted by currency effects because he is paid in Canadian dollars. Mr. Wheeler's targeted total cash compensation (\$340,435) was at 112% of the median of the peer group utilized by Mr. Cashman, and his actual total cash compensation was at 125% of that median. Actual total cash compensation for all of the NEOs exceeded the targeted mid-point range as a result of the Company's overachievement of revenue, operating profit and earnings per share goals.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Comment 5:

*Please disclose the financial performance-related factors for the 2006 bonus plan and those financial performance goals, to the extent established, that are tied to 2007 incentive compensation. See Item 402(b)(2)(v)-(vi) and Instruction 2 to Item 402(b) of Regulation S-K. To the extent you believe that such disclosure is not required because it would result in competitive harm and allow you to omit the disclosure under Instruction 4 to Item 402(b) of Regulation S-K, please provide a detailed supplemental analysis supporting your conclusion and provide appropriate disclosure pursuant to Instruction 4. In discussing how difficult it will be for you to achieve the target levels or other factors, provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm. Consider disclosure that addresses the relationship between historical and future achievement and the extent to which the Committee set the incentive parameters based upon a probability that you would achieve the performance objectives.*

Response 5:

In response to the Staff's comment and pursuant to Instruction 4 to Item 402(b) of Regulation S-K, the Company respectfully advises the Staff that the financial performance-related goals for the 2006 bonus plan and those financial performance goals were not disclosed in the Definitive 14A because such disclosure would result in competitive harm to the Company. As described in the Definitive 14A, target bonus levels are determined according to the Company's performance against revenue, operating profit, and diluted earnings per share targets established in its confidential 2006 internal financial plan and other non-quantitative goals described in further detail in Response 7 below. The Company's internal financial plans for both 2006 and 2007 are based on non-GAAP financial measures of its revenue, operating profit and diluted earnings per share, excluding the income statement effects of stock-based compensation, purchase accounting for deferred revenue, acquisition-related amortization of intangible assets and the one-time acquired in-process research and development charge resulting from its acquisition of Fluent Inc. Although the Company's internal plan numbers would be historical when disclosed as part of the Definitive 14A, competitors and other market participants would undoubtedly use such numbers to extrapolate the Company's confidential internal plan for the current year, placing the Company at a competitive disadvantage and causing confusion in the marketplace, particularly if the internal plan is not achieved. Thus, the Company believes that disclosure of these financial performance goals would provide its existing and potential competitors with substantial competitive advantages and cause substantial harm to the competitive position of the Company.

The internal plans for 2006 and 2007 are aggressive and represent stretch goals that exceed the performance that the Company has committed to deliver to its stockholders. It is at least 50% likely that the Company will not be successful in achieving its internal plan for any given year. Since 2000, the Company has achieved its internal revenue plan in approximately 43% of the years and has failed to achieve it in approximately 57% of the years. With the exception of the post-9/11 impact to 2002 results, the Company has achieved between 92% and 104% of plan. The Committee sets the incentive parameters to align with the Company's achievement relative to plan and not based on a probability that the plan will be achieved.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Bonuses Awarded in 2006, page 13

Comment 6:

*Each named executive officer received an annual incentive bonus in excess of 100% of the target based on company performance that exceeded target levels as they related to revenue, operating profit, and earnings per share. Yet it is not clear how the Committee set the amount of cash to be awarded upon attainment of the relevant performance objectives or why the Committee deemed the resultant payout levels appropriate in light of the factors the Committee considers in awarding this element of compensation. Please analyze the payout of these awards in reasonably complete detail.*

Response 6:

The Company advises the Staff that the Company's philosophy with respect to the allocation of the Company's earnings is to reward its stockholders first and then to allocate bonus payments first to its employees and then to senior management and the CEO. The amount of cash incentive bonus payments to be awarded to all executives including the CEO depends upon the achievement of corporate performance in the key areas of revenue growth, operating profit and earnings per share in accordance with internal plan goals. Bonus payments up to 100% of target are based upon the achievement of these internal plan goals. Bonus payments exceeding 100% of target are determined based upon the Company's overachievement of earnings. Individual differences in payments exceeding 100% of target are based on individual performance factors depending on the particular executive's role, as further described in Responses 3 and 7.

In 2006, Mr. Cashman received a cash bonus of \$506,900, or 127% of his target bonus of \$400,000; Ms. Shields received a cash bonus of \$138,200, or 154% of her target bonus of \$90,000; Mr. Fairbanks received a cash bonus of \$184,800, or 148% of his target bonus of \$125,000; Mr. Reid received a cash bonus of \$179,536, or 113% of his target bonus of \$150,000; and Mr. Wheeler received a cash bonus of \$151,250, or 121% of his target bonus of \$125,000. All executives received bonus payments in excess of 100% of their targets for 2006 because of the Company's achievement of the internal plan goals and overachievement of earnings for 2006. The Committee deemed the resultant payout level in excess of 100% of the target for each of the NEOs appropriate because the Company overachieved on its corporate objectives at 102% of revenue, 108% of operating profit and 124% of earnings per share for 2006. Individual differences in bonus payments relative to targets beyond 100% were based on individual performance goals described in Response 7.

Mr. Cashman, Ms. Shields, Mr. Fairbanks, Mr. Reid and Mr. Wheeler also received bonuses in the form of restricted stock and related tax assistance.

Mr. Cashman received 2,147 shares valued at \$105,160 and \$35,046 in tax assistance, Ms. Shields received 614 shares valued at \$30,074 and \$10,023 in tax assistance, Mr. Fairbanks received 614 shares valued at \$30,074 and \$10,023 in tax assistance, Mr. Reid received 521 shares valued at \$25,519 and \$8,504 in tax assistance, and Mr. Wheeler received 521 shares valued at \$25,519 and \$8,504 in tax assistance. Restricted stock was granted because corporate operating profit and earnings per share were overachieved. These stock grants were made to the individual NEOs in the same relative proportion as the November 20, 2006 stock option grants.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Comment 7:

*Although you provide a brief description of how company performance affects annual bonuses, and equity-based awards, you provide minimal analysis of the effect individual performance has on compensation awards despite disclosure throughout that indicates compensation-related decisions are made in connection [with] non-quantitative achievements. Expand your disclosure to provide additional detail and analysis of how individual performance contributed to actual 2006 compensation for the named executive officers. For example, disclose and discuss in greater detail the achievement of the financial and operational goals within a named executive officer's individual area of responsibility. Also expand your disclosure to include a description of the factors the Committee considered in establishing personal objectives for Mr. Cashman. See Item 402(b)(2)(vii) of Regulation S-K.*

Response 7:

The Company advises the Staff that annual bonus payments up to 100% of target for all executives are based on the Company's achievement of its revenue, operating profit and earnings per share internal plan goals. Cash bonus payments above 100% of target are determined based upon the Company's overachievement of earnings on corporate overachievement of earnings, and individual differences in bonus payments above 100% of target for each executive depend on individual performance factors.

Individual goals for Mr. Fairbanks in 2006 included improvements in the development of a scalable, motivated, effective sales organization, forecast accuracy, services development and marketing integration. Mr. Fairbanks achieved these goals in 2006.

Individual goals for Ms. Shields in 2006 included improvements in the organization and staff development, corporate governance, sales operations, business modeling and acquisitions effectiveness. Ms. Shields achieved these goals in 2006.

Individual goals for Mr. Reid in 2006 included improvements in the business unit revenue, expense and contribution margin goals, product development, product management, business unit integration, and development of corporate services strategy. Mr. Reid achieved these goals in 2006.

Individual goals for Mr. Wheeler in 2006 included improvements in the business unit revenue, expense and contribution margin goals, product development, product management, organization and staff development, key function leadership and third party relationship management. Mr. Wheeler achieved these goals in 2006.

Mr. Fairbanks, Ms. Shields, Mr. Reid and Mr. Wheeler received bonus payments for 2006 that exceeded their targets because the company achieved its revenue, operating profit and earnings per share internal plan and overachieved its earnings target, and because of their performance of the individual goals identified above. Bonus payments in excess of 100% of target to Ms. Shields and Mr. Fairbanks also reflect their exceptional performance in connection with the acquisition and integration of Fluent. Mr. Reid's bonus payment in excess of target was also influenced by his involvement with the Fluent integration as well as currency effects because he is paid in Canadian dollars.

Individual goals for Mr. Cashman included achievement of corporate business objectives relating to revenue, profit, cash position and earnings per share. The Committee also considered achievement in the Company's organic growth as well as the quality of the Company's strategic acquisition process and implementation. In particular, the acquisition of Fluent, the largest in the Company's history, provided the basis for several of these objectives, including the finalization of the merger agreement, and the effective integration plans and implementation for the technology, sales, marketing and financial aspects of the business. The Committee also focused on certain organizational development goals in support of the acquisition and the general growth of the Company, such as progress in succession planning, the enhancement of management and organizational development and strengthening and reorganizing of the Company's human resources department. Also considered was the attainment of customer satisfaction goals, as measured by ISO ratings and user survey results, and the continued enhancement of the Company's investor base. Mr. Cashman was successful in achieving these goals in 2006 because the Company exceeded its internal financial plan by 102% of revenue, 108% of operating profit and 124% of earnings per share, ISO and user survey objectives were achieved, and the Committee determined that Mr. Cashman had achieved his individual goals.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Equity Compensation, page 14

Comment 8:

*It is not clear how the Committee determined the amount of option awards that were made to the named executive officers on November 20, 2006. Please provide a complete analysis of the individual factors that you considered in making this award and describe the reasons why the Committee believed the awards were appropriate and fit reasonably within your overall compensation objectives.*

Response 8:

The Company advises the Staff that Response 2 explains how the Committee determined the amount of option awards that were made to the NEOs on November 20, 2006.

Mr. Cashman received a grant of options to purchase 70,000 shares of the Company's common stock, which was significantly more than the other NEOs received, because in his role as CEO he bears more of the responsibility for the Company's performance and has a larger variable compensation component that reflects this greater risk. In determining the option awards for Mr. Cashman in 2006, the Committee considered short and long-term performance, long-term potential and leadership capability, the broader scope of the Company given the Fluent acquisition and future retention incentives. The Committee also reviewed past stock awards and Mr. Cashman's current option holdings. In addition, the Committee utilized the benchmark data from the peer companies listed in the proxy statement in order to target second quarter annual equity value for Mr. Cashman at the mid-point of the range.

Ms. Shields received a grant of options to purchase 20,000 shares of the Company's common stock consistent with competitive benchmarks and an analysis provided by the Company's compensation consultant and in recognition of her exceptional performance in connection with the acquisition and integration of Fluent.

Mr. Fairbanks received a grant of options to purchase 20,000 shares of the Company's common stock consistent with competitive benchmarks and an analysis provided by the Company's compensation consultant and in recognition of the over-achievement of the sales organization and his exceptional performance in connection with the acquisition and integration of Fluent.

Mr. Reid received a grant of options to purchase 17,000 shares of the Company's common stock consistent with competitive benchmarks and an analysis provided by the Company's compensation consultant.

Mr. Wheeler received a grant of options to purchase 17,000 shares of the Company's common stock consistent with competitive benchmarks and an analysis provided by the Company's compensation consultant.

In next year's Definitive 14A, the Company will provide more detail and clarity consistent with the disclosure set forth in this response.

Employment, Severance and Change-in-Control Agreements, page 7

Comment 9:

*Please describe and explain how the appropriate payment and benefit levels are determined under the various circumstances that trigger payments or provision of benefits under the employment and severance agreements and change of control agreements. Also, in the Compensation Discussion and Analysis discuss how these arrangements fit into your overall compensation objectives and affect the decisions you made regarding other compensation elements and the rationale for decisions made in connection with these arrangements. See paragraphs (b)(1)(v) and (j)(3) of Item 402 of Regulation S-K.*

Response 9:

As disclosed in the Definitive 14A, the Company advises the Staff that only Mr. Smith (one of the Company's directors and the executive chairman), Mr. Cashman and Mr. Reid have severance agreements, which is consistent with the Company's moderately conservative compensation philosophy. The Company has entered into severance agreements with these individuals because of the unique situations of each of these executives. In the case of Mr. Smith, his agreement was entered into in 1994 in connection with his employment with the Company. In the case of Mr. Cashman, his agreement was entered into in 2003 based on competitive and benchmarking data at that time. In the case of Mr. Reid, his agreement reflects his contractual arrangements at the time of the Company's acquisition of CFX in 2003.

Mr. Smith's severance payment and change of control benefits were established in 1994 and reflect competitive conditions at the time of his employment and has been maintained because his role is viewed by the Committee as critical to any change of control that could be advantageous to the Company's stockholders. Mr. Smith's employment agreement provides that he is entitled to severance at the annual rate of \$300,000 and continuation of then-existing benefits in the event Mr. Smith's employment is terminated by the Company without cause or in the event of a constructive termination until the earlier of one year after termination or Mr. Smith's acceptance of other employment.

Mr. Cashman's severance payment and change of control benefits were established in 2003 for retention reasons and because his role is viewed by the Committee as critical to any change of control which could be advantageous to the Company's stockholders. His payments reflect

competitive comparisons made at the time to the following peer companies: Advent Software, Inc., Ansoft Corp., Business Objects SA, Cadence Design Systems Inc., Citrix Systems, Inc., Kronos Inc., Manhattan Associates, Inc., MapInfo Corp., Mentor Graphics Corp., Mercury Interactive, Moldflow Corp., MSC Software Corp., MTS Systems Corp. and Parametric Technology Corp. Mr. Cashman's employment agreement provides for termination benefits equal to two times his combined salary and target bonus and continuation of benefits then in effect if the Company terminates him without cause at any time or demotes or terminates him with or without cause within 180 days following a change of control of the Company, or if he resigns following the Company's material breach of his employment agreement. The Company's compensation consultant reviewed these terms in December 2006 and verified that they were in line with competitive practices.

Mr. Reid's severance payment and change of control benefits reflect the continuation of the terms of the employment agreement existing at the time of the Company's acquisition of CFX. Mr. Reid's employment agreement provides for termination benefits equal to twelve months salary then in effect if the Company terminates him other than for cause at any time or terminates him following a change of control of the Company.

Given their key roles in ensuring the success of any corporate transaction and the relative exposure of their roles following any such transaction, all options held by Mr. Smith, Mr. Cashman and Ms. Shields vest upon a change of control. The value of these benefits were considered appropriate because of the key role of these individuals in any change of control transaction and because this payment would be a function of the success of the Company and the delivery of stockholder value, as reflected in the stock price at the time of the change of control. Assuming a change of control occurred on December 29, 2006 and that the price per share is the closing market price as of that date, Mr. Smith would receive \$534,960, Mr. Cashman would receive \$3,574,250 and Ms. Shields would receive \$207,928, respectively.

Each of Mr. Fairbanks, Mr. Reid and Mr. Wheeler are subject to "double-trigger" vesting, meaning that if within 18 months of a change of control, their respective employment is terminated by the Company without cause or is terminated by such employee after any material adverse modification of his duties, principal employment location or compensation, then all stock options awarded to that employee would become fully vested. These executive officers are subject to double-trigger vesting rather than single-trigger vesting because they are less likely to lose their positions at the Company upon a change of control. Assuming a change of control occurred on December 29, 2006 and that the price per share is the closing market price as of that date, Mr. Fairbanks, Mr. Reid and Mr. Wheeler would receive \$123,638, \$565,860 and \$545,088, respectively.

In addition, each of Mr. Cashman, Ms. Shields, Mr. Fairbanks, Mr. Reid and Mr. Wheeler have stock award grants totaling 2,147, 1,264, 1,264, 771, and 1,171 shares, respectively.

The Committee has implemented these change of control arrangements because it believes that such arrangements are necessary to protect the interests of its senior executives when a potential change of control could affect such executive's job security, authority, or compensation and that these arrangements help the Company recruit and retain executive-level talent. These change of control arrangements also promote the interests of the Company's stockholders by mitigating the senior executives' concerns about such potential matters and thereby assuring that management provides guidance to the Board of Directors and stockholders that is not related to such concerns. The Committee considers these potential payments in tally sheet format when considering

decisions on the compensation elements. In general, change of control agreements are in place to provide appropriate incentive in a change of control situation positive to stockholders. The Committee gives significantly greater weight to Company performance and individual goal achievement than it does to prospective change of control payments in making compensation decisions.

The Company advises the Staff that it will provide more clarity in next year's proxy statement relating to the reasons why it believes such potential payments are appropriate and the circumstances relating to how such potential payments were determined.

Compensation Earned, page 17

Summary Compensation Table, page 17

Comment 10:

*The reference to Management's Discussion and Analysis in footnote (1) is not clear. Please specify the "additional information" that may be found in this section of your Form 10-K and describe how it related to the information provided under paragraph (c) of Item 402 of Regulation S-K.*

Response 10:

The Company advises the Staff that it included the references to Management's Discuss and Analysis in footnote 1 to the Summary Compensation Table to provide an additional reference for the Company's adoption of Statement No. 123R. Given that footnote 3 to the Summary Compensation Table provides the same reference, the Company will delete this reference from future filings.

\* \* \* \* \*

As requested in the Comment Letter, the Company has acknowledged to us, and has granted us the authority to represent to the Commission on behalf of it, that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filings;
- Staff comments or changes to disclosure in response to 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 (617) 570-1633 or by facsimile at (617) 523-1231.

Very truly yours,

/s/ Joseph L. Johnson III

Joseph L. Johnson III, Esq.  
Goodwin Procter LLP

cc: Sheila S. DiNardo  
ANSYS, Inc.