UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

x **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2017

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number: 0-20853

ANSYS, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**04-3219960**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2600 ANSYS Drive, Canonsburg, PA	**15317**
(Address of principal executive offices)	**(Zip Code)**

844-462-6797
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company (as defined in Exchange Act Rule 12b-2). (Check one):

Large accelerated filer	x	Accelerated filer	o
Non-accelerated filer	o	Smaller reporting company	o
Emerging growth company	o		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes o No x

The number of shares of the Registrant's Common Stock, par value $.01 per share, outstanding as of April 30, 2017 was 85,496,576 shares.

ANSYS, INC. AND SUBSIDIARIES

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PART I – UNAUDITED FINANCIAL INFORMATION

Item 1. Financial Statements:

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)	March 31, 2017 (Unaudited)	December 31, 2016 (Audited)
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 866,188**	$ 822,479
Short-term investments	**368**	381
Accounts receivable, less allowance for doubtful accounts of $6,700 and $5,700, respectively	**92,332**	107,192
Other receivables and current assets	**223,181**	239,349
Total current assets	**1,182,069**	1,169,401
Property and equipment, net	**54,513**	54,677
Goodwill	**1,340,391**	1,337,215
Other intangible assets, net	**164,112**	172,619
Other long-term assets	**19,122**	24,287
Deferred income taxes	**34,486**	42,327
Total assets	**$ 2,794,693**	$ 2,800,526
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	**$ 4,839**	$ 7,395
Accrued bonuses and commissions	**21,005**	49,487
Accrued income taxes	**6,688**	5,263
Other accrued expenses and liabilities	**81,486**	73,676
Deferred revenue	**414,708**	403,279
Total current liabilities	**528,726**	539,100
Long-term liabilities:		
Deferred income taxes	**2,227**	2,259
Other long-term liabilities	**52,295**	50,762
Total long-term liabilities	**54,522**	53,021
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $.01 par value; 2,000,000 shares authorized; zero shares issued or outstanding	**—**	—
Common stock, $.01 par value; 300,000,000 shares authorized; 93,236,023 shares issued	**932**	932
Additional paid-in capital	**853,478**	883,010
Retained earnings	**2,120,971**	2,057,665
Treasury stock, at cost: 7,786,800 and 7,548,188 shares, respectively	**(713,853)**	(675,550)
Accumulated other comprehensive loss	**(50,083)**	(57,652)
Total stockholders' equity	**2,211,445**	2,208,405
Total liabilities and stockholders' equity	**$ 2,794,693**	$ 2,800,526

The accompanying notes are an integral part of the condensed consolidated financial statements.

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

(in thousands, except per share data)	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Revenue:		
Software licenses	**$ 141,908**	$ 126,051
Maintenance and service	**111,497**	99,855
Total revenue	**253,405**	225,906
Cost of sales:		
Software licenses	**9,277**	6,738
Amortization	**8,936**	9,511
Maintenance and service	**18,818**	19,036
Total cost of sales	**37,031**	35,285
Gross profit	**216,374**	190,621
Operating expenses:		
Selling, general and administrative	**73,417**	57,769
Research and development	**54,378**	44,672
Amortization	**3,107**	3,158
Total operating expenses	**130,902**	105,599
Operating income	**85,472**	85,022
Interest income	**1,249**	950
Other expense, net	**(1,154)**	(194)
Income before income tax provision	**85,567**	85,778
Income tax provision	**22,261**	29,310
Net income	**$ 63,306**	$ 56,468
Earnings per share – basic:		
Earnings per share	**$ 0.74**	$ 0.64
Weighted average shares	**85,456**	88,114
Earnings per share – diluted:		
Earnings per share	**$ 0.73**	$ 0.63
Weighted average shares	**87,224**	90,084

The accompanying notes are an integral part of the condensed consolidated financial statements.

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

(in thousands)	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Net income	**$ 63,306**	$ 56,468
Other comprehensive income:		
Foreign currency translation adjustments	**7,569**	11,071
Comprehensive income	**$ 70,875**	$ 67,539

The accompanying notes are an integral part of the condensed consolidated financial statements.

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(in thousands)	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Cash flows from operating activities:		
Net income	**$ 63,306**	$ 56,468
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	**16,591**	17,432
Deferred income tax expense	**9,291**	8,676
Provision for bad debts	**1,040**	127
Stock-based compensation expense	**10,513**	7,078
Other	**(363)**	(225)
Changes in operating assets and liabilities:		
Accounts receivable	**15,060**	9,860
Other receivables and current assets	**18,203**	29,810
Other long-term assets	**6,046**	(92)
Accounts payable, accrued expenses and current liabilities	**(23,335)**	(32,258)
Accrued income taxes	**1,303**	14,602
Deferred revenue	**7,176**	5,387
Other long-term liabilities	**1,062**	(6,142)
Net cash provided by operating activities	**125,893**	110,723
Cash flows from investing activities:		
Acquisitions, net of cash acquired	**(5,864)**	—
Capital expenditures	**(4,057)**	(2,695)
Other investing activities	**(964)**	4
Net cash used in investing activities	**(10,885)**	(2,691)
Cash flows from financing activities:		
Purchase of treasury stock	**(100,352)**	(42,684)
Restricted stock withholding taxes paid in lieu of issued shares	**(8,480)**	(4,752)
Contingent consideration payments	**—**	(1,048)
Proceeds from shares issued for stock-based compensation	**30,498**	10,136
Other financing activities	**—**	(1)
Net cash used in financing activities	**(78,334)**	(38,349)
Effect of exchange rate fluctuations on cash and cash equivalents	**7,035**	9,584
Net increase in cash and cash equivalents	**43,709**	79,267
Cash and cash equivalents, beginning of period	**822,479**	784,168
Cash and cash equivalents, end of period	**$ 866,188**	$ 863,435
Supplemental disclosures of cash flow information:		
Income taxes paid	**$ 2,376**	$ 6,037
Interest paid	**$ 1**	$ 435

The accompanying notes are an integral part of the condensed consolidated financial statements.

ANSYS, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
March 31, 2017
(Unaudited)

1. Organization

ANSYS, Inc. (hereafter the "Company" or "ANSYS") develops and globally markets engineering simulation software and technologies widely used by engineers, designers, researchers and students across a broad spectrum of industries and academia, including aerospace and defense, automotive, industrial equipment, electronics, biomedical, energy, materials and chemical processing, and semiconductors.

As defined by the accounting guidance for segment reporting, the Company operates as one segment.

Given the integrated approach to the multi-discipline problem-solving needs of the Company's customers, a single sale of software may contain components from multiple product areas and include combined technologies. The Company also has a multi-year product and integration strategy that will result in new, combined products or changes to the historical product offerings. As a result, it is impracticable for the Company to provide accurate historical or current reporting among its various product lines.

2. Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared by ANSYS in accordance with accounting principles generally accepted in the United States for interim financial information for commercial and industrial companies and the instructions to the Quarterly Report on Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, the accompanying statements do not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements. The accompanying condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements (and notes thereto) included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The condensed consolidated December 31, 2016 balance sheet presented is derived from the audited December 31, 2016 balance sheet included in the most recent Annual Report on Form 10-K. In the opinion of management, all adjustments considered necessary for a fair presentation of the financial statements have been included, and all adjustments are of a normal and recurring nature. Operating results for the three months ended March 31, 2017 are not necessarily indicative of the results that may be expected for any future period.

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of highly liquid investments such as deposits held at major banks and money market funds. Cash equivalents are carried at cost, which approximates fair value. The Company’s cash and cash equivalent balances comprise the following:

	March 31, 2017		December 31, 2016	
(in thousands, except percentages)	**Amount**	**% of Total**	**Amount**	**% of Total**
Cash accounts	**$ 511,200**	**59.0**	$ 488,504	59.4
Money market funds	**354,988**	**41.0**	333,975	40.6
Total	**$ 866,188**		$ 822,479	

The Company's money market fund balances are held in various funds of a single issuer.

3. Other Receivables and Current Assets

The Company's other receivables and current assets comprise the following balances:

(in thousands)	March 31, 2017	December 31, 2016
Receivables related to unrecognized revenue	**$ 186,512**	$ 199,119
Income taxes receivable, including overpayments and refunds	**9,512**	15,718
Prepaid expenses and other current assets	**27,157**	24,512
Total other receivables and current assets	**$ 223,181**	$ 239,349

Receivables for unrecognized revenue represent the current portion of billings made for annual lease licenses and software maintenance that have not yet been recognized as revenue.

4. Earnings Per Share

Basic earnings per share ("EPS") amounts are computed by dividing earnings by the weighted average number of common shares outstanding during the period. Diluted EPS amounts assume the issuance of common stock for all potentially dilutive equivalents outstanding. To the extent stock options are anti-dilutive, they are excluded from the calculation of diluted EPS.

The details of basic and diluted EPS are as follows:

	Three Months Ended	
(in thousands, except per share data)	March 31, 2017	March 31, 2016
Net income	**$ 63,306**	$ 56,468
Weighted average shares outstanding – basic	**85,456**	88,114
Dilutive effect of stock plans	**1,768**	1,970
Weighted average shares outstanding – diluted	**87,224**	90,084
Basic earnings per share	**$ 0.74**	$ 0.64
Diluted earnings per share	**$ 0.73**	$ 0.63
Anti-dilutive shares	**309**	287

5. Goodwill and Intangible Assets

The Company's intangible assets and estimated useful lives are classified as follows:

	March 31, 2017		December 31, 2016	
(in thousands)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Finite-lived intangible assets:				
Developed software and core technologies (3 – 11 years)	**$ 341,377**	**$ (280,557)**	$ 338,594	$ (275,130)
Customer lists and contract backlog (5 – 15 years)	**161,728**	**(92,928)**	159,549	(88,414)
Trade names (2 – 10 years)	**128,000**	**(93,865)**	127,952	(90,289)
Total	**$ 631,105**	**$ (467,350)**	$ 626,095	$ (453,833)
Indefinite-lived intangible asset:				
Trade name	**$ 357**		$ 357	

Amortization expense for the intangible assets reflected above was $12.0 million and $12.7 million for the three months ended March 31, 2017 and 2016, respectively.

As of March 31, 2017, estimated future amortization expense for the intangible assets reflected above is as follows:

(in thousands)	
Remainder of 2017	$ 36,079
2018	35,099
2019	21,844
2020	20,873
2021	16,706
2022	12,161
Thereafter	20,993
Total intangible assets subject to amortization	163,755
Indefinite-lived trade name	357
Other intangible assets, net	**$ 164,112**

The changes in goodwill during the three months ended March 31, 2017 and 2016 were as follows:

(in thousands)	**2017**	**2016**
Beginning balance – January 1	**$ 1,337,215**	$ 1,332,348
Acquisition	**2,586**	—
Currency translation	**590**	1,781
Ending balance – March 31	**$ 1,340,391**	$ 1,334,129

During the first quarter of 2017, the Company completed the annual impairment test for goodwill and the indefinite-lived intangible asset and determined that these assets had not been impaired as of the test date, January 1, 2017. No other events or circumstances changed during the three months ended March 31, 2017 that would indicate that the fair values of the Company's reporting unit and indefinite-lived intangible asset are below their carrying amounts.

6. Fair Value Measurement

The valuation hierarchy for disclosure of assets and liabilities reported at fair value prioritizes the inputs for such valuations into three broad levels:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; or
- Level 3: unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value.

A financial asset's or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The following tables provide the assets and liabilities carried at fair value and measured on a recurring basis:

(in thousands)	March 31, 2017	Fair Value Measurements at Reporting Date Using: Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	**$ 354,988**	**$ 354,988**	**$ —**	**$ —**
Short-term investments	**$ 368**	**$ —**	**$ 368**	**$ —**
Deferred compensation plan investments	**$ 994**	**$ 994**	**$ —**	**$ —**

(in thousands)	December 31, 2016	Fair Value Measurements at Reporting Date Using: Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	$ 333,975	$ 333,975	$ —	$ —
Short-term investments	$ 381	$ —	$ 381	$ —
Deferred compensation plan investments	$ 459	$ 459	$ —	$ —

The cash equivalents in the preceding tables represent money market funds.

The short-term investments in the preceding tables represent deposits held by certain foreign subsidiaries of the Company. The deposits have fixed interest rates with maturity dates ranging from three months to one year.

The deferred compensation plan investments in the preceding tables represent trading securities held in a rabbi trust for the benefit of the non-affiliate independent directors. These securities consist of mutual funds traded in an active market with quoted prices. As a result, the plan assets were classified as Level 1 in the fair value hierarchy. The plan assets are recorded within other long-term assets on the Company's condensed consolidated balance sheets.

The carrying values of cash, accounts receivable, accounts payable, accrued expenses, other accrued liabilities and short-term obligations approximate their fair values because of their short-term nature.

7. Geographic Information

Revenue to external customers is attributed to individual countries based upon the location of the customer. Revenue by geographic area is as follows:

(in thousands)	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
United States	**$ 100,819**	$ 85,377
Japan	**31,438**	27,855
Germany	**22,692**	23,367
South Korea	**13,676**	11,891
France	**13,512**	11,714
Canada	**3,357**	3,383
Other European	**33,534**	33,989
Other international	**34,377**	28,330
Total revenue	**$ 253,405**	$ 225,906

Property and equipment by geographic area is as follows:

(in thousands)	March 31, 2017	December 31, 2016
United States	**$ 43,945**	$ 43,810
Europe	**4,676**	4,753
India	**3,112**	3,033
Other international	**2,780**	3,081
Total property and equipment, net	**$ 54,513**	$ 54,677

8. Stock-Based Compensation

Total stock-based compensation expense and its net impact on basic and diluted earnings per share are as follows:

	Three Months Ended	
(in thousands, except per share data)	March 31, 2017	March 31, 2016
Cost of sales:		
Software licenses	**$ 250**	$ 155
Maintenance and service	**426**	367
Operating expenses:		
Selling, general and administrative	**5,956**	2,924
Research and development	**3,881**	3,632
Stock-based compensation expense before taxes	**10,513**	7,078
Related income tax benefits	**(10,421)**	(2,043)
Stock-based compensation expense, net of taxes	**$ 92**	$ 5,035
Net impact on earnings per share:		
Basic earnings per share	**$ —**	$ (0.06)
Diluted earnings per share	**$ —**	$ (0.06)

As a result of new accounting guidance further discussed in Note 12, the three months ended March 31, 2017 related income tax benefits above include $7.0 million of excess tax benefits that in prior years had been recorded to additional paid-in capital. If such tax benefits were excluded, the impact on both basic and diluted earnings per share would have been $0.08.

9. Stock Repurchase Program

Under the Company's stock repurchase program, the Company repurchased shares as follows:

	Three Months Ended	
(in thousands, except per share data)	March 31, 2017	March 31, 2016
Number of shares repurchased	**1,000**	500
Average price paid per share	**$ 100.35**	$ 85.37
Total cost	**$ 100,352**	$ 42,684

In February 2017, the Company's Board of Directors increased the number of shares authorized for repurchase to a total of 5.0 million shares under the stock repurchase program. As of March 31, 2017, 4.5 million shares remained available for repurchase under the program.

10. Restructuring

During the fourth quarter of 2016, the Company initiated workforce realignment activities to reallocate resources to align with the Company's future strategic plans. The Company incurred related restructuring charges as follows:

(in thousands)	Gross		Net of Tax	
Q4 2016	$	3,419	$	2,355
Q1 2017	$	9,273	$	6,176
Total restructuring charges	**$**	**12,692**	**$**	**8,531**

The restructuring charges are included in the presentation of cost of software licenses; cost of maintenance and service; research and development expense; and selling, general and administrative expense. As of March 31, 2017, $6.8 million of the charges incurred to date remains unpaid. The Company expects to incur additional charges of $2.0 million - $4.0 million, or $1.3 million - $2.8 million net of tax, primarily during the second quarter of 2017.

11. Contingencies and Commitments

The Company is subject to various investigations, claims and legal proceedings that arise in the ordinary course of business, including commercial disputes, labor and employment matters, tax audits, alleged infringement of intellectual property rights and other matters. In the opinion of the Company, the resolution of pending matters is not expected to have a material adverse effect on the Company’s consolidated results of operations, cash flows or financial position. However, each of these matters is subject to various uncertainties and it is possible that an unfavorable resolution of one or more of these proceedings could materially affect the Company’s results of operations, cash flows or financial position.

An Indian subsidiary of the Company has several service tax audits pending that have resulted in formal inquiries being received on transactions through mid-2012. The Company could incur tax charges and related liabilities, including those related to the service tax audit case, of approximately $7 million. The service tax issues raised in the Company’s notices and inquiries are very similar to the case, M/s Microsoft Corporation (I) (P) Ltd. Vs Commissioner of Service Tax, New Delhi, wherein the Delhi Customs, Excise and Service Tax Appellate Tribunal (CESTAT) has passed a favorable ruling to Microsoft. The Company can provide no assurances on whether the Microsoft case’s favorable ruling will be challenged in higher courts or on the impact that the present Microsoft case’s decision will have on the Company’s cases. The Company is uncertain as to when these service tax matters will be concluded.

A French subsidiary of the Company received notice that the French taxing authority rejected the Company's 2012 research and development credit. The Company has contested the decision. However, if the Company does not receive a favorable outcome, it could incur charges of approximately $0.8 million. In addition, an unfavorable outcome could result in the authorities reviewing or rejecting $3.8 million of similar research and development credits for 2013 through the current quarter that are currently reflected as an asset. The Company can provide no assurances on the timing or outcome of this matter.

The Company sells software licenses and services to its customers under proprietary software license agreements. Each license agreement contains the relevant terms of the contractual arrangement with the customer, and generally includes certain provisions for indemnifying the customer against losses, expenses and liabilities from damages that are incurred by or awarded against the customer in the event the Company’s software or services are found to infringe upon a patent, copyright or other proprietary right of a third party. To date, the Company has not had to reimburse any of its customers for any losses related to these indemnification provisions and no material claims asserted under these indemnification provisions are outstanding as of March 31, 2017. For several reasons, including the lack of prior material indemnification claims, the Company cannot determine the maximum amount of potential future payments, if any, related to such indemnification provisions.

12. New Accounting Guidance

Revenue from contracts with customers: In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (ASU 2014-09). ASU 2014-09 supersedes most current revenue recognition guidance, including industry-specific guidance. Previous guidance requires an entity to recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price to the buyer is fixed or determinable, and collectibility is reasonably assured. Under the new guidance, an entity is required to evaluate revenue recognition by identifying a contract with a customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations in the contract and recognizing revenue when (or as) the entity satisfies a performance obligation. The standard also requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, delayed the effective date of ASU 2014-09 to annual periods beginning after December 15, 2017, including interim periods within that reporting period. This standard is effective for the Company on January 1, 2018. Entities have the option of using a full retrospective, cumulative effect or modified approach to adopt ASU 2014-09. The Company expects to utilize the full retrospective method to restate each prior period presented upon adoption.

This update will impact the timing and amounts of revenue recognized, which will result in increased volatility in the amount of revenue recognized each period. The Company's preliminary assessment is that the adoption of this standard will have a material impact on the Company’s consolidated financial statements. While the Company expects that the standard will impact various elements of its business, the Company's initial assessment is that the most significant impact will be on the recognition of revenue related to software lease licenses. These licenses include the right to use the software and PCS over the term of the license. These licenses are currently recognized as revenue ratably over the term of the license. Under the new standard and the existing interpretations, the Company expects to recognize a meaningful portion of the revenue related to these licenses up-front at the time the license is delivered. However, the Company's preliminary assessment could change as additional interpretations relating to the new standard are provided and as issues identified by software industry groups are addressed.

Business combinations: In January 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* (ASU 2017-01). This update narrows the definition of a business. If substantially all the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, the acquiree is not a business. The update also requires a business to include an input and a substantive process that significantly contributes to the ability to create outputs. This definition is expected to reduce the number of acquisitions accounted for as business combinations, which will impact the accounting treatment of certain items, including the accounting treatment of contingent consideration and transaction expenses. ASU 2017-01 is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted and the update will be applied prospectively. The effect of the implementation will depend upon the nature of the Company's future acquisitions, if any. Historically, the Company has entered into acquisitions that would meet the definition of a business under ASU 2017-01.

Income taxes: In October 2016, the FASB issued Accounting Standards Update No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* (ASU 2016-16). Previous guidance requires the tax effects from intra-entity asset transfers to be deferred until that asset is sold to a third party or recovered through use. ASU 2016-16 eliminates this deferral for all intra-entity asset transfers other than inventory. The standard is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted and a modified retrospective transition is required upon adoption. The Company plans to adopt ASU 2016-16 beginning in 2018 and expects adoption to have an immaterial effect, if any, on its financial results.

Credit losses: In June 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13). Previous guidance requires the allowance for doubtful accounts to be estimated based on an incurred loss model, which considers past and current conditions. ASU 2016-13 requires companies to use an expected loss model that also considers reasonable and supportable forecasts of future conditions. ASU 2016-13 is effective for annual periods beginning after December 15, 2019, including interim periods within that reporting period. Early adoption is permitted for annual periods beginning after December 15, 2018, including interim periods within that reporting period. The standard requires a cumulative-effect adjustment to the statement of financial position as of the beginning of the first reporting period in which the guidance is effective. The Company is currently evaluating the effect that this update will have on its financial results upon adoption.

Employee share-based payment accounting: In March 2016, the FASB issued Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (ASU 2016-09). This update includes various areas for simplification related to aspects of the accounting for share-based payment transactions. One simplification is that the tax effects of share-based payment settlements will be recorded in the income statement. Prior guidance required tax windfalls at settlement, and tax shortfalls to the extent of previous windfalls, to be recorded in equity. This provision was required to be adopted prospectively. These tax effects were reported retrospectively as operating cash flows according to the new guidance as opposed to financing cash flows in the prior guidance.

The Company adopted the guidance during the quarter ended March 31, 2017. The primary impact of adoption was the recognition of excess tax benefits in the Company's provision for income taxes rather than paid-in capital, which resulted in the recognition of excess tax benefits in the provision for income taxes of $7.0 million during the quarter ended March 31, 2017. This increased diluted EPS by $0.08. In addition, the Company applied the change in classification of such benefits on the consolidated statements of cash flows on a retrospective basis resulting in an increase to both net cash provided by operating activities and net cash used in financing activities of $2.1 million for the three months ended March 31, 2016.

Leases: In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases (Topic 842)* (ASU 2016-02). ASU 2016-02 requires virtually all leases, other than leases that meet the definition of a short-term lease, to be recorded on the balance sheet with a right-of-use asset and corresponding lease liability. As a result, the Company's assets and liabilities will increase upon adoption. Leases will be classified as either operating or finance leases based on certain criteria. This classification will determine the timing and presentation of expenses on the income statement, as well as the presentation of related cash flows. The standard is effective for annual periods beginning after December 15, 2018, including interim periods within that reporting period. Early adoption is permitted and a modified retrospective transition is required upon adoption. The Company does not expect to early adopt and is currently evaluating the effect that this update will have on its financial results upon adoption.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
ANSYS, Inc.
Canonsburg, Pennsylvania

We have reviewed the accompanying condensed consolidated balance sheet of ANSYS, Inc. and subsidiaries (the "Company") as of March 31, 2017, and the related condensed consolidated statements of income, comprehensive income, and cash flows for the three-month periods ended March 31, 2017 and 2016. These interim financial statements are the responsibility of the Company's management.

We conducted our reviews in accordance with the standards of the Public Company Accounting Oversight Board (United States). A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States), the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our reviews, we are not aware of any material modifications that should be made to such condensed consolidated interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of ANSYS, Inc. and subsidiaries as of December 31, 2016, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for the year then ended (not presented herein); and in our report dated February 23, 2017, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet as of December 31, 2016 is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

/s/ Deloitte & Touche LLP
Pittsburgh, Pennsylvania
May 4, 2017

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Overview:

The Company's GAAP results for the three months ended March 31, 2017 reflect growth in revenue of 12.2%, operating income of 0.5% and diluted earnings per share of 15.9% as compared to the three months ended March 31, 2016. The Company experienced higher revenue in 2017 primarily from growth in lease licenses and maintenance. The Company also experienced increased operating expenses primarily due to increased personnel costs and costs associated with workforce realignment activities. Diluted earnings per share was significantly impacted by $7.0 million of excess tax benefits recorded within the income tax provision that in the prior year were reflected within additional paid-in capital.

The Company's non-GAAP results for the three months ended March 31, 2017 reflect growth in revenue of 12.2%, operating income of 12.1% and diluted earnings per share of 15.6% as compared to the three months ended March 31, 2016. The non-GAAP results exclude the income statement effects of the acquisition accounting adjustment to deferred revenue, stock-based compensation, acquisition-related amortization of intangible assets, restructuring charges and transaction costs related to business combinations. For further disclosure regarding non-GAAP results, see the section titled "Non-GAAP Results" immediately preceding the section titled "Liquidity and Capital Resources."

The Company's comparative financial results were impacted by fluctuations in the U.S. Dollar during the three months ended March 31, 2017 as compared to the three months ended March 31, 2016. The impacts on the Company's revenue and operating income due to currency fluctuations are reflected in the table below.

The amounts in the table represent the difference between the actual 2017 results and the same results calculated at the 2016 exchange rates. Amounts in brackets indicate a net adverse impact from currency fluctuations.

	Three Months Ended March 31, 2017	
(in thousands)	GAAP	Non-GAAP
Revenue	$ (1,796)	$ (1,796)
Operating income	$ (28)	$ (54)

In constant currency[1], the Company's growth rates were as follows:

	Three Months Ended March 31, 2017	
	GAAP	Non-GAAP
Revenue	13.0%	13.0%
Operating income	0.6%	12.2%

[1] Constant currency amounts exclude the effect of foreign currency fluctuations on the reported results. To present this information, the results for 2017 for entities whose functional currency is a currency other than the U.S. Dollar were converted to U.S. Dollars at rates that were in effect for 2016, rather than the actual exchange rates in effect for 2017.

The Company’s financial position includes $866.6 million in cash and short-term investments, and working capital of $653.3 million as of March 31, 2017.

During the three months ended March 31, 2017, the Company repurchased 1.0 million shares for $100.4 million at an average price of $100.35 per share.

Business:

On August 29, 2016, the Board of Directors (the “Board”) of the Company appointed Dr. Ajei S. Gopal, a member of the Board, as President and Chief Operating Officer of the Company, effective as of such date. In addition, effective as of January 1, 2017, Dr. Gopal assumed the role of Chief Executive Officer of the Company and Mr. James E. Cashman III became Chairman of the Board. In connection therewith, Ronald W. Hovsepian became the Board’s Lead Independent Director.

ANSYS develops and globally markets engineering simulation software and services widely used by engineers, designers, researchers and students across a broad spectrum of industries and academia, including aerospace and defense, automotive, industrial equipment, electronics, biomedical, energy, materials and chemical processing, and semiconductors. Headquartered south of Pittsburgh, Pennsylvania, the Company employed approximately 2,800 people as of March 31, 2017. ANSYS focuses on the development of open and flexible solutions that enable users to analyze designs directly on the desktop, providing a common platform for fast, efficient and cost-conscious product development, from design concept to final-stage testing and validation. The Company distributes its suite of simulation technologies through a global network of independent channel partners and direct sales offices in strategic, global locations. It is the Company’s intention to continue to maintain this hybrid sales and distribution model.

The Company licenses its technology to businesses, educational institutions and governmental agencies. Growth in the Company’s revenue is affected by the strength of global economies, general business conditions, currency exchange rate fluctuations, customer budgetary constraints and the competitive position of the Company’s products. The Company believes that the features, functionality and integrated multiphysics capabilities of its software products are as strong as they have ever been. However, the software business is generally characterized by long sales cycles. These long sales cycles increase the difficulty of predicting sales for any particular quarter. The Company makes many operational and strategic decisions based upon short- and long-term sales forecasts that are impacted not only by these long sales cycles but also by current global economic conditions. As a result, the Company believes that its overall performance is best measured by fiscal-year results rather than by quarterly results.

The Company’s management considers the competition and price pressure that it faces in the short- and long-term by focusing on expanding the breadth, depth, ease of use and quality of the technologies, features, functionality and integrated multiphysics capabilities of its software products as compared to its competitors; investing in research and development to develop new and innovative products and increase the capabilities of its existing products; supplying new products and services; focusing on customer needs, training, consulting and support; and enhancing its distribution channels. From time to time, the Company also considers acquisitions to supplement its global engineering talent, product offerings and distribution channels.

Geographic Trends:

The following table presents the Company's geographic constant currency revenue growth, based upon the customer location, during the three months ended March 31, 2017 as compared to the three months ended March 31, 2016:

	Three Months Ended March 31, 2017
North America	**17.3%**
Europe	**5.3%**
Asia-Pacific	**15.0%**
Total	**13.0%**

In North America, the Company's performance was primarily driven by the electronics, semiconductors, aerospace and defense, and automotive industries. The automotive manufacturers continued their strong investments in developing advanced technologies for connected, autonomous and electric vehicles. The performance within aerospace and defense was driven by engine manufacturers, growing demand from the commercial space sector and the commercial aerospace supply chain. While the renewable energy sector remains strong, it was mostly offset by the continuing negative impact of the oil and gas sector. The Company continued to experience increased interest from leading customers to expand their enterprise deployments of the Company's platform and technologies. This is being driven by their own internal initiatives to accelerate the pace of innovation and to increase information technology efficiencies within their global organizations and supply chains.

In Europe, France led the region while the Company's business in Germany reported mixed results and the Company continued to experience challenges in the United Kingdom. The Company has taken actions to improve sales execution, build the sales pipeline and update the go-to-market strategy in the region. These actions included, but were not limited to, senior sales leadership changes, a new organizational structure and a greater emphasis on partnering with the indirect channel. Qualitatively, the industry contributions in Europe were split among the automotive, electronics, aerospace and defense, and energy industries. The impact of the low oil price has had less of an impact on Europe, as reductions in oil and gas revenue in the United Kingdom and Nordic regions were more than offset by gains elsewhere in nuclear and power generation.

The results in Asia-Pacific were driven by growth in China, Japan, India, Taiwan and South Korea. From an industry perspective, electronics was by far the strongest sector in Asia-Pacific, pivoting towards connected and autonomous vehicles, data center technologies and the Internet of Things. Due to the emergence of a domestic industrial equipment sector in the region, the Company continued to experience growth in the adoption of the broader portfolio of products to include integrated multiphysics and control software. The automotive industry, particularly in China and India, is very strong and companies are investing heavily in research and development, particularly in technologies to support autonomous driving, connectivity, shared mobility and safety initiatives.

The Company continues to focus on a number of sales improvement activities across the geographic regions, including sales hiring, pipeline building, productivity initiatives and customer engagement activities.

Note About Forward-Looking Statements

The following discussion should be read in conjunction with the accompanying unaudited condensed consolidated financial statements and notes thereto for the three months ended March 31, 2017, and with the Company’s audited consolidated financial statements and notes thereto for the year ended December 31, 2016 filed on the Annual Report on Form 10-K with the Securities and Exchange Commission. The Company’s discussion and analysis of its financial condition and results of operations are based upon the Company’s condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, the Company evaluates its estimates, including those related to the fair values of stock awards, bad debts, contract revenue, acquired deferred revenue, the valuation of goodwill and other intangible assets, deferred compensation, income taxes, uncertain tax positions, tax valuation reserves, useful lives for depreciation and amortization, and contingencies and litigation. The Company bases its estimates on historical experience, market experience, estimated future cash flows and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily available from other sources. Actual results may differ from these estimates.

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including, but not limited to, the following statements, as well as statements that contain such words as "anticipates", "intends", "believes", "plans" and other similar expressions:

- The Company's expectations regarding future restructuring charges.
- The Company's assessment of the ultimate liabilities arising from various investigations, claims and legal proceedings.
- The Company's expectations regarding the outcome of its service tax audit cases.
- The Company's expectations regarding the realization of the French research and development credits.
- The Company's expectations regarding future claims related to indemnification obligations.
- The Company's expectations regarding the impacts of new accounting guidance.
- The Company's intentions regarding its hybrid sales and distribution model.
- The Company's statement regarding the strength of the features, functionality and integrated multiphysics capabilities of its software products.
- The Company's belief that its overall performance is best measured by fiscal-year results rather than by quarterly results.
- The Company's expectations regarding the adverse impact on license and maintenance revenue growth in the near term due to an increased customer preference for time-based licenses.
- The Company's estimates regarding the expected impact on reported revenue related to the acquisition accounting treatment of deferred revenue.
- The Company's expectation that it will continue to make targeted investments in its global sales and marketing organization and its global business infrastructure to enhance and support its revenue-generating activities.
- The Company's intentions related to investments in research and development, particularly as it relates to expanding the ease of use and capabilities of its broad portfolio of simulation software products.
- The Company's intention to repatriate previously taxed earnings and to reinvest all other earnings of its non-U.S. subsidiaries.
- The Company's plans related to future capital spending.
- The sufficiency of existing cash and cash equivalent balances to meet future working capital and capital expenditure requirements.
- The Company's belief that the best uses of its excess cash are to invest in the business and to repurchase stock in order to both offset dilution and return capital to stockholders, in excess of its requirements, with the goal of increasing stockholder value.
- The Company's intentions related to investments in complementary companies, products, services and technologies.
- The Company's expectation that changes in currency exchange rates will affect the Company's financial position, results of operations and cash flows.

Forward-looking statements should not be unduly relied upon because they involve known and unknown risks, uncertainties and other factors, some of which are beyond the Company's control. The Company's actual results could differ materially from those set forth in forward-looking statements. Certain factors, among others, that might cause such a difference include risks and uncertainties disclosed in the Company's most recent Annual Report on Form 10-K, Part I, Item 1A. Information regarding new risk factors or material changes to these risk factors have been included within Part II, Item 1A of this Quarterly Report on Form 10-Q.

Results of Operations

Three Months Ended March 31, 2017 Compared to Three Months Ended March 31, 2016

Revenue:

	Three Months Ended March 31,		Change	
(in thousands, except percentages)	2017	2016	Amount	%
Revenue:				
Lease licenses	**$ 93,634**	$ 81,639	$ 11,995	14.7
Perpetual licenses	**48,274**	44,412	3,862	8.7
Software licenses	**141,908**	126,051	15,857	12.6
Maintenance	**104,406**	93,618	10,788	11.5
Service	**7,091**	6,237	854	13.7
Maintenance and service	**111,497**	99,855	11,642	11.7
Total revenue	**$ 253,405**	$ 225,906	$ 27,499	12.2

The Company's revenue in the quarter ended March 31, 2017 increased 12.2% as compared to the quarter ended March 31, 2016, while revenue grew 13.0% in constant currency. The growth rate was favorably impacted by the Company's continued investment in its global sales, support and marketing organizations. Lease license revenue increased 14.7% as compared to the prior-year quarter. Perpetual license revenue, which is derived primarily from new sales during the quarter, increased 8.7% as compared to the prior-year quarter. Annual maintenance contracts that were sold with new perpetual licenses, along with maintenance contracts sold with new perpetual licenses in previous quarters, contributed to maintenance revenue growth of 11.5%.

With respect to revenue, on average for the quarter ended March 31, 2017, the U.S. Dollar was approximately 1.5% stronger, when measured against the Company's primary foreign currencies, than for the quarter ended March 31, 2016. The net overall strengthening resulted in decreased revenue of $1.8 million during the quarter ended March 31, 2017 as compared with the same quarter of 2016. The impact on revenue was primarily driven by $2.1 million and $1.0 million of adverse impact due to a weaker Euro and British Pound, respectively, partially offset by $0.6 million and $0.4 million of favorable impact due to a stronger Japanese Yen and South Korean Won, respectively. The impact on operating income was insignificant.

A substantial portion of the Company's license and maintenance revenue is derived from annual lease and maintenance contracts. These contracts are generally renewed on an annual basis and typically have a high rate of customer renewal. In addition to the recurring revenue base associated with these contracts, a majority of customers purchasing new perpetual licenses also purchase related annual maintenance contracts. As a result of the significant recurring revenue base, the Company's license and maintenance revenue growth rate in any period does not necessarily correlate to the growth rate of new license and maintenance contracts sold during that period. To the extent the rate of customer renewal for lease and maintenance contracts is high, incremental lease contracts, and maintenance contracts sold with new perpetual licenses, will result in license and maintenance revenue growth in constant currency. Conversely, if the rate of renewal for these contracts is adversely affected by economic or other factors, the Company's license and maintenance growth will be adversely affected over the term that the revenue for those contracts would have otherwise been recognized.

The Company has been experiencing an increased interest by some of its larger customers in enterprise agreements that often include longer-term, time-based licenses involving a larger number of the Company's software products. While these arrangements typically involve a higher overall transaction price, the revenue from these contracts is typically deferred and recognized over the period of the contract, resulting in increased deferred revenue and backlog. To the extent these types of contracts replace sales of perpetual licenses, there could be a near-term adverse impact on software license and maintenance revenue growth. The Company is similarly experiencing a shifting preference from perpetual licenses to time-based licenses across a broader spectrum of its customers, particularly in the more mature geographic markets, such as the U.S. and Japan. To the extent this shift continues or becomes more prevalent, the result could be a similar and incremental near-term adverse impact on software license and maintenance revenue growth.

International and domestic revenues, as a percentage of total revenue, were 60.2% and 39.8%, respectively, during the quarter ended March 31, 2017, and 62.2% and 37.8%, respectively, during the quarter ended March 31, 2016. The Company derived 24.4% and 23.5% of its total revenue through the indirect sales channel for the quarters ended March 31, 2017 and 2016, respectively.

In valuing deferred revenue on the balance sheets of the Company's recent acquisitions as of their respective acquisition dates, the Company applied the fair value provisions applicable to the accounting for business combinations, resulting in a reduction of deferred revenue as compared to its historical carrying amount. As a result, the Company's post-acquisition revenue will be less than the sum of what would have otherwise been reported by ANSYS and each acquiree absent the acquisitions. The impact on reported revenue was $0.1 million for both the quarters ended March 31, 2017 and 2016. The expected impacts on reported revenue are $0.4 million and $1.4 million for the quarter ending June 30, 2017 and for the year ending December 31, 2017, respectively.

Deferred Revenue and Backlog:

Deferred revenue consists of billings made or payments received in advance of revenue recognition from software license and maintenance agreements. The deferred revenue on the Company's condensed consolidated balance sheets does not represent the total value of annual or multi-year noncancellable software license and maintenance agreements. The Company's backlog represents installment billings for periods beyond the current quarterly billing cycle and customer orders received but not processed. The Company's deferred revenue and backlog as of March 31, 2017 and December 31, 2016 consist of the following:

	Balance at March 31, 2017		
(in thousands)	Total	Current	Long-Term
Deferred revenue	**$ 432,508**	**$ 414,708**	**$ 17,800**
Backlog	**220,088**	**78,417**	**141,671**
Total	**$ 652,596**	**$ 493,125**	**$ 159,471**

	Balance at December 31, 2016		
(in thousands)	Total	Current	Long-Term
Deferred revenue	$ 415,846	$ 403,279	$ 12,567
Backlog	221,994	64,361	157,633
Total	$ 637,840	$ 467,640	$ 170,200

Revenue associated with deferred revenue and backlog that will be recognized in the subsequent twelve months is classified as current in the table above.

Cost of Sales and Gross Profit:

The table below reflects the Company's operating results as presented on the condensed consolidated statements of income, which are inclusive of foreign currency translation impacts. Amounts included in the discussion that follows are provided in constant currency. The impact, where material, of foreign exchange translation on each expense line is provided separately.

	Three Months Ended March 31,					
	2017		2016		Change	
(in thousands, except percentages)	Amount	% of Revenue	Amount	% of Revenue	Amount	%
Cost of sales:						
Software licenses	**$ 9,277**	**3.7**	$ 6,738	3.0	$ 2,539	37.7
Amortization	**8,936**	**3.5**	9,511	4.2	(575)	(6.0)
Maintenance and service	**18,818**	**7.4**	19,036	8.4	(218)	(1.1)
Total cost of sales	**37,031**	**14.6**	35,285	15.6	1,746	4.9
Gross profit	**$ 216,374**	**85.4**	$ 190,621	84.4	$ 25,753	13.5

Software Licenses: The increase in the cost of software licenses was primarily due to the following:

- Increased third-party royalties of $1.4 million.
- Restructuring costs of $0.8 million.
- Increased other headcount-related costs of $0.2 million.

Amortization: The decrease in amortization expense was primarily due to a net decrease in the amortization of acquired technology.

Maintenance and Service: The net decrease in maintenance and service costs was primarily due to the following:

- Decreased salaries of $0.9 million, primarily due to a decrease in headcount resulting from a shift in technical personnel to pre-sales activities.
- Cost decrease related to foreign exchange translation of $0.4 million due to a stronger U.S. Dollar.
- Restructuring costs of $0.7 million.
- Increased third-party technical support of $0.4 million.

The improvement in gross profit was a result of the increase in revenue, partially offset by the increase in the related cost of sales.

Operating Expenses:

The table below reflects the Company's operating results as presented on the condensed consolidated statements of income, which are inclusive of foreign currency translation impacts. Amounts included in the discussion that follows are provided in constant currency. The impact, where material, of foreign exchange translation on each expense line is provided separately.

	Three Months Ended March 31,					
	2017		**2016**		**Change**	
(in thousands, except percentages)	**Amount**	**% of Revenue**	**Amount**	**% of Revenue**	**Amount**	**%**
Operating expenses:						
Selling, general and administrative	**$ 73,417**	**29.0**	$ 57,769	25.6	$ 15,648	27.1
Research and development	**54,378**	**21.5**	44,672	19.8	9,706	21.7
Amortization	**3,107**	**1.2**	3,158	1.4	(51)	(1.6)
Total operating expenses	**$ 130,902**	**51.7**	$ 105,599	46.7	$ 25,303	24.0

Selling, General and Administrative: The increase in selling, general and administrative costs was primarily due to the following:

- Increased salaries, incentive compensation and other headcount-related costs of $7.1 million.
- Increased stock-based compensation of $3.1 million.
- Increased consulting costs of $2.3 million.
- Restructuring costs of $1.9 million.
- Increased business travel of $1.0 million.
- Increased bad debt of $0.9 million.

The Company anticipates that it will continue to make targeted investments in its global sales and marketing organization and its global business infrastructure to enhance and support its revenue-generating activities.

Research and Development: The increase in research and development costs was primarily due to the following:

- Restructuring costs of $6.0 million.
- Increased salaries, incentive compensation and other headcount-related costs of $3.6 million.

The Company has traditionally invested significant resources in research and development activities and intends to continue to make investments in expanding the ease of use and capabilities of its broad portfolio of simulation software products.

Interest Income: Interest income for the quarter ended March 31, 2017 was $1.2 million as compared to $1.0 million for the quarter ended March 31, 2016. Interest income increased as a result of an increase in both the Company's average invested cash balances and the average rate of return on those balances.

Other Expense, net: The Company's other expense consists of the following:

	Three Months Ended	
(in thousands)	March 31, 2017	March 31, 2016
Foreign currency losses, net	**$ (1,125)**	$ (107)
Other	**(29)**	(87)
Total other expense, net	**$ (1,154)**	$ (194)

Income Tax Provision: The Company recorded income tax expense of $22.3 million and had income before income taxes of $85.6 million for the quarter ended March 31, 2017. During the quarter ended March 31, 2016, the Company recorded income tax expense of $29.3 million and had income before income taxes of $85.8 million. The effective tax rates were 26.0% and 34.2% for the first quarters of 2017 and 2016, respectively.

The decrease in the effective tax rate from the prior year is primarily due to tax benefits related to stock-based compensation. In the first quarter of 2017, the Company adopted ASU 2016-09, which requires excess tax benefits and deficiencies related to stock-based compensation to be reflected in the income statement as a component of the provision for income taxes. Previously, these tax effects were reflected in stockholders' equity. The Company recognized a $7.0 million tax benefit related to excess tax benefits from stock-based compensation in the first quarter of 2017.

When compared to the federal and state combined statutory rate, the effective tax rates for the quarters ended March 31, 2017 and 2016 were favorably impacted by the domestic manufacturing deduction and research and development credits. The rates were also favorably impacted by the recurring item of lower statutory tax rates in many of the Company's foreign jurisdictions.

Net Income: The Company’s net income in the first quarter of 2017 was $63.3 million as compared to net income of $56.5 million in the first quarter of 2016. Diluted earnings per share was $0.73 in the first quarter of 2017 and $0.63 in the first quarter of 2016. The weighted average shares used in computing diluted earnings per share were 87.2 million and 90.1 million in the first quarters of 2017 and 2016, respectively.

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Non-GAAP Results

The Company provides non-GAAP revenue, non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share as supplemental measures to GAAP regarding the Company's operational performance. These financial measures exclude the impact of certain items and, therefore, have not been calculated in accordance with GAAP. A detailed explanation and a reconciliation of each non-GAAP financial measure to its most comparable GAAP financial measure are described below.

	Three Months Ended														
	March 31, 2017							March 31, 2016							
(in thousands, except percentages and per share data)	As Reported		Adjustments			Non-GAAP Results		As Reported		Adjustments			Non-GAAP Results		
Total revenue	**$**	**253,405**	**$**	**143**	**(1)**	**$**	**253,548**	$	225,906	$	103	(4)	$	226,009	
Operating income		**85,472**		**32,111**	**(2)**		**117,583**		85,022		19,850	(5)		104,872	
Operating profit margin		**33.7%**					**46.4%**		37.6%					46.4%	
Net income	**$**	**63,306**	**$**	**14,183**	**(3)**	**$**	**77,489**	$	56,468	$	12,965	(6)	$	69,433	
Earnings per share – diluted:															
Earnings per share	**$**	**0.73**				**$**	**0.89**	$	0.63				$	0.77	
Weighted average shares		**87,224**					**87,224**		90,084					90,084	

(1) Amount represents the revenue not reported during the period as a result of the acquisition accounting adjustment associated with the accounting for deferred revenue in business combinations.

(2) Amount represents $12.0 million of amortization expense associated with intangible assets acquired in business combinations, $10.5 million of stock-based compensation expense, $9.3 million of restructuring charges, $0.1 million of transaction expenses related to business combinations and the $0.1 million adjustment to revenue as reflected in (1) above.

(3) Amount represents the impact of the adjustments to operating income referred to in (2) above, adjusted for the related income tax impact of $17.9 million.

(4) Amount represents the revenue not reported during the period as a result of the acquisition accounting adjustment associated with the accounting for deferred revenue in business combinations.

(5) Amount represents $12.7 million of amortization expense associated with intangible assets acquired in business combinations, $7.1 million of stock-based compensation expense and the $0.1 million adjustment to revenue as reflected in (4) above.

(6) Amount represents the impact of the adjustments to operating income referred to in (5) above, adjusted for the related income tax impact of $6.9 million.

Non-GAAP Measures

Management uses non-GAAP financial measures (a) to evaluate the Company's historical and prospective financial performance as well as its performance relative to its competitors, (b) to set internal sales targets and spending budgets, (c) to allocate resources, (d) to measure operational profitability and the accuracy of forecasting, (e) to assess financial discipline over operational expenditures and (f) as an important factor in determining variable compensation for management and its employees. In addition, many financial analysts that follow the Company focus on and publish both historical results and future projections based on non-GAAP financial measures. The Company believes that it is in the best interest of its investors to provide this information to analysts so that they accurately report the non-GAAP financial information. Moreover, investors have historically requested and the Company has historically reported these non-GAAP financial measures as a means of providing consistent and comparable information with past reports of financial results.

While management believes that these non-GAAP financial measures provide useful supplemental information to investors, there are limitations associated with the use of these non-GAAP financial measures. These non-GAAP financial measures are not prepared in accordance with GAAP, are not reported by all of the Company's competitors and may not be directly comparable to similarly titled measures of the Company's competitors due to potential differences in the exact method of calculation. The Company compensates for these limitations by using these non-GAAP financial measures as supplements to GAAP financial measures and by reviewing the reconciliations of the non-GAAP financial measures to their most comparable GAAP financial measures.

The adjustments to these non-GAAP financial measures, and the basis for such adjustments, are outlined below:

Acquisition accounting for deferred revenue and its related tax impact. Historically, the Company has consummated acquisitions in order to support its strategic and other business objectives. In accordance with the fair value provisions applicable to the accounting for business combinations, acquired deferred revenue is often recorded on the opening balance sheet at an amount that is lower than the historical carrying value. Although this acquisition accounting requirement has no impact on the Company's business or cash flow, it adversely impacts the Company's reported GAAP revenue in the reporting periods following an acquisition. In order to provide investors with financial information that facilitates comparison of both historical and future results, the Company provides non-GAAP financial measures which exclude the impact of the acquisition accounting adjustment. The Company believes that this non-GAAP financial adjustment is useful to investors because it allows investors to (a) evaluate the effectiveness of the methodology and information used by management in its financial and operational decision-making, and (b) compare past and future reports of financial results of the Company as the revenue reduction related to acquired deferred revenue will not recur when related annual lease licenses and software maintenance contracts are renewed in future periods.

Amortization of intangible assets from acquisitions and its related tax impact. The Company incurs amortization of intangible assets, included in its GAAP presentation of amortization expense, related to various acquisitions it has made. Management excludes these expenses and their related tax impact for the purpose of calculating non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when it evaluates the continuing operational performance of the Company because these costs are fixed at the time of an acquisition, are then amortized over a period of several years after the acquisition and generally cannot be changed or influenced by management after the acquisition. Accordingly, management does not consider these expenses for purposes of evaluating the performance of the Company during the applicable time period after the acquisition, and it excludes such expenses when making decisions to allocate resources. The Company believes that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate the effectiveness of the methodology and information used by management in its financial and operational decision-making, and (b) compare past reports of financial results of the Company as the Company has historically reported these non-GAAP financial measures.

Stock-based compensation expense and its related tax impact. The Company incurs expense related to stock-based compensation included in its GAAP presentation of cost of software licenses; cost of maintenance and service; research and development expense; and selling, general and administrative expense. Stock-based compensation expense (benefit) incurred in connection with the Company's deferred compensation plan held in a rabbi trust includes an offsetting benefit (charge) recorded in other income (expense). Although stock-based compensation is an expense of the Company and viewed as a form of compensation, management excludes these expenses for the purpose of calculating non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when it evaluates the continuing operational performance of the Company. Management similarly excludes income (expense) related to assets held in a rabbi trust in connection with the Company's deferred compensation plan. Specifically, the Company excludes stock-based compensation and income related to assets held in the deferred compensation plan rabbi trust during its annual budgeting process and its quarterly and annual assessments of the Company's and management's performance. The annual budgeting process is the primary mechanism whereby the Company allocates resources to various initiatives and operational requirements. Additionally, the annual review by the board of directors during which it compares the Company's historical business model and profitability to the planned business model and profitability for the forthcoming year excludes the impact of stock-based compensation. In evaluating the performance of senior management and department managers, charges related to stock-based compensation are excluded from expenditure and profitability results. In fact, the Company records stock-based compensation expense into a stand-alone cost center for which no single operational manager is responsible or accountable. In this way, management is able to review, on a period-to-period basis, each manager's performance and assess financial discipline over operational expenditures without the effect of stock-based compensation. The Company believes that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate the Company's operating results and the effectiveness of the methodology used by management to review the Company's operating results, and (b) review historical comparability in the Company's financial reporting as well as comparability with competitors' operating results.

Restructuring charges and the related tax impact. The Company occasionally incurs expenses for restructuring its workforce included in its GAAP presentation of cost of software licenses; cost of maintenance and service; research and development expense; and selling, general and administrative expense. Management excludes these expenses for the purpose of calculating non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when it evaluates the continuing operational performance of the Company, as it generally generally does not incur these expenses as a part of its operations. The Company believes that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate the Company's operating results and the effectiveness of the methodology used by management to review the Company's operating results, and (b) review historical comparability in the Company's financial reporting as well as comparability with competitors' operating results.

Transaction costs related to business combinations. The Company incurs expenses for professional services rendered in connection with business combinations, which are included in its GAAP presentation of selling, general and administrative expense. These expenses are generally not tax-deductible. Management excludes these acquisition-related transaction expenses for the purpose of calculating non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when it evaluates the continuing operational performance of the Company, as it generally would not have otherwise incurred these expenses in the periods presented as a part of its operations. The Company believes that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate the Company's operating results and the effectiveness of the methodology used by management to review the Company's operating results, and (b) review historical comparability in the Company's financial reporting as well as comparability with competitors' operating results.

Non-GAAP financial measures are not in accordance with, or an alternative for, GAAP. The Company's non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP financial measures, and should be read only in conjunction with the Company's consolidated financial statements prepared in accordance with GAAP.

The Company has provided a reconciliation of the non-GAAP financial measures to the most directly comparable GAAP financial measures as listed below:

GAAP Reporting Measure	**Non-GAAP Reporting Measure**
Revenue	Non-GAAP Revenue
Operating Income	Non-GAAP Operating Income
Operating Profit Margin	Non-GAAP Operating Profit Margin
Net Income	Non-GAAP Net Income
Diluted Earnings Per Share	Non-GAAP Diluted Earnings Per Share

Liquidity and Capital Resources

(in thousands)	March 31, 2017	December 31, 2016	Change
Cash, cash equivalents and short-term investments	**$ 866,556**	$ 822,860	$ 43,696
Working capital	**$ 653,343**	$ 630,301	$ 23,042

Cash, Cash Equivalents and Short-Term Investments

Cash and cash equivalents consist primarily of highly liquid investments such as money market funds and deposits held at major banks. Short-term investments consist primarily of deposits held by certain foreign subsidiaries of the Company with original maturities of three months to one year. The following table presents the Company's foreign and domestic holdings of cash, cash equivalents and short-term investments as of March 31, 2017 and December 31, 2016:

(in thousands, except percentages)	March 31, 2017	% of Total	December 31, 2016	% of Total
Domestic	**$ 620,771**	**71.6**	$ 593,348	72.1
Foreign	**245,785**	**28.4**	229,512	27.9
Total	**$ 866,556**		$ 822,860	

If the foreign balances were repatriated to the U.S., unless previously taxed in the U.S., they would be subject to domestic tax, resulting in a tax obligation in the period of repatriation. In general, it is the practice and intention of the Company to repatriate previously taxed earnings and to reinvest all other earnings of its non-U.S. subsidiaries. The amount of cash, cash equivalents and short-term investments held by foreign subsidiaries is subject to translation adjustments caused by changes in foreign currency exchange rates as of the end of each respective reporting period, the offset to which is recorded in accumulated other comprehensive loss on the Company’s condensed consolidated balance sheet.

Cash Flows from Operating Activities

	Three Months Ended March 31,		
(in thousands)	2017	2016	Change
Net cash provided by operating activities	**$ 125,893**	$ 110,723	$ 15,170

Net cash provided by operating activities increased during the current fiscal year due to increased net income (net of non-cash operating adjustments) of $10.8 million and increased net cash flows from operating assets and liabilities of $4.3 million.

Cash Flows from Investing Activities

	Three Months Ended March 31,		
(in thousands)	2017	2016	Change
Net cash used in investing activities	**$ (10,885)**	$ (2,691)	$ (8,194)

Net cash used in investing activities increased during the current fiscal year due primarily to increased acquisition-related net cash outlays of $5.9 million and increased capital expenditures of $1.4 million. The Company currently plans capital spending of $15 million to $20 million for the 2017 fiscal year as compared to the $12.4 million that was spent in 2016. The level of spending will depend on various factors, including growth of the business and general economic conditions.

Cash Flows from Financing Activities

	Three Months Ended March 31,		
(in thousands)	2017	2016	Change
Net cash used in financing activities	**$ (78,334)**	$ (38,349)	$ (39,985)

Net cash used in financing activities increased during the current fiscal year due primarily to increased stock repurchases of $57.7 million, partially offset by increased proceeds from shares issued for stock-based compensation of $20.4 million.

Other Cash Flow Information

The Company believes that existing cash and cash equivalent balances of $866.2 million, together with cash generated from operations, will be sufficient to meet the Company’s working capital and capital expenditure requirements through the next twelve months. The Company’s cash requirements in the future may also be financed through additional equity or debt financings. There can be no assurance that such financings can be obtained on favorable terms, if at all.

Under the Company's stock repurchase program, the Company repurchased shares during the three months ended March 31, 2017 and 2016, as follows:

	Three Months Ended	
(in thousands, except per share data)	**March 31, 2017**	**March 31, 2016**
Number of shares repurchased	**1,000**	500
Average price paid per share	**$ 100.35**	$ 85.37
Total cost	**$ 100,352**	$ 42,684

In February 2017, the Company's Board of Directors increased the number of shares authorized for repurchase to a total of 5.0 million shares under the stock repurchase program. As of March 31, 2017, 4.5 million shares remained available for repurchase under the program.

The Company's repurchase authorization does not have an expiration date and the pace of the repurchase activity will depend on factors such as working capital needs, cash requirements for acquisitions, the Company's stock price, and economic and market conditions. The Company's stock repurchases may be effected from time to time through open market purchases or pursuant to a Rule 10b5-1 plan.

The Company continues to generate positive cash flows from operating activities and believes that the best uses of its excess cash are to invest in the business and to repurchase stock in order to both offset dilution and return capital, in excess of its requirements, to stockholders with the goal of increasing stockholder value. Additionally, the Company has in the past, and expects in the future, to acquire or make investments in complementary companies, products, services and technologies. Any future acquisitions may be funded by available cash and investments, cash generated from operations, credit facilities or the issuance of additional securities.

Off-Balance-Sheet Arrangements

The Company does not have any special-purpose entities or off-balance-sheet financing.

Contractual Obligations

There were no material changes to the Company’s significant contractual obligations during the three months ended March 31, 2017 as compared to those previously reported in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” within the Company’s most recent Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

During the first quarter of 2017, the Company completed the annual impairment test for goodwill and the indefinite-lived intangible asset and determined that these assets had not been impaired as of the test date, January 1, 2017. No other events or circumstances changed during the three months ended March 31, 2017 that would indicate that the fair values of the Company's reporting unit and indefinite-lived intangible asset are below their carrying amounts.

No significant changes have occurred to the Company’s critical accounting policies and estimates as previously reported within “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Company’s most recent Annual Report on Form 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Income Rate Risk. Changes in the overall level of interest rates affect the interest income that is generated from the Company's cash, cash equivalents and short-term investments. For the three months ended March 31, 2017, total interest income was $1.2 million. Cash and cash equivalents consist primarily of highly liquid investments such as money market funds and deposits held at major banks. Short-term investments consist primarily of deposits held by certain foreign subsidiaries of the Company with original maturities of three months to one year.

Foreign Currency Transaction Risk. As the Company operates in international regions, a portion of its revenue, expenses, cash, accounts receivable and payment obligations are denominated in foreign currencies. As a result, changes in currency exchange rates will affect the Company's financial position, results of operations and cash flows. The Company is most impacted by movements in and among the Euro, British Pound, Japanese Yen, South Korean Won, Taiwan Dollar, Indian Rupee, Canadian Dollar and U.S. Dollar.

With respect to revenue, on average for the quarter ended March 31, 2017, the U.S. Dollar was approximately 1.5% stronger, when measured against the Company's primary foreign currencies, than for the quarter ended March 31, 2016. The net overall strengthening resulted in decreased revenue of $1.8 million during the quarter ended March 31, 2017 as compared with the same quarter of 2016. The impact on revenue was primarily driven by $2.1 million and $1.0 million of adverse impact due to a weaker Euro and British Pound, respectively, partially offset by $0.6 million and $0.4 million of favorable impact due to a stronger Japanese Yen and South Korean Won, respectively. The impact on operating income was insignificant.

The most significant currency impacts on revenue and operating income are typically attributable to U.S. Dollar exchange rate changes against the British Pound, Euro, Japanese Yen and South Korean Won as reflected in the charts below:

	Period-End Exchange Rates			
As of	**GBP/USD**	**EUR/USD**	**USD/JPY**	**USD/KRW**
March 31, 2016	1.436	1.138	112.613	1,144.951
December 31, 2016	1.234	1.051	116.918	1,208.313
March 31, 2017	**1.255**	**1.065**	**111.408**	**1,118.693**

	Average Exchange Rates			
Three Months Ended	**GBP/USD**	**EUR/USD**	**USD/JPY**	**USD/KRW**
March 31, 2016	1.432	1.104	115.256	1,200.768
March 31, 2017	**1.239**	**1.065**	**113.607**	**1,152.516**

No other material change has occurred in the Company's market risk subsequent to December 31, 2016.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. As required by Rules 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Company has evaluated, with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of the design and operation of its disclosure controls and procedures as of the end of the period covered by this report. Based on such evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that such disclosure controls and procedures are effective, as defined in Rule 13a-15(e) of the Exchange Act.

The Company has a Disclosure Review Committee to assist in the quarterly evaluation of the Company's internal disclosure controls and procedures and in the review of the Company's periodic filings under the Exchange Act. The membership of the Disclosure Review Committee consists of the Company's Chief Executive Officer; Chief Financial Officer; Vice President of Finance; General Counsel; Senior Director, Global Investor Relations; Vice President of Worldwide Sales and Customer Excellence; Vice President of Human Resources; Vice President, Design and Platform Business Unit; and Chief Product Officer. This committee is advised by external counsel, particularly on SEC-related matters. Additionally, other members of the Company's global management team advise the committee with respect to disclosure via a sub-certification process.

The Company believes, based on its knowledge, that the financial statements and other financial information included in this report fairly present, in all material respects, the financial condition, results of operations and cash flows of the Company as of and for the periods presented in this report. The Company is committed to both a sound internal control environment and to good corporate governance.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

From time to time, the Company reviews the disclosure controls and procedures and may make changes to enhance their effectiveness and to ensure that the Company's systems evolve with its business.

Changes in Internal Control. There were no changes in the Company's internal control over financial reporting that occurred during the three months ended March 31, 2017 that materially affected, or were reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

The Company is subject to various investigations, claims and legal proceedings that arise in the ordinary course of business, including commercial disputes, labor and employment matters, tax audits, alleged infringement of intellectual property rights and other matters. In the opinion of the Company, the resolution of pending matters is not expected to have a material adverse effect on the Company's consolidated results of operations, cash flows or financial position. However, each of these matters is subject to various uncertainties and it is possible that an unfavorable resolution of one or more of these proceedings could, in the future, materially affect the Company's results of operations, cash flows or financial position.

Item 1A. Risk Factors

The Company cautions investors that its performance (and, therefore, any forward-looking statement) is subject to risks and uncertainties. Various important factors may cause the Company's future results to differ materially from those projected in any forward-looking statement. These factors were disclosed in, but are not limited to, the items within the Company's most recent Annual Report on Form 10-K, Part I, Item 1A. No material changes have occurred regarding the Company's risk factors subsequent to December 31, 2016.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(c) Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under Plans or Programs[1]
January 1 - January 31, 2017	500,000	$ 93.92	500,000	800,000
February 1 - February 28, 2017	—	$ —	—	5,000,000
March 1 - March 31, 2017	500,000	$ 106.78	500,000	4,500,000
Total	1,000,000	$ 100.35	1,000,000	4,500,000

[1] The Company initially announced its stock repurchase program in February 2000, and subsequently announced various amendments to the program. The most recent amendment to the program, authorizing the repurchase of up to 5,000,000 shares, was approved by the Company's Board of Directors in February 2017. There is no expiration date to this amendment.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Exhibit
10.1	Form of Performance-Based Restricted Stock Unit Agreement (2017), attached hereto as Exhibit 10.1.*
10.2	Form of Performance-Based Restricted Stock Unit Agreement under Long-Term Incentive Plan, attached hereto as Exhibit 10.2.*
10.3	Third Amended and Restated Long-Term Incentive Plan, attached hereto as Exhibit 10.3.*
10.4	Agreement and General Release by and between the Company and Walid Abu-Hadba, dated May 1, 2017 (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed May 1, 2017, and incorporated herein by reference).*
15	Independent Registered Public Accountant’s Letter Regarding Unaudited Financial Information.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

* Indicates management contract or compensatory plan, contract or arrangement.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ANSYS, Inc.

Date:	May 4, 2017	By:	/s/ *Ajei S. Gopal*
			Ajei S. Gopal
			President and Chief Executive Officer
Date:	May 4, 2017	By:	/s/ *Maria T. Shields*
			Maria T. Shields
			Chief Financial Officer

EXHIBIT 10.1

AWARD NOTICE
UNDER THE FIFTH AMENDED AND RESTATED
ANSYS, INC. 1996 STOCK OPTION AND GRANT PLAN

Name of Participant:
Target Award:
Grant Date of Target Award: March 5, 2017

Performance Cycles: January 1, 2017 to December 31, 2017
January 1, 2018 to December 31, 2018
January 1, 2019 to December 31, 2019

Pursuant to the Fifth Amended and Restated ANSYS, Inc. 1996 Stock Option and Grant Plan (the "Plan"), ANSYS, Inc., a Delaware corporation, (the "Company") has selected the Participant named above to be awarded the Target Award specified above, subject to the terms and conditions of the Plan and this Award Notice. Capitalized terms used but not defined in this Award Notice shall have the meaning given such terms in the Plan. A copy of the Plan is attached hereto as Exhibit A.

1. Acceptance of Award. The total number of Restricted Stock Units that may be credited to the Participant (if any) shall be determined by the Company's performance for the Performance Cycles specified above, as set forth in Section 5 below. One third of the Target Award is eligible to be credited for each Performance Cycle (the "Annual Target"). The actual number of Restricted Stock Units that may be credited could be up to 200% of the Target Award and could also be lower than the Target Award and could be zero.

2. Termination of Employment. Subject to Sections 3 and 5(a) below, a Participant must be employed through the last day of the final Performance Cycle to vest in any of the Restricted Stock Units that may be credited with respect to all three Performance Cycles, and all Restricted Stock Units not yet vested upon the termination of the Participant's employment with the Company (or a Subsidiary(ies) as applicable) for any reason shall automatically be forfeited as of the date of termination of employment.

3. Transaction. Upon a Transaction, the Award shall be treated as specified in Section 3(c) of the Plan.

4. Issuance of Shares.

(a) Each Restricted Stock Unit relates to one share of the Company's Stock. Shares of Stock (if any) shall be issued in settlement of any credited Restricted Stock Units within 74 days after the end of the final Performance Cycle, subject to the Participant's continued employment with the Company through the last day of the final Performance Cycle; provided that, in the event at least 100% of the Annual Target is met with respect to the 2017 Performance Cycle, 2018 Performance Cycle or 2019 Performance Cycle, as applicable, then 50% of the credited Restricted Stock Units with respect to such Performance Cycle shall be deemed vested as of the last day of such Performance Cycle and shall be paid within 74 days after the end of such Performance Cycle. Shares of Stock (if any) shall be delivered to the Participant in accordance with the terms of this Award Notice and of the Plan, upon compliance to the satisfaction of the Committee with all requirements under applicable laws or regulations in connection with such issuance and with the requirements hereof and of the Plan. The determination of the Committee as to such compliance shall be final and binding on the Participant.

(b) Until such time as shares of Stock are issued to the Participant pursuant to the terms hereof and of the Plan, the Participant shall have no rights as a stockholder with respect to any shares of Stock underlying the Restricted Stock Units, including but not limited to any voting rights.

5. Determination and Payment of Awards

(a) The Annual Target shall become credited based on achievement by the Company of the Performance Criteria for the applicable Performance Cycle as set forth in Exhibit B attached hereto (as updated for each Performance Cycle) and incorporated herein by reference, subject to the Participant's continued employment with the Company through the conclusion of the final Performance Cycle, except as set forth in Section 3 above and in the following sentence. Notwithstanding the foregoing, if at least 100% of the Annual Target is achieved with respect to the 2017 Performance Cycle, 2018 Performance Cycle or 2019 Performance Cycle, as applicable, then 50% of the credited Restricted Stock Units with respect to such Performance Cycle shall be deemed vested as of the last day of such Performance Cycle and the remaining 50% shall vest subject to the Participant's continued employment with the Company through the conclusion of the final Performance Cycle. For purposes of clarity and by way of example: If, during the Performance Cycle ending December 31, 2017, (i) the Participant is credited 75% of the Annual Target for the 2017 Performance Cycle, determined by reference to the Performance Criteria included in Exhibit B, 25% of the Annual Target shall be forfeited and the credited Restricted Stock Units (75% of the Annual Target) shall vest and be settled if the Participant remains employed through the last day of the end of the final Performance Cycle and (ii) if the Participant is credited 130% of the Annual Target for the 2017 Performance Cycle, determined by reference to the Performance Criteria included in Exhibit B, then 65% of the Annual Target (i.e., 50% of the Restricted Stock Units that were credited as of the end of the 2017 Performance Cycle) shall vest and be settled within 74 days following the last day of the 2017 Performance Cycle and the remaining 65% of the Annual Target shall vest and be settled if the Participant remains employed through the last day of the end of the final Performance Cycle.

(b) For purposes of this Section 5, the following definitions shall apply:

(i) "Revenue" means non-GAAP revenue as reported in the Company's public filings.

(ii) "Operating Margin" means non-GAAP operating margin percent as reported in the Company's public filings.

(c) For purposes of the foregoing definitions, (1) there shall be constant currency measurement for both Revenue compared to the prior year and Operating Margin; (1) future years' annual performance targets will be designed to exclude future acquisitions depending on the closing date, subject to the Committee's discretion; and (iii) the Committee shall assess the materiality of any merger or acquisition and reserves the discretion to determine the impact thereof on the applicable targets.

(d) The Committee, at its first regular meeting following the conclusion of each Performance Cycle and the delivery to the Company of its audited financial statements for such Performance Cycle, shall determine the actual number of Restricted Stock Units that will be deemed to have been credited and vested (if applicable) as of the final day of such Performance Cycle, in accordance with the Performance Criteria set forth in Exhibit B.

(e) Notwithstanding the foregoing, as soon as practicable (but in no event later than 74 days) following the conclusion of the final (third) Performance Cycle, the Restricted Stock Units that were credited over all three Performance Cycles, if any, will vest and be settled in an equal number of shares of Stock, subject to the Participant's continued employment with the Company; provided however, that with respect to any Restricted Stock Units that vested as of the last day of the 2017 Performance Cycle, 2018 Performance Cycle or 2019 Performance Cycle, as applicable, such Restricted Stock Units shall be paid as soon as practicable (but in no event later than 74 days) following the conclusion of such Performance Cycle.

6. Non-Competition and Non-Solicitation. As additional consideration for the grant of this Award to the Participant, the Participant hereby agrees that he or she shall not, at anytime during his or her employment with the Company or any Subsidiary, **[for non-California employees only:** and for a period of one year immediately after the termination of such employment (no matter if terminated by the Participant or the Company and no matter what the reason for that termination),**]** engage for any reason, directly or indirectly, whether as owner, part-owner,

shareholder, member, partner, director, officer, trustee, employee, agent or consultant, or in any other capacity, on behalf of himself or herself or any firm, corporation or other business organization other than the Company and its subsidiaries, in any one or more of the following activities:

(a) the development, marketing, solicitation, or selling of any product or service that is competitive with the products or services of the Company, or products or services that the Company has under development or that are subject to active planning at any time during Participant's employment;

(b) the use of any of the Company's confidential or proprietary information, copyrights, patents or trade secrets which was acquired by the Participant as an employee of the Company and its subsidiaries; or

(c) any activity for the purpose of inducing, encouraging, or arranging for the employment or engagement by anyone other than the Company and its subsidiaries of any employee, officer, director, agent, consultant, or sales representative of the Company and its subsidiaries or attempt to engage any of them in a manner which would deprive the Company and its subsidiaries of their services or place them in a conflict of interest with the Company and its subsidiaries.

The Participant acknowledges and agrees that the activities set forth in (a)-(c) (above) are adverse to the Company's interests, and that it would be inequitable for Participant to benefit from this Award should Participant engage in any such activities during or within one year after termination of his or her employment with the Company. The Participant may be released from his or her obligations as stated above only if the Committee (or its duly appointed agent) determines in its sole discretion that such action is in the best interests of the Company and its subsidiaries.

7. Claw-Back of Award Proceeds. The Committee shall have the authority to unilaterally terminate this Award and/or cause some or all of the proceeds relating to this Award that have been received by the Participant to become immediately due and payable by the Participant to the Company upon the occurrence of any of the following events:

(a) the Participant's violation of Section 6 of this Agreement (entitled Non-Competition and Non-Solicitation);

(b) the material restatement of the Company's financial statements due to misconduct by the Participant;

(c) the material restatement of the Company's financial statements that results in the Participant receiving more compensation under the Award than the Participant would have received absent the incorrect financial statements.

The determination of whether any of the foregoing events has occurred and the extent of the application of this Section to the Participant and this Award shall be determined by the Committee in its sole discretion.

8. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Award Notice shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Committee set forth in Section 2 of the Plan.

9. Transferability. This Award is personal to the Participant, is non-assignable and is not transferable by Participant in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. The Stock to be issued upon the vesting of this Award to the Participant shall be issued, during the Participant's lifetime, only to the Participant, and thereafter, only to the Participant's beneficiary. The Participant may designate a beneficiary by providing written notice of the name of such beneficiary to the Company, and may revoke or change such designation at any time by filing written notice of revocation or change with the Company.

10. Section 409A. This Award is intended as a short-term deferral, and to not be subject to any tax, penalty, or interest under, Section 409A of the Internal Revenue Code and the regulations promulgated thereunder. This Award, this Agreement and the Plan (as to the Award) shall be construed and interpreted consistent with such intent.

11. Tax Withholding. Any issuance of shares of Stock to a Participant shall be subject to tax withholding. The minimum tax withholding obligation shall be satisfied through a net issuance of shares. The Company shall withhold from shares of Stock to be issued to the Participant a number of shares of Stock with an aggregate fair market value that would satisfy the minimum withholding amount due.

12. No Contract for Continuing Services. Neither the Plan nor this Award Notice shall be construed as creating any contract for continued services between the Company or any of its subsidiaries and the Participant and nothing herein contained shall give the Participant the right to be retained as an employee or consultant of the Company or any of its subsidiaries.

13. Mandatory Arbitration. The Participant and the Company agree that any dispute or claim arising out of or in any way related to (i) the Participant's employment with the Company, and/or (ii) this Agreement or any breach hereof, this Award, the Plan and/or any actions taken under the Plan, to the fullest extent permitted by law, shall be submitted to and resolved by confidential, binding arbitration by a single, neutral arbitrator. The arbitration shall be held in the county where the Company has an office at which the Participant provides services (for remote Participants, the nearest county where the Company has an office) or any other locale to which the parties jointly agree. The arbitration shall be administered by and under the auspices of JAMS in accordance with the then-current Employment Arbitration Rules & Procedures of JAMS (which are available at www.jamsadr.com/rules-employment). Arbitrator selection and discovery shall be conducted pursuant to the JAMS Rules. The arbitrator shall issue a written award setting forth the essential findings and conclusions on which the award is based, which shall be final and binding and judgment thereon may be entered in any court of competent jurisdiction. Other than an amount equal to the fee for filing such an action in the local state court, which amount the Participant shall pay toward the costs of the arbitration, the Company shall bear the administrative, filing and forum costs of the arbitration, including the JAMS administrative fees and the arbitrator's fees. Except as otherwise provided by law or in the arbitrator's ruling, each party shall otherwise bear its own respective attorneys' fees and costs of the arbitration. The Participant and the Company agree that each may bring claims against the other only in an individual capacity, and not as a plaintiff, claimant or class member in any purported class action, collective action or other representative proceeding, or otherwise seeking to represent the interests of any other person. This agreement to arbitrate shall survive any separation of the Participant's employment. Notwithstanding the foregoing, nothing herein or otherwise shall preclude the Company from pursuing a court action for the purpose of obtaining a temporary restraining order or other injunctive relief to enforce any restrictive covenants the Participant has with or for the benefit of the Company.

14. General Release of Claims by the Participant.

(a) As a condition of and in consideration for the promises made by the Company herein, including without limitation to provide the Award hereunder, the Participant hereby knowingly and voluntarily releases and discharges to the fullest extent permitted by law the Company and its past, present and future parents, subsidiaries, affiliates, and related entities, any and all of its or their past, present or future directors, shareholders, officers, executives, employees, and/or agents, and/or its and their respective predecessors, successors, and assigns (individually and collectively, the "Company Releasees"), from and with respect to any and all claims and causes of action whatsoever, in law or in equity, known or unknown, which the Participant ever had, has or may have against the Company and/or any or all of the other Company Releasees for, upon, or by reason of any matter whatsoever up to the date on which the Participant signs this Agreement (individually and collectively, "Claims"). The parties intend the foregoing to be a general release of any and all Claims to the fullest extent permissible by law. Notwithstanding the foregoing, nothing herein is a release by the Participant of (A) any rights or Claims with respect to accrued and vested benefits and/or previously awarded equity interests, subject in each instance to the terms and conditions of any applicable plan, grant, and/or agreement pertaining to such benefits, awards or interests and applicable law, (B) any rights or Claims arising under or to enforce this Agreement, or (C) any rights or Claims that, under applicable law, cannot lawfully be released by private agreement or otherwise.

(b) **FOR CALIFORNIA RESIDENTS ONLY:** In granting the foregoing release, the Participant acknowledges that he/she has been advised to consult with legal counsel and is familiar with the provision of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."

Being aware of said Code section, the Participant hereby expressly waives any rights the Participant may have thereunder, as well as under any other state or federal statutes or common law principles of similar effect.

(c) Nothing contained in this Agreement (including the foregoing general release) limits the Participant's ability to file a charge or complaint with any federal, state or local governmental agency, commission or regulatory entity (a "Government Agency"). If the Participant files any charge or complaint with any Government Agency, if any Government Agency pursues any charge or claim on the Participant's behalf, or if any other third party pursues any claim or charge on the Participant's behalf, the Participant waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action); provided, however, that nothing in this Agreement limits any right the Participant may have to receive a whistleblower award or bounty for information provided to the Securities and Exchange Commission. The Participant represents that he/she is not aware of any unlawful conduct or violations of any federal, state or local law, rule or regulation by the Company and/or any other Company Releasees or any basis to bring a charge or complaint to any Government Agency.

15. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Participant at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

16. Severability. If any provision(s) hereof shall be determined to be illegal or unenforceable, such determination shall in no manner affect the legality or enforceability of any other provision hereof.

17. Counterparts. For the convenience of the parties and to facilitate execution, this document may be executed in two or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same document.

18. Time to Review and Accept; Right to Revoke; Effective Date. The Participant is advised by the Company to consult with an attorney in connection with this Agreement. The Participant understands that as part of his/her agreement to release Claims against the Company and the other Company Releasees, the Participant is releasing Claims for age discrimination under the federal Age Discrimination in Employment Act (the "ADEA"). Accordingly, the Participant has the right, and acknowledges that he/she has been given the opportunity, to review and consider this Agreement for a period of twenty-one (21) days from the Participant's receipt of this Agreement before signing it (the "Review Period"). To accept this Agreement and the Award granted hereunder, the Participant must return a signed original or signed .pdf copy of this Agreement to: [NAME, TITLE, ADDRESS; E-MAIL ADDRESS] at any time before the end of the Review Period. If the Participant signs this Agreement before the end of the Review Period, the Participant acknowledges that such decision was voluntary and that he/she had the opportunity to consider this Agreement for the full Review Period. For the period of seven (7) days from the date when the Participant signs this Agreement, the Participant has the right to revoke this Agreement by written notice to [NAME, TITLE, ADDRESS; E-MAIL ADDRESS], provided such notice is delivered so that it is received at or before the expiration of the 7-day revocation period. This Agreement shall not become effective or enforceable during the revocation period. If timely accepted and not revoked by the Participant prior to the end of the revocation

period, this Agreement shall become effective on the first business day following the expiration of the revocation period (the "Effective Date"). If not timely accepted or if (after timely signing) the Participant revokes prior to the expiration of the revocation period, this Agreement shall not become effective and the Participant will not be entitled to or receive the Award granted hereunder and/or such Award shall be rescinded.

19. Knowing and Voluntary Agreement. By signing this Agreement, the Participant acknowledges and represents that the Participant (a) has carefully read this Agreement in its entirety; (b) is hereby advised by the Company in writing to consult with an attorney of the Participant's choice before signing this Agreement; (c) has been afforded and has had a full and reasonable opportunity and period of time of at least 21 days to consider the terms and conditions of this Agreement; (d) fully understands the meaning and significance, and consequences, of all of the terms and conditions of this Agreement (including without limitation the general release given by the Participant in this Agreement); and (e) is signing this Agreement knowingly, voluntarily and of the Participant's own free will and with the intent to be fully bound hereby.

ANSYS, INC.

By: ______________________________

Name: ________________________

Title: ________________________

The foregoing Agreement is hereby accepted and the terms and conditions thereof hereby agreed to by the undersigned.

Dated: ______________________

____
Participant's Signature

Participant's name and address:

AWARD NOTICE
UNDER THE ANSYS, INC.
THIRD AMENDED AND RESTATED LONG-TERM INCENTIVE PLAN

Name of Participant:
Target Award:
Grant Date of Target Award: March 5, 2017
Performance Measurement Period: January 1, 2017 to December 31, 2019

Pursuant to the ANSYS, Inc. Third Amended and Restated Long-Term Incentive Plan (the "Plan"), ANSYS, Inc. (the "Company") has selected the Participant named above to be awarded the Target Award specified above, subject to the terms and conditions of the Plan and this Award Notice. Capitalized terms used but not defined in this Award Notice shall have the meaning given such terms in the Plan. A copy of the Plan is attached hereto as Exhibit A.

1. Acceptance of Award. The total number of Restricted Stock Units that may be credited to the Participant (if any) shall be determined by the Company's performance for the three Performance Sub Periods within the Performance Measurement Period specified above, as set forth in Section 4(b) of the Plan. The actual number of Restricted Stock Units that may be credited could be up to 150% of such Target Award and could also be lower than the Target Award and could be zero.

2. Termination of Employment. Subject to Section 3 below, if at any time prior to the conclusion of the Performance Measurement Period, the Participant's employment with the Company terminates for any reason, the Participant shall automatically forfeit the right to receive any portion of the Award.

3. Change in Control. Upon a Change in Control, the Award shall be treated as specified in Section 6 of the Plan.

4. Issuance of Shares.

(a) Each Restricted Stock Unit relates to one share of the Company's Stock. Shares of Stock (if any) shall be issued and delivered to the Participant in accordance with the terms of this Award Notice and of the Plan upon compliance to the satisfaction of the Committee with all requirements under applicable laws or regulations in connection with such issuance and with the requirements hereof and of the Plan. The determination of the Committee as to such compliance shall be final and binding on the Participant.

(b) Until such time as shares of Stock are issued to the Participant pursuant to the terms hereof and of the Plan, the Participant shall have no rights as a stockholder with respect to any shares of Stock underlying the Restricted Stock Units, including but not limited to any voting rights.

5. Non-Competition and Non-Solicitation. As additional consideration for the grant of this Award to the Participant, the Participant hereby agrees that he or she shall not, at anytime during his or her employment with the Company, **[for non-California employees only:** and for a period of one year immediately after the termination of such employment (no matter if terminated by the Participant or the Company and no matter what the reason for that termination),**]** engage for any reason, directly or indirectly, whether as owner, part-owner, shareholder, member, partner, director, officer, trustee, employee, agent or consultant, or in any other capacity, on behalf of himself or herself or any firm, corporation or other business organization other than the Company and its subsidiaries, in any one or more of the following activities:

(a) the development, marketing, solicitation, or selling of any product or service that is competitive with the products or services of the Company, or products or services that the Company has under development or that are subject to active planning at any time during Participant's employment;

(b) the use of any of the Company's confidential or proprietary information, copyrights, patents or trade secrets which was acquired by the Participant as an employee of the Company and its subsidiaries; or

(c) any activity for the purpose of inducing, encouraging, or arranging for the employment or engagement by anyone other than the Company and its subsidiaries of any employee, officer, director, agent, consultant, or sales representative of the Company and its subsidiaries or attempt to engage any of them in a manner which would deprive the Company and its subsidiaries of their services or place them in a conflict of interest with the Company and its subsidiaries.

The Participant acknowledges and agrees that the activities set forth in (a)-(c) (above) are adverse to the Company's interests, and that it would be inequitable for Participant to benefit from this Award should Participant engage in any such activities during or within one year after termination of his or her employment with the Company. The Participant may be released from his or her obligations as stated above only if the Committee (or its duly appointed agent) determines in its sole discretion that such action is in the best interests of the Company and its subsidiaries.

6. Claw-Back of Award Proceeds. The Committee shall have the authority to unilaterally terminate this Award and/or cause some or all of the proceeds relating to this Award that have been received by the Participant to become immediately due and payable by the Participant to the Company upon the occurrence of any of the following events:

(a) the Participant's violation of Section 5 of this Agreement (entitled Non-Competition and Non-Solicitation);

(b) the material restatement of the Company's financial statements due to misconduct by the Participant;

(c) the material restatement of the Company's financial statements that results in the Participant receiving more compensation under the Award than the Participant would have received absent the incorrect financial statements.

The determination of whether any of the foregoing events has occurred and the extent of the application of this Section to the Participant and this Award shall be determined by the Committee in its sole discretion.

7. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Award Notice shall be subject to and governed by all the terms and conditions of the Plan, including the powers of the Committee set forth in Section 3 of the Plan.

8. Transferability. This Award is personal to the Participant, is non-assignable and is not transferable by Participant in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. The Stock to be issued upon the settlement of this Award to the Participant shall be issued, during the Participant's lifetime, only to the Participant, and thereafter, only to the Participant's beneficiary. The Participant may designate a beneficiary by providing written notice of the name of such beneficiary to the Company, and may revoke or change such designation at any time by filing written notice of revocation or change with the Company.

9. No Contract for Continuing Services. Neither the Plan nor this Award Notice shall be construed as creating any contract for continued services between the Company or any of its subsidiaries and the Participant and nothing herein contained shall give the Participant the right to be retained as an employee or consultant of the Company or any of its subsidiaries.

10. Mandatory Arbitration. The Participant and the Company agree that any dispute or claim arising out of or in any way related to (i) the Participant's employment with the Company, and/or (ii) this Agreement or any breach hereof, this Award, the Plan and/or any actions taken under the Plan, to the fullest extent permitted by law, shall be submitted to and resolved by confidential, binding arbitration by a single, neutral arbitrator. The arbitration shall be held in the county where the Company has an office at which the Participant provides services (for remote Participants, the nearest county where the Company has an office) or any other locale to which the parties jointly agree. The arbitration shall be administered by and under the auspices of JAMS in accordance with the then-current Employment Arbitration Rules & Procedures of JAMS (which are available at www.jamsadr.com/rules-employment). Arbitrator selection and discovery

shall be conducted pursuant to the JAMS Rules. The arbitrator shall issue a written award setting forth the essential findings and conclusions on which the award is based, which shall be final and binding and judgment thereon may be entered in any court of competent jurisdiction. Other than an amount equal to the fee for filing such an action in the local state court, which amount the Participant shall pay toward the costs of the arbitration, the Company shall bear the administrative, filing and forum costs of the arbitration, including the JAMS administrative fees and the arbitrator's fees. Except as otherwise provided by law or in the arbitrator's ruling, each party shall otherwise bear its own respective attorneys' fees and costs of the arbitration. The Participant and the Company agree that each may bring claims against the other only in an individual capacity, and not as a plaintiff, claimant or class member in any purported class action, collective action or other representative proceeding, or otherwise seeking to represent the interests of any other person. This agreement to arbitrate shall survive any separation of the Participant's employment. Notwithstanding the foregoing, nothing herein or otherwise shall preclude the Company from pursuing a court action for the purpose of obtaining a temporary restraining order or other injunctive relief to enforce any restrictive covenants the Participant has with or for the benefit of the Company.

11. General Release of Claims by the Participant.

(a) As a condition of and in consideration for the promises made by the Company herein, including without limitation to provide the Award hereunder, the Participant hereby knowingly and voluntarily releases and discharges to the fullest extent permitted by law the Company and its past, present and future parents, subsidiaries, affiliates, and related entities, any and all of its or their past, present or future directors, shareholders, officers, executives, employees, and/or agents, and/or its and their respective predecessors, successors, and assigns (individually and collectively, the "Company Releasees"), from and with respect to any and all claims and causes of action whatsoever, in law or in equity, known or unknown, which the Participant ever had, has or may have against the Company and/or any or all of the other Company Releasees for, upon, or by reason of any matter whatsoever up to the date on which the Participant signs this Agreement (individually and collectively, "Claims"). The parties intend the foregoing to be a general release of any and all Claims to the fullest extent permissible by law. Notwithstanding the foregoing, nothing herein is a release by the Participant of (A) any rights or Claims with respect to accrued and vested benefits and/or previously awarded equity interests, subject in each instance to the terms and conditions of any applicable plan, grant, and/or agreement pertaining to such benefits, awards or interests and applicable law, (B) any rights or Claims arising under or to enforce this Agreement, or (C) any rights or Claims that, under applicable law, cannot lawfully be released by private agreement or otherwise.

(b) **FOR CALIFORNIA RESIDENTS ONLY:** In granting the foregoing release, the Participant acknowledges that he/she has been advised to consult with legal counsel and is familiar with the provision of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."

Being aware of said Code section, the Participant hereby expressly waives any rights the Participant may have thereunder, as well as under any other state or federal statutes or common law principles of similar effect.

(c) Nothing contained in this Agreement (including the foregoing general release) limits the Participant's ability to file a charge or complaint with any federal, state or local governmental agency, commission or regulatory entity (a "Government Agency"). If the Participant files any charge or complaint with any Government Agency, if any Government Agency pursues any charge or claim on the Participant's behalf, or if any other third party pursues any claim or charge on the Participant's behalf, the Participant waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action); provided, however, that nothing in this Agreement limits any right the Participant may have to receive a whistleblower award or bounty for information provided to the Securities and Exchange Commission. The Participant represents that he/she is not aware of any unlawful conduct or violations of any federal, state or local law, rule or regulation by the Company and/or any other Company Releasees or any basis to bring a charge or complaint to any Government Agency.

12. Notices. Notices hereunder shall be mailed or delivered to the Company at its principal place of business and shall be mailed or delivered to the Participant at the address on file with the Company or, in either case, at such other address as one party may subsequently furnish to the other party in writing.

13. Severability. If any provision(s) hereof shall be determined to be illegal or unenforceable, such determination shall in no manner affect the legality or enforceability of any other provision hereof.

14. Counterparts. For the convenience of the parties and to facilitate execution, this document may be executed in two or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same document.

15. Time to Review and Accept; Right to Revoke; Effective Date. The Participant is advised by the Company to consult with an attorney in connection with this Agreement. The Participant understands that as part of his/her agreement to release Claims against the Company and the other Company Releasees, the Participant is releasing Claims for age discrimination under the federal Age Discrimination in Employment Act (the "ADEA"). Accordingly, the Participant has the right, and acknowledges that he/she has been given the opportunity, to review and consider this Agreement for a period of twenty-one (21) days from the Participant's receipt of this Agreement before signing it (the "Review Period"). To accept this Agreement and the Award granted hereunder, the Participant must return a signed original or signed .pdf copy of this Agreement to: [NAME, TITLE, ADDRESS; E-MAIL ADDRESS] at any time before the end of the Review Period. If the Participant signs this Agreement before the end of the Review Period, the Participant acknowledges that such decision was voluntary and that he/she had the opportunity to consider this Agreement for the full Review Period. For the period of seven (7) days from the date when the Participant signs this Agreement, the Participant has the right to revoke this Agreement by written notice to [NAME, TITLE, ADDRESS; E-MAIL ADDRESS], provided such notice is delivered so that it is received at or before the expiration of the 7-day revocation period. This Agreement shall not become effective or enforceable during the revocation period. If timely accepted and not revoked by the Participant prior to the end of the revocation period, this Agreement shall become effective on the first business day following the expiration of the revocation period (the "Effective Date"). If not timely accepted or if (after timely signing) the Participant revokes prior to the expiration of the revocation period, this Agreement shall not become effective and the Participant will not be entitled to or receive the Award granted hereunder and/or such Award shall be rescinded.

16. Knowing and Voluntary Agreement. By signing this Agreement, the Participant acknowledges and represents that the Participant (a) has carefully read this Agreement in its entirety; (b) is hereby advised by the Company in writing to consult with an attorney of the Participant's choice before signing this Agreement; (c) has been afforded and has had a full and reasonable opportunity and period of time of at least 21 days to consider the terms and conditions of this Agreement; (d) fully understands the meaning and significance, and consequences, of all of the terms and conditions of this Agreement (including without limitation the general release given by the Participant in this Agreement); and (e) is signing this Agreement knowingly, voluntarily and of the Participant's own free will and with the intent to be fully bound hereby.

ANSYS, INC.

By: ____________________
Name:
Title:

The foregoing Award is hereby accepted and the terms and conditions of this Agreement are hereby agreed to by the undersigned.

Dated: ______________________

____
Participant's Signature

Participant's name and address:

ANSYS, INC.
THIRD AMENDED AND RESTATED LONG-TERM INCENTIVE PLAN

1. Purpose

This Third Amended and Restated Long-Term Incentive Plan (the "Plan") is intended to provide an incentive for superior work and to motivate executives and employees of ANSYS, Inc. (the "Company") toward even higher achievement and business results, to tie their goals and interests to those of the Company and its stockholders and to enable the Company to attract and retain highly qualified executives and employees. The Plan is for the benefit of Participants (as defined below). Awards made under this Plan constitute Restricted Stock Unit Awards under Section 11 of the Company's Fifth Amended and Restated 1996 Stock Option and Grant Plan (the "1996 Option Plan") and shall be granted under, and subject to, the terms of the 1996 Option Plan.

2. Definitions

For purposes of this Plan:

(a) "Award" means a grant to a Participant hereunder. From and after a Change in Control, any references to an Award shall mean the fixed number of Restricted Stock Units eligible to be earned by a Participant, as determined by the Committee pursuant to Section 6 hereof.

(b) "Award Notice" means a notice or agreement provided to a Participant that sets forth the terms, conditions and limitations of the Participant's participation in this Plan, including, without limitation, the Participant's Target Award.

(c) "Board" means the Board of Directors of the Company.

(d) "Cause" means, and shall be limited to a determination by the Company that the Participant's employment shall be terminated as a result of any one or more of the following events:

(i) any material breach by the Participant of any agreement between the Participant and the Company; or

(ii) the conviction of, indictment for or plea of nolo contendere by the Participant to a felony or a crime involving moral turpitude; or

(iii) any material misconduct or willful and deliberate non-performance (other than by reason of disability) by the Participant of the Participant's duties to the Company; or

(iv) willful failure to cooperate with a bona fide internal investigation or an investigation by regulatory or law enforcement authorities, after being instructed by the Company to cooperate, or the willful destruction or failure to preserve documents or other materials known to be relevant to such investigation or the willful inducement of others to fail to cooperate or to produce documents or other materials in connection with such investigation.

(e) "Change in Control" means any of the following:

(i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act") (other than the Company, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50 percent or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the Company); or

(ii) the consummation of (A) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than 50 percent of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (B) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company.

Notwithstanding the foregoing, a "Change in Control" shall not be deemed to have occurred for purposes of the foregoing clause (i) solely as the result of an acquisition of securities by the Company which, by reducing the number of shares of Voting Securities outstanding, increases the proportionate number of Voting Securities beneficially owned by any person to 50 percent or more of the combined voting power of all of the then outstanding Voting Securities; provided, however, that if any person referred to in this sentence shall thereafter become the beneficial owner of any additional shares of Voting Securities (other than pursuant to a stock split, stock dividend, or similar transaction or as a result of an acquisition of securities directly from the Company) and immediately thereafter beneficially owns 50 percent or more of the combined voting power of all of the then outstanding Voting Securities, then a "Change in Control" shall be deemed to have occurred for purposes of the foregoing clause (i).

(f) "Change in Control Date" means with respect to each Change in Control Performance Measurement Period, the last day of the month immediately preceding the effective date of the Change in Control.

(g) "Change in Control Performance Measurement Period" means the Performance Measurement Period that is shortened by the Committee such that such period shall be deemed to have concluded as of the Change in Control Date and which may shorten one or more Performance Sub-Periods.

(h) "Change in Control Terminating Event" means during the 18-month period following the occurrence of a Change in Control, any of the following events: (i) termination by the Company of the Participant's employment for any reason other than for Cause, death or disability; or (ii) the termination by the Participant of his or her employment with the Company for Good Reason. Notwithstanding the foregoing, a Change in Control Terminating Event shall not be deemed to have occurred herein solely as a result of the Participant being an employee of any direct or indirect successor to the business or assets of the Company.

(i) "Closing Index Value" means the Performance Measurement Index Value as of the last day of each Performance Sub-Period.

(j) "Closing Stock Price" means the Stock Price as of the last day of each Performance Sub-Period.

(k) "Code" means Internal Revenue Code of 1986, as amended.

(l) "Committee" means the Compensation Committee of the Board.

(m) "Effective Date" means as of January 1, 2017.

(n) "Good Reason" means that the Participant has complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following events:

(i) a material diminution in the Participant's responsibilities, authority or duties; or

(ii) a material reduction in the Participant's Base Salary and Target Bonus except for across-the-board salary reductions similarly affecting all or substantially all management employees; or

(iii) a material change in the geographic location at which the Participant is principally employed.

For purposes of this Section 2(n)(i), a change in the reporting relationship, or a change in a title will not, by itself, be sufficient to constitute a material diminution of responsibilities, authority or duty.

(o) "Good Reason Process" means:

(i) the Participant reasonably determines in good faith that a "Good Reason" condition has occurred;

(ii) the Participant notifies the Company in writing of the occurrence of the Good Reason condition within 60 days of the first occurrence of such condition;

(iii) the Participant cooperates in good faith with the Company's efforts, for a period not less than 30 days following such notice (the "Cure Period"), to remedy the condition;

(iv) notwithstanding such efforts, the Good Reason condition continues to exist following the Cure Period; and

(v) the Participant terminates his or her employment within 30 days after the end of the Cure Period.

If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

(p) "Initial Index Value" means, the Performance Measurement Index Value as of January 1 of the first calendar year in any Performance Measurement Period.

(q) "Initial Stock Price" means the Stock Price as of January 1 of the first calendar year in any Performance Measurement Period.

(r) "Participant" means an executive or employee of the Company selected by the Committee to participate in the Plan.

(s) "Performance Measurement Index" means the NASDAQ Composite Index (^IXIC), or, in the event such index is discontinued or its methodology significantly changed, a comparable index selected by the Committee in good faith.

(t) "Performance Measurement Index Value" means, with respect to any date, the average value of the Performance Measurement Index for the ten consecutive trading days immediately preceding such date.

(u) "Performance Measurement Period" means a three year period commencing on January 1 and ending on the third December 31 thereafter, and which consists of three Performance Sub-Periods. There shall be overlapping Performance Measurement Periods.

(v) “Performance Multiplier” means the percentage between 0% and 150% by which the applicable portion of the Target Award is multiplied to determine the number of credited Restricted Stock Units for a Performance Sub-Period.

(w) “Performance Sub-Period” means one of three periods (each a Performance Sub-Period) within a Performance Measurement Period where each period commences on January 1 of the first calendar year within the Performance Measurement Period and concludes on the immediately following December 31 of such year for the first Performance Sub-Period, December 31 of the following year for the second Performance Sub-Period and December 31 of the second year thereafter for the third Performance Sub-Period. For the avoidance of doubt, the first Performance Measurement Period under the Plan will commence on January 1, 2017 and will contain the following three Performance Sub-Periods: January 1, 2017 – December 31, 2017; January 1, 2017 – December 31, 2018; and January 1, 2017 – December 31, 2019. Performance Measurement Periods will commence on each January 1 thereafter (and will contain three such Performance Sub-Periods) while the Plan is effective.

(x) “Restricted Stock Units” means the stock units of the Company to be settled in shares of Stock.

(y) “Stock” means the Company’s common stock, par value $0.01 per share.

(z) “Stock Price” means, as of a particular date, the average closing price of one share of Stock for the ten consecutive trading days ending on, and including, such date; provided however, that in the event of a Change in Control of the Company, the Stock Price shall equal the fair market value, as determined by the Committee in its discretion, of the total consideration paid or payable in the transaction resulting in the Change in Control for one share of Stock.

(aa) “Target Award” means the target number of Restricted Stock Units that comprise a Participant’s Award for each Performance Measurement Period, as set forth in the Participant’s Award Notice.

(bb) “Total Shareholder Return” means, with respect to a Performance Sub-Period, the total percentage return per share, achieved by the Stock assuming contemporaneous reinvestment in the Stock of all dividends and other distributions (excluding dividends and distributions paid in the form of additional shares of Stock) at the closing price of one share of Stock on the date such dividend or other distribution was paid, based on the Initial Stock Price, and the Closing Stock Price for the last day of the applicable Performance Sub-Period.

3. Administration

(a) The Plan shall be administered by the Committee. The Committee shall have the discretionary authority to make all determinations (including, without limitation, the interpretation and construction of the Plan and the determination of relevant facts) regarding the entitlement to any Award hereunder and the amount of any Award to be paid under the Plan (including the number of shares of Stock issuable to any Participant), provided such determinations are made in good faith and are consistent with the purpose and intent of the Plan. In particular, but without limitation and subject to the foregoing, the Committee shall have the authority:

(i) to select Participants under the Plan;

(ii) to determine the Target Award and any formula or criteria for the determination of the Target Award for each Participant;

(iii) to determine the terms and conditions, not inconsistent with the terms of this Plan, which shall govern Award Notices and all other written instruments evidencing an Award hereunder, including the waiver or modification of any such conditions;

(iv) to adopt, alter and repeal such administrative rules, guidelines and practices governing the Plan as it shall from time to time deem advisable; and

(v) to interpret the terms and provisions of the Plan and any Award granted under the Plan (and any Award Notices or other agreements relating thereto) and to otherwise supervise the administration of the Plan.

(b) Notwithstanding anything herein to the contrary, the Committee may, in its discretion, make appropriate adjustments to any Award, any Target Award, any Initial Stock Price, any Closing Stock Price or the Total Shareholder Return for any period in connection with or as a result of any of the following events which occur or have occurred after the Effective Date: reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar change in the Company's capital stock, if the outstanding shares of Stock are increased or decreased or are exchanged for a different number or kind of shares or other securities of the Company, or additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Stock or other securities.

(c) Subject to the terms hereof, all decisions made by the Committee pursuant to the Plan shall be final, conclusive and binding on all persons, including the Company and the Participants. No member of the Board or the Committee, nor any officer or employee of the Company acting on behalf of the Board or the Committee shall be personally liable for any action, determination or interpretation taken or made in good faith with respect to the Plan, and all members of the Board or Committee and each and any officer or employee of the Company acting on their behalf shall, to the extent permitted by law, be fully indemnified and protected by the Company in respect of any such action, determination or interpretation.

4. Determination and Payment of Awards

(a) Measurement Period Target. Each Participant's Award Notice shall specify such Participant's Target Award, one third of which (the "Measurement Period Target") is eligible to be credited for each Performance Sub-Period. The Target Award shall be expressed as a number of Restricted Stock Units. The percentage of the Measurement Period Target that is eligible to be credited shall be determined by reference to the Company's performance for the applicable Performance Sub-Period as measured by the Total Shareholder Return relative to the percentage appreciation of the Performance Measurement Index for such calendar year or years. The percentage appreciation of the Performance Measurement Index shall be established by comparing the Initial Index Value to the Closing Index Value.

(b) Performance Multiplier: If Total Shareholder Return for a Performance Sub-Period is less than the Performance Measurement Index, the Performance Multiplier shall be 100% minus A, where A is (the amount by which the Performance Measurement Index exceeds Total Shareholder Return) times three; provided however that the Performance Multiplier shall be zero if A results in a number greater than 75. If Total Shareholder Return for a Performance Sub-Period is equal to the Performance Measurement Index, the Performance Multiplier shall be 100%. If Total Shareholder Return for a Performance Sub-Period is greater than the Performance Measurement Index, the Performance Multiplier is 100% plus B, where B is (the amount by which Total Shareholder Return exceeds the Performance Measurement Index) times two.

Subject to Section 4(c), in no event will any portion of a Participant's Target Award be credited for a Performance Sub-Period in which either: (A) the Performance Multiplier calculates to a number of less than 25%

(i.e., in such event the Performance Multiplier shall be 0% for such Performance Sub-Period); or (ii) both absolute Total Shareholder Return and relative Total Shareholder Return (i.e., where Total Shareholder Return is less than the Performance Measurement Index) are negative. For purposes of clarity, see the following examples:

Sample ANSYS Total Shareholder Return	Sample Performance Measurement Index	Difference between Sample ANSYS Total Shareholder Return and Performance Measurement Index	Performance Multiplier
40	15	+25	150%
40	30	+10	120%
40	40	0	100%
40	42	-2	94%
40	56	-16	52%
40	65	-25	25%
40	70	-30	0%
-10	-20	+10	100%
-10	-5	-5	0%

Notwithstanding the foregoing, in no event shall the Performance Multiplier be less than 0% or exceed 150%, regardless of a Total Shareholder Return that would result in a Performance Multiplier of less than 0% or in excess of 150%.

Notwithstanding the foregoing, if the Total Shareholder Return in a Performance Sub-Period is a negative percentage, then a maximum of 100% of the Measurement Period Target may be credited for such calendar year, even if the Total Shareholder Return relative to the median percentage appreciation (depreciation) of the Performance Measurement Index would result in a greater Performance Multiplier.

(c) Retroactive Crediting. If the Performance Multiplier for the third and final Performance Sub-Period within a Performance Measurement Period exceeds the Performance Multiplier of any of the two earlier Performance Sub-Periods within such Performance Measurement Period, the Committee, at its first meeting following the conclusion of the Performance Measurement Period, shall retroactively credit the previous Measurement Period Target(s) based upon the third and final Performance Sub-Period's Performance Multiplier. For the avoidance of doubt, in no event shall a Participant receive more than 150% of the Target Award in a Performance Measurement Period.

(d) Committee Determination. The Committee, at its first meeting following the conclusion of each Performance Sub-Period within a Performance Measurement Period, shall determine the actual number of Restricted Stock Units that will be deemed to have been credited as of the final day of such Performance Sub-Period. For each Performance Sub-Period, the number of Restricted Stock Units credited for such period shall equal the Measurement Period Target multiplied by the Performance Multiplier, subject to the terms and conditions hereof.

(e) Vesting and Settlement. Subject to Section 5, as soon as practicable (but in no event later than 74 days) following the conclusion of the Performance Measurement Period, the cumulative number of Restricted Stock Units, if any, that were credited in each of the three Performance Sub-Periods will be vested and settled in an equal number of shares of Stock.

5. Termination of Employment. Unless otherwise provided in any Award Notice or as provided in Section 6 below, if at any time prior to the conclusion of a Performance Measurement Period, a Participant's employment with the Company terminates for any reason, such Participant shall automatically forfeit the right to receive any Award credited as of the date of termination of employment.

6. <u>Change in Control</u>. Unless otherwise provided in any Award Notice, upon a Change in Control of the Company, the following shall occur:

(a) With respect to each Change In Control Performance Measurement Period, the Committee, in accordance with Section 4, shall determine the actual number of Restricted Stock Units that are eligible to be credited based on the Total Shareholder Return for the Change in Control Performance Measurement Period relative to the median percentage appreciation of the Performance Measurement Index for such Change in Control Performance Measurement Period and such Award shall not be deemed fully vested until the conclusion of the Performance Measurement Period, subject to the continued employment of the Participant through such date. For example, if a Change in Control occurs during the last month of the first Performance Sub-Period within the Performance Measurement Period, the Committee shall determine the number of Restricted Stock Units that are eligible to be credited with respect to the applicable Change in Control Performance Measurement Period based on performance for such period, but the Award shall not be deemed vested and will not be settled until the end of the full 36 month Performance Measurement Period. For the avoidance of doubt, since the Plan contemplates overlapping Performance Measurement Periods, there may be up to three different Change In Control Performance Measurement Periods.

(b) In the event that subsequent to a Change in Control, a Participant's employment with the Company terminates for any reason other than a Change in Control Terminating Event, such Participant shall automatically forfeit the right to receive all outstanding Awards that have been credited as of the date of termination of employment.

(c) In the event a Change in Control Terminating Event occurs with respect to a Participant, all outstanding Awards held by such Participant shall immediately vest and become payable.

(d) If as a result of a Change in Control, no Stock remains outstanding and the surviving corporation (or its ultimate parent) does not agree to convert the Awards into a number of restricted stock units of equivalent value of the surviving corporation (or its ultimate parent), then the Awards shall be converted to a dollar value based on the Stock Price.

7. <u>Miscellaneous</u>

(a) <u>Amendment and Termination</u>. The Company reserves the right to amend or terminate the Plan at any time in its discretion without the consent of any Participants, but no such amendment shall adversely affect the rights of the Participants with regard to outstanding Awards. In the event the Plan is terminated, the Company shall determine the Awards payable to Participants based on the Total Shareholder Return relative to the Performance Measurement Index for each Performance Measurement Period ending on the date of Plan termination. The Awards for each Performance Measurement Period shall be further prorated to reflect the shortened Performance Measurement Period.

(b) <u>No Contract for Continuing Services</u>. This Plan shall not be construed as creating any contract for continued services between the Company or any of its subsidiaries and any Participant and nothing herein contained shall give any Participant the right to be retained as an employee or consultant of the Company or any of its subsidiaries.

(c) <u>No Transfers</u>. A Participant's rights in an interest under the Plan may not be assigned or transferred.

(d) <u>Unfunded Plan</u>. The Plan shall be unfunded and shall not create (or be construed to create) a trust or separate fund. Likewise, the Plan shall not establish any fiduciary relationship between the

Company or any of subsidiaries or affiliates and any Participant. To the extent that any Participant holds any rights by virtue of an Award under the Plan, such right shall be no greater than the right of an unsecured general creditor of the Company or any of its subsidiaries.

(e) Governing Law. The Plan and each Award Notice awarded under the Plan shall be construed in accordance with and governed the laws of the State of Delaware, without regard to principles of conflict of laws of such state.

(f) Tax Withholding. Any issuance of shares of Stock to a Participant shall be subject to tax withholding. The minimum tax withholding obligation shall be satisfied through a net issuance of shares. The Company shall withhold from shares of Stock to be issued to the Participant a number of shares of Stock with an aggregate fair market value that would satisfy the minimum withholding amount due.

(g) Construction. Wherever appropriate, the use of the masculine gender shall be extended to include the feminine and/or neuter or vice versa; and the singular form of words shall be extended to include the plural; and the plural shall be restricted to mean the singular.

(h) Headings. The Section headings and Section numbers are included solely for ease of reference. If there is any conflict between such headings or numbers and the text of this Plan, the text shall control.

(i) Effect on Other Plans. Nothing in this Plan shall be construed to limit the rights of Participants under the Company’s or its subsidiaries’ benefit plans, programs or policies.

(j) Effective Date. The Plan shall be effective as of the Effective Date.

8. Section 409A.

(a) All payments and benefits described in this Plan are intended to constitute a short term deferral for purposes of Section 409A of the Internal Revenue Code of 1986, as amended. To the extent that any payment or benefit described in this Plan constitutes “non-qualified deferred compensation” under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Participant’s termination of employment, then such payments or benefits shall be payable only upon the Participant’s “separation from service.” The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(b) The parties intend that this Plan will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Plan is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The parties agree that this Plan may be amended, as reasonably requested by either party, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(c) The Company makes no representation or warranty and shall have no liability to the Participant or any other person if any provisions of this Plan are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

EXHIBIT 15

May 4, 2017

ANSYS, Inc.
2600 ANSYS Drive
Canonsburg, PA 15317

We have reviewed, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the unaudited interim financial information of ANSYS, Inc. and subsidiaries for the periods ended March 31, 2017, and 2016, as indicated in our report dated May 4, 2017; because we did not perform an audit, we expressed no opinion on that information.

We are aware that our report referred to above, which is included in your Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, is incorporated by reference in Registration Statement Nos. 333-08613, 333-69506, 333-110728, 333-137274, 333-152765, 333-174670, 333-177030, 333-196393, 333-206111, and 333-212412 on Form S-8.

We also are aware that the aforementioned report, pursuant to Rule 436(c) under the Securities Act of 1933, is not considered a part of the Registration Statement prepared or certified by an accountant or a report prepared or certified by an accountant within the meaning of Sections 7 and 11 of that Act.

/s/ Deloitte & Touche LLP
Pittsburgh, Pennsylvania

EXHIBIT 31.1

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, Ajei S. Gopal, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ANSYS, Inc. (“ANSYS”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of ANSYS as of, and for, the periods presented in this report;

4. ANSYS’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for ANSYS and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to ANSYS, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of ANSYS’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in ANSYS’s internal control over financial reporting that occurred during ANSYS’s most recent fiscal quarter (ANSYS’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, ANSYS’s internal control over financial reporting; and

5. ANSYS’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to ANSYS’s auditors and the audit committee of ANSYS’s board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect ANSYS’s ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in ANSYS’s internal control over financial reporting.

Date: May 4, 2017	*/s/ Ajei S. Gopal*
	Ajei S. Gopal
	President and Chief Executive Officer

EXHIBIT 31.2

CHIEF FINANCIAL OFFICER CERTIFICATION

I, Maria T. Shields, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ANSYS, Inc. (“ANSYS”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of ANSYS as of, and for, the periods presented in this report;
4. ANSYS’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for ANSYS and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to ANSYS, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of ANSYS’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in ANSYS’s internal control over financial reporting that occurred during ANSYS’s most recent fiscal quarter (ANSYS’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, ANSYS’s internal control over financial reporting; and
5. ANSYS’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to ANSYS’s auditors and the audit committee of ANSYS’s board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect ANSYS’s ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in ANSYS’s internal control over financial reporting.

Date: May 4, 2017

/s/ Maria T. Shields

Maria T. Shields
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of ANSYS, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ajei S. Gopal, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is provided solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be part of the Report or filed for any purpose whatsoever.

/s/ *Ajei S. Gopal*

Ajei S. Gopal
President and Chief Executive Officer
May 4, 2017

EXHIBIT 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of ANSYS, Inc. (the “Company”) on Form 10-Q for the quarter ended March 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Maria T. Shields, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is provided solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be part of the Report or filed for any purpose whatsoever.

/s/ *Maria T. Shields*

Maria T. Shields
Chief Financial Officer
May 4, 2017