



**ANSYS, INC. FOURTH QUARTER 2017  
EARNINGS ANNOUNCEMENT  
PREPARED REMARKS  
February 21, 2018**

ANSYS is providing a copy of its prepared remarks in connection with its earnings announcement. These remarks are offered to provide stockholders and research analysts with additional time and detail for analyzing our Q4 2017 results in advance of our quarterly conference call. These prepared remarks will not be read on the call.

**Conference call details:  
February 22, 2018  
8:30 a.m. Eastern Time**

- To access the live broadcast, please visit the Investor Relations section of ANSYS' website at <http://investors.ansys.com> and click on Events & Presentations, then Webcasts & Events.
- The call can also be heard by dialing (855) 239-2942 (US) or (412) 542-4124 (CAN & INT'L) at least five minutes prior to the call and referencing conference code 10116584.
- A replay will be available within two hours of the call's completion at <http://investors.ansys.com> or by dialing (877) 344-7529 (US), (855) 669-9658 (CAN) or (412) 317-0088 (INT'L) and referencing the access code 10116584.

**NON-GAAP SUPPLEMENTAL INFORMATION**

In addition to our GAAP information, ANSYS has historically provided non-GAAP supplemental information. Our reasons for providing this information are described later in this document, as well as in our Q4 earnings press release, which can be found on our website in the press release section. Reconciliations of GAAP to non-GAAP information are also provided. In line with our historical practice, the financial information below is presented on a supplemental, non-GAAP basis unless otherwise indicated.

**FOURTH QUARTER AND FY 2017 OVERVIEW**

We finished the year with an exceptional fourth quarter that exceeded the high end of our revenue and non-GAAP EPS guidance. For FY 2017, we exceeded \$1 billion in revenue for the first time in the Company's history. We reported fourth quarter consolidated non-GAAP revenue of \$303.4 million, an increase of 12% in reported currency and 9% in constant currency. We reported FY 2017 consolidated non-GAAP revenue of \$1,098.1 million, an increase of 11% in both reported and constant currency. We also achieved non-GAAP EPS of \$1.07 and \$4.01 in the fourth quarter and FY 2017, respectively, which represented 9% and 10% growth over Q4 and FY 2016, respectively. Our financial results for Q4 and FY 2017 included cash flows from operations of \$103.5 million and \$430.4 million, respectively.

**The following are other notable comments and events related to Q4 2017 and FY 2017:**

- On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (Tax Reform). Tax Reform makes broad and complex changes to the U.S. tax code. The new law adversely impacted our GAAP income tax provision for Q4 2017. In connection with our initial analysis of the impact of Tax Reform, a discrete net tax expense of \$17.9 million was recorded in the

period ending December 31, 2017, primarily consisting of \$1.9 million for the revaluation of net deferred tax assets related to the corporate rate reduction and \$16.0 million for the transition tax. In addition to the \$17.9 million charge, we would have recognized a \$4.8 million benefit in the fourth quarter related to foreign earnings repatriation, but this benefit was eliminated due to Tax Reform. These items were excluded for non-GAAP purposes as discussed in the Non-GAAP Measures section below.

- Lease license revenue grew 7% and 11% in Q4 and FY 2017, respectively, and maintenance revenue grew 11% in both Q4 and FY 2017, all in constant currency.
- Both lease licenses and maintenance contributed to the recurring revenue base continuing to remain strong at 71% of revenue for the fourth quarter and 75% of revenue for FY 2017.
- There was continued progress in enterprise portfolio sales efforts, cross-selling and customer engagement activities that contributed to building the deferred revenue and backlog balance to a record of \$769.7 million at December 31, 2017, an increase of 21% over Q4 2016.
- During Q4 2017 we had 49 customers with orders over \$1 million, including six customers with orders over \$5 million and three of those customers with orders over \$10 million. This compares to 37 customers with orders over \$1 million in Q4 2016, including 12 customers with orders over \$5 million and seven of those customers with orders over \$10 million.
- For FY 2017 we had 149 customers with cumulative orders in excess of \$1 million, including 22 customers with orders over \$5 million and 10 of those customers with orders over \$10 million. During Q3, the Company closed a three-year deal of over \$45 million, which was the largest deal in the Company's history. This compares to 139 customers with cumulative orders over \$1 million in FY 2016, including 24 customers with orders over \$5 million and 12 of those customers with orders over \$10 million.
- Our direct and indirect businesses contributed 74% and 26%, respectively, of Q4 revenue and 75% and 25%, respectively, of YTD revenue.
- Total headcount on December 31, 2017 was approximately 2,900 employees.

### **Other Recent Highlights**

- Dr. Alec Gallimore was appointed to the Board of Directors effective December 18, 2017. He holds several engineering posts at the University of Michigan, including the Robert J. Vlasic Dean of Engineering and the Chief Academic and Executive Officer of Michigan Engineering. He is also the director of the NASA-funded Michigan Space Grant Consortium and co-director of the Plasmadynamics and Electric Propulsion Laboratory. This experience provides Dr. Gallimore with a deep understanding of the engineering challenges that companies are facing today and how simulation can provide innovative solutions.
- We acquired 3DSIM, a developer of premier additive manufacturing simulation software, in November 2017. This enhances our product portfolio with the industry's only complete additive manufacturing simulation workflow. The fast-growing additive manufacturing market involves challenges to manufacturers, including potential stress, distortion and build failure during the printing process. Printing metal is particularly challenging because it often involves a laser, which optimizes the metal's density for each application. But it can also melt the metal in unexpected ways, causing product failure. Additionally, rapid heating and cooling causes stresses that can deform the product. The combined ANSYS-3DSIM simulation solution will mitigate those risks, leading to stronger, yet lighter components in the future. Customers include aerospace and automotive OEMs, parts manufacturers, metal additive manufacturing machine producers and leading research labs.

## TECHNOLOGY UPDATES

Companies continue to strive for innovation to keep pace with the merging physical and digital worlds. Today's products are increasingly complex, which makes simulation imperative to delivering groundbreaking products at a lower cost and shorter time to market. To address these challenges, we announced ANSYS 19 in January 2018, which allows companies to leverage simulation to solve the most complex problems with greater accuracy, reduced costs and less time and complexity. ANSYS 19 includes several enhancements to our product portfolio, including:

- New support for avionics systems modeling in the embedded suite, enabling users to quickly identify and address interoperability issues in systems and components, while maximizing critical performance characteristics and controlling system costs.
- Enhanced HMI (Human Machine Interface) functionality to facilitate faster development, deployment and testing of safety-critical HMIs for cockpit, dashboard or control room displays for aerospace, automotive or industrial applications.
- A robust, integrated electromagnetic-thermal workflow that predicts crucial thermal effects, which can impact reliability and performance within electronics designs.
- Functional safety analysis capabilities extended to the automotive, aerospace, rail, nuclear and other safety-critical industries. This automates analysis and verification of functional safety for electronic control systems, and ensures that safety mechanisms are in place for protection over a wide range of operating scenarios.
- A comprehensive big-data-enabled simulation platform that simultaneously solves for power noise, thermal integrity, reliability and performance across chip, package and system. Statistical electromigration budgeting enables chip designers to meet reliability targets by prioritizing design fixes for sign-off while avoiding overdesign.
- Enhancements to fluids and structures products, which provide improved user experiences and advanced functionalities. New fluids workflows reduce the time needed to deliver airflow and other solutions, while reducing computational effort to solve for multiphase flow problems such as spray breakup. Structures product features include new fracture analysis capabilities and more efficient acoustic simulations.
- High-performance computing and solver improvements that result in more computational power and additional capacity for simulations.
- Enhanced topology optimization capabilities that provide shape optimization to create lighter-weight, stronger designs in less time.

We also introduced ANSYS Discovery Live™, which revolutionizes the speed and ease-of-use of engineering simulation. Discovery Live allows every engineer to immediately examine the impact of design changes. This allows for digital exploration upfront in the design process, which leads to more innovative products in less time. The interactive 3-D model makes it intuitive for the non-simulation expert, delivering on our goal of Pervasive Engineering Simulation™. Discovery Live supports fluids, structural and thermal simulation.

## DEFERRED REVENUE AND BACKLOG (GAAP)

<i>(in thousands)</i>	December 31, 2017	September 30, 2017	December 31, 2016	September 30, 2016
Current Deferred Revenue	\$ 440,491	\$ 381,727	\$ 403,279	\$ 359,979
Current Backlog	97,283	91,885	64,361	49,611
Total Current Deferred Revenue and Backlog	<b>537,774</b>	473,612	467,640	409,590
Long-Term Deferred Revenue	28,069	23,971	12,567	10,623
Long-Term Backlog	203,867	171,686	157,633	64,621
Total Long-Term Deferred Revenue and Backlog	<b>231,936</b>	195,657	170,200	75,244
Total Deferred Revenue and Backlog	<b>\$ 769,710</b>	\$ 669,269	\$ 637,840	\$ 484,834

As a result of the fair value provisions applicable to the accounting for business combinations, the Company typically records acquired deferred revenue at an amount that is lower than the historical carrying value. The impact on GAAP revenue was \$1.1 million for the fourth quarter of 2017. There was no impact on GAAP revenue for the fourth quarter of 2016. The impacts on GAAP revenue were \$2.9 million and \$0.1 million for FY 2017 and 2016, respectively.

We expect a cumulative-effect adjustment to retained earnings of \$230 million - \$260 million that will reduce deferred revenue upon adoption of ASC 606 on January 1, 2018, primarily derived from revenue related to software lease licenses.

## BOOKINGS

The Company's total bookings were as follows:

<i>(in thousands, except percentages)</i>	2017	2016	% Change	% Change in Constant Currency
Q4	\$ 400,163	\$ 433,941	(7.8)%	(10.8)%
YTD	\$ 1,210,556	\$ 1,125,070	7.6 %	6.7 %

There were favorable foreign exchange impacts on deferred revenue of \$2.6 million and \$16.6 million for the fourth quarter and year-to-date 2017, respectively.

NOTE: Bookings growth in any particular quarter can vary significantly based upon the timing of contract renewals and large, multi-year contracts.

## NON-GAAP REVENUE

<i>(in thousands, except percentages)</i>	Q4 QTD 2017	% of Total	Q4 QTD 2016	% of Total	% Change	% Change in Constant Currency
Lease	\$ 97,732	32.2%	\$ 89,616	33.1%	9.1%	7.4%
Perpetual	79,565	26.2%	71,890	26.6%	10.7%	6.7%
Maintenance	116,497	38.4%	101,970	37.7%	14.2%	10.9%
Service	9,650	3.2%	7,152	2.6%	34.9%	30.0%
Total	<b>\$ 303,444</b>		<b>\$ 270,628</b>		12.1%	9.1%

<i>(in thousands, except percentages)</i>	Q4 YTD 2017	% of Total	Q4 YTD 2016	% of Total	% Change	% Change in Constant Currency
Lease	\$ 378,874	34.5%	\$ 340,358	34.4%	11.3%	11.3%
Perpetual	248,078	22.6%	227,843	23.0%	8.9%	7.6%
Maintenance	441,296	40.2%	394,821	39.9%	11.8%	11.2%
Service	29,858	2.7%	25,546	2.6%	16.9%	16.0%
Total	<u>\$ 1,098,106</u>		<u>\$ 988,568</u>		11.1%	10.5%

### NON-GAAP GEOGRAPHIC REVENUE HIGHLIGHTS

<i>(in thousands, except percentages)</i>	Q4 QTD 2017	% of Total	Q4 QTD 2016	% of Total	% Change	% Change in Constant Currency
North America	\$ 116,042	38.2%	\$ 105,421	39.0%	10.1%	10.0%
Germany	29,141	9.6%	26,386	9.7%	10.4%	1.4%
United Kingdom	9,314	3.1%	7,813	2.9%	19.2%	11.7%
Other Europe	52,262	17.2%	41,424	15.3%	26.2%	16.0%
Europe	90,717	29.9%	75,623	27.9%	20.0%	10.5%
Japan	31,603	10.4%	29,559	10.9%	6.9%	9.7%
Other Asia-Pacific	65,082	21.4%	60,025	22.2%	8.4%	5.7%
Asia-Pacific	96,685	31.9%	89,584	33.1%	7.9%	7.0%
Total	<u>\$ 303,444</u>		<u>\$ 270,628</u>		12.1%	9.1%

<i>(in thousands, except percentages)</i>	Q4 YTD 2017	% of Total	Q4 YTD 2016	% of Total	% Change	% Change in Constant Currency
North America	\$ 432,709	39.4%	\$ 381,302	38.6%	13.5 %	13.4%
Germany	108,377	9.9%	99,816	10.1%	8.6 %	6.3%
United Kingdom	33,510	3.1%	33,887	3.4%	(1.1)%	2.4%
Other Europe	174,196	15.9%	155,225	15.7%	12.2 %	9.7%
Europe	316,083	28.8%	288,928	29.2%	9.4 %	7.6%
Japan	126,522	11.5%	120,160	12.2%	5.3 %	8.1%
Other Asia-Pacific	222,792	20.3%	198,178	20.0%	12.4 %	10.6%
Asia-Pacific	349,314	31.8%	318,338	32.2%	9.7 %	9.7%
Total	<u>\$ 1,098,106</u>		<u>\$ 988,568</u>		11.1 %	10.5%

## Regional Commentary

### North America

North America delivered 10% and 13% constant currency revenue growth in the fourth quarter and FY 2017, respectively, including 10% and 17%, respectively, in constant currency lease revenue growth. North America continued to lead in large deal sales with a total of 24 customers with orders above \$1 million in the fourth quarter,

including three customers with orders over \$5 million and two of those customers with orders over \$10 million. The region also led for FY 2017 with a total of 68 customers with orders above \$1 million, including 14 customers with orders over \$5 million and seven of those customers with orders over \$10 million. The high-tech industry is strong and benefiting from miniaturization, connectivity, energy efficiency and data volume needs. The automotive industry continues to demonstrate strength as efficiency, electrification, autonomy and safety drive demand for our multidisciplinary workflows. New defense spending in the U.S. and the need for efficient and safe aircraft are drivers of the aerospace and defense industry. Commodity prices have improved, which is bolstering the recovery in the energy industry. Simulation is increasingly important in this industry as customers look to increase efficiency and lower costs after the downturn. The industrial equipment industry has been strong as companies strive for machine efficiency and reliability. Across the industries, autonomy; electrification; and smart, connected products are driving the demand for innovative products for which simulation can decrease complexity, cost and time to market.

## ***Europe***

Europe showed signs of continued improvement with constant currency revenue growth of 10% and 8% in the fourth quarter and FY 2017, respectively. The United Kingdom and Italy each delivered double-digit constant currency revenue growth for the fourth quarter, but this strength was partially offset by lower growth in Germany. During the fourth quarter, there was continued progress with larger deal sales with a total of 16 customers with orders in excess of \$1 million. The performance of the indirect channel continued to show positive signs of progress with double-digit constant currency growth for the fourth quarter. We are starting to see improvement in the region's growth, but the full effect will not be realized until 2018 and beyond as we continue to build the sales pipeline and finalize initiatives to update our go-to-market strategy. Europe experienced similar overall industry trends as North America except that the oil and gas recovery has not been fully realized in Europe.

## ***Asia-Pacific***

Asia-Pacific experienced constant currency revenue growth of 7% and 10% for the fourth quarter and FY 2017, respectively. We experienced strength in China and Taiwan for both the fourth quarter and FY 2017, partially offset by lower performance in our direct sales in India, which have been negatively impacted by enterprise deals that previously may have been sold directly to subsidiaries in India and are now included in a centralized purchase in other geographies. Our investments over the past several years in the indirect sales channel helped deliver double-digit constant currency revenue growth for the indirect channel for both the fourth quarter and FY 2017. The industry trends in the region were similar to those in North America. The emergence of India and China in the space sector continues to strengthen the aerospace and defense industry. Like Europe, Asia-Pacific has not fully realized the oil and gas recovery. The high-tech industry is particularly strong in Taiwan and South Korea, and domestic technology development programs in China have been a driver in the growth of the industrial equipment industry.

## **INCOME STATEMENT HIGHLIGHTS**

**Q4 AND FY 2017 MARGINS:** The non-GAAP gross and operating margins were 90.1% and 42.6%, respectively, for the fourth quarter and 90.2% and 46.4%, respectively, for FY 2017.

**Q4 AND FY 2017 TAX RATE:** Our Q4 non-GAAP effective tax rate was 29.1%. Our FY non-GAAP effective tax rate was 32.3%.

## **BALANCE SHEET AND CASH FLOW HIGHLIGHTS**

- Cash and short-term investments totaled \$881.8 million as of December 31, 2017, of which 64% was held domestically.

- Cash flows from operations were \$103.5 million for the fourth quarter of 2017 as compared to \$99.2 million for the fourth quarter of 2016. Cash flows from operations were \$430.4 million for FY 2017 as compared to \$366.0 million for FY 2016.
- Consolidated net DSO was 40 days.
- Cash paid for acquisitions, net of cash acquired, was \$37.9 million for the fourth quarter and \$63.9 million for the year.
- Capital expenditures totaled \$4.3 million for the fourth quarter of 2017 and \$19.1 million for FY 2017. We are currently planning total 2018 capital expenditures in the range of \$22 - \$27 million.

## SHARE COUNT AND SHARE REPURCHASE

We had 86.7 million fully diluted weighted average shares outstanding in Q4. In line with our commitment to return capital to stockholders, we repurchased 0.8 million shares at an average price of \$150.33 per share during the fourth quarter of 2017. We repurchased 2.8 million shares at an average price of \$122.20 per share during FY 2017. As of December 31, 2017, the Company had 2.8 million shares remaining in its authorized share repurchase program. In February 2018, the Company's Board of Directors increased the authorized share repurchase program to a total of 5.0 million shares.

## STOCK-BASED COMPENSATION EXPENSE

<i>(in thousands, except per share data)</i>	Three Months Ended		Twelve Months Ended	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Cost of sales:				
Software licenses	\$ 258	\$ 177	\$ 969	\$ 701
Maintenance and service	639	378	2,533	1,578
Operating expenses:				
Selling, general and administrative	7,507	4,830	30,817	15,990
Research and development	5,342	3,398	18,835	15,078
Stock-based compensation expense before taxes	13,746	8,783	53,154	33,347
Related income tax expense (benefits)	3,477	(2,610)	(20,503)	(10,538)
Stock-based compensation expense, net of taxes	\$ 17,223	\$ 6,173	\$ 32,651	\$ 22,809
Net impact on earnings per share:				
Diluted earnings per share	\$ (0.20)	\$ (0.07)	\$ (0.38)	\$ (0.26)

During the first quarter of 2017, the Company adopted new share-based payment guidance. During the fourth quarter and FY 2017, the adoption of this guidance resulted in \$1.9 million and \$13.3 million, respectively, of excess tax benefits being recorded in the provision for income taxes that would have been recorded in paid-in capital under the previous accounting guidance. In addition, in connection with the Tax Cuts and Jobs Act and the corresponding corporate rate reduction, we recorded a discrete tax charge of \$9.6 million related to the revaluation of deferred tax assets on stock-based compensation. While this standard and the change in tax law affected the Company's GAAP income tax expense, it had no effect on its non-GAAP income tax expense.

## CURRENCY

**CURRENCY IMPACT:** The fourth quarter 2017 revenue and operating income were favorably impacted by currency fluctuations of \$8.1 million and \$4.0 million, respectively. The favorable impacts on revenue and operating income for FY 2017 were \$5.4 million and \$3.6 million, respectively.

## OUTLOOK

**Q1 2018 OUTLOOK:** We are currently forecasting the following for Q1 2018 under ASC 606:

*(in millions, except percentages and per share data)*

	<u>GAAP</u>	<u>non-GAAP</u>
Revenue	\$261.0 - \$281.0	\$261.0 - \$281.0
Operating margin	27.0% - 31.0%	39.0% - 42.0%
Effective tax rate	15.0% - 20.0%	22.0% - 23.5%
Diluted earnings per share	\$0.70 - \$0.88	\$0.90 - \$1.05

We are currently forecasting the following for Q1 2018 under ASC 605:

*(in millions, except percentages and per share data)*

	<u>GAAP</u>	<u>non-GAAP</u>
Revenue	\$274.6 - \$284.6	\$275.0 - \$285.0
Operating margin	30.0% - 32.0%	42.0% - 43.0%
Effective tax rate	15.0% - 20.0%	22.0% - 23.5%
Diluted earnings per share	\$0.82 - \$0.92	\$1.02 - \$1.09

**FY 2018 OUTLOOK:** We are currently forecasting the following for FY 2018 under ASC 606:

*(in millions, except percentages and per share data)*

	<u>GAAP</u>	<u>non-GAAP</u>
Revenue	\$1,152.0 - \$1,232.0	\$1,152.0 - \$1,232.0
Operating margin	31.0% - 35.0%	42.0% - 45.0%
Effective tax rate	19.0% - 23.5%	22.0% - 23.5%
Diluted earnings per share	\$3.38 - \$4.11	\$4.41 - \$5.04

We are currently forecasting the following for FY 2018 under ASC 605:

*(in millions, except percentages and per share data)*

	<u>GAAP</u>	<u>non-GAAP</u>
Revenue	\$1,191.3 - \$1,226.3	\$1,192.0 - \$1,227.0
Operating margin	33.0% - 35.0%	44.0% - 45.0%
Effective tax rate	19.0% - 23.5%	22.0% - 23.5%
Diluted earnings per share	\$3.72 - \$4.06	\$4.76 - \$5.00

The transition to ASC 606 will impact the timing and amounts of revenue recognized. The most significant impact relates to the accounting for lease licenses. Under ASC 605, the revenue associated with these licenses was recognized ratably and was accounted for entirely as lease license revenue. Under ASC 606, approximately 50% of the value of the lease license will be recognized upfront as lease license revenue, while the remainder will be recognized as maintenance revenue ratably over the contract duration. The upfront recognition of the amount attributed to license revenue will result in greater volatility in our revenue and earnings results. As such, beginning in 2018, we are introducing a new performance metric, Annual Contract Value (ACV). We believe this new measure is an improved metric as compared to the historical bookings metric because it adjusts the sales bookings metric to reflect only the annual value of a contract and also adjusts to reflect the sales booking at the date of the contract inception or renewal.

In addition, we are currently forecasting the following for FY 2018:

*(in millions)*

	<u>Other Financial Metrics</u>
ACV	\$1,230.0 - \$1,275.0
Operating cash flows*	\$430.0 - \$470.0

\*The Company's operating cash flow guidance reflects an adverse impact of approximately \$20.0 million related to the acceleration of income tax payments associated with deferred revenue and backlog credited to retained earnings and never recognized as revenue in the financial statements.

The Company's ACV metric during FY 2017 was approximately \$1,124.0 million.

We are currently expecting approximately 87.0 million and 86.0 - 87.0 million fully diluted shares outstanding for Q1 2018 and FY 2018, respectively.

**CURRENCY OUTLOOK:** The Company's results have been, and will continue to be, impacted by currency fluctuations, particularly by rate movements in the Euro, British Pound and Japanese Yen. Our currency rate assumptions are as follows:

<i>(in millions)</i>	<b>Euro</b>	<b>British Pound</b>	<b>Japanese Yen</b>
Q1 2018	1.22 - 1.25	1.38 - 1.41	107 - 110
FY 2018	1.22 - 1.25	1.39 - 1.42	106 - 109

These outlooks factor in actual and planned increases in sales and channel capacity, our current visibility around major account activity, sales pipelines and forecasts. However, as we have said in the past, and will continue to reiterate, there are many things that we have no control over, including the macro-economic environment, customer procurement patterns, government and tax policies, and currency rate volatility. We do, however, have the benefit of a solid, repeatable business base; a diversified geographic and industry footprint; and a world-class customer base that have helped us to succeed and to deliver on our commitments.

## GLOSSARY OF TERMS

Annual Contract Value (ACV): ACV is comprised of the following:

- the annualized value of maintenance and lease contracts with start dates or anniversary dates during the period, plus
- the value of perpetual license contracts with start dates during the period, plus
- the value of services contracts completed during the period and expected to be fulfilled over the next 12 months.

Example 1: A \$300,000 lease or maintenance contract with a term of January 1, 2018 - December 31, 2020 would contribute \$100,000 to ACV in each of fiscal years 2018, 2019, 2020.

Example 2: A perpetual license valued at \$200,000 with a contract start date of March 1, 2018, sold in connection with three years of annual maintenance valued at a total of \$120,000 would contribute to ACV as follows: fiscal year 2018: \$240,000 (\$200,000 + \$40,000); fiscal years 2019 and 2020: \$40,000 in each year.

Backlog: Installment billings for periods beyond the current quarterly billing cycle and customer orders received but not processed.

Deferred Revenue: Billings made or payments received in advance of revenue recognition from software license and maintenance agreements.

Lease or Time-Based License: A license of a stated product of the Company's software that is granted to a customer for use over a specified time period, which can be months or years in length. In addition to the use of the

software, the customer is provided with access to maintenance (unspecified version upgrades and technical support) without additional charge. The revenue related to these contracts is recognized ratably over the contract period.

Perpetual / Paid-Up License: A license of a stated product and version of the Company's software that is granted to a customer for use in perpetuity. The revenue related to this type of license is typically recognized up-front.

Maintenance: A contract, typically one year in duration, that is purchased by the owner of a perpetual license and that provides access to unspecified version upgrades and technical support during the duration of the contract. The revenue from these contracts is recognized ratably over the contract period.

Vendor-Specific Objective Evidence (VSOE): Sufficient evidence of the fair value of the elements in a multiple-element arrangement that allows a company to separate the elements and to account for each element separately. If sufficient VSOE of fair value does not exist to allocate revenue to the various elements of an arrangement, revenue from the arrangement may be either deferred or recognized ratably over the contract period, depending on the facts and circumstances of the particular contract.

## FORWARD-LOOKING STATEMENTS AND RISK FACTORS

***Information provided by the Company or its spokespersons, including the above statements and any others in this document that refer to plans and expectations for the first quarter of 2018, FY 2018 and the future are forward-looking statements. The Company cautions investors that its performance (and, therefore, any forward-looking statement) is subject to risks and uncertainties. A detailed discussion of these risks and other factors that could affect ANSYS' results is included in ANSYS' SEC filings, including the Annual Report on Form 10-K for the year ended December 31, 2017, filed on February 22, 2018.***

## RECONCILIATION OF GAAP TO NON-GAAP MEASURES

<i>(in thousands, except percentages and per share data)</i>	Three Months Ended					
	December 31, 2017			December 31, 2016		
	As Reported	Adjustments	Non-GAAP Results	As Reported	Adjustments	Non-GAAP Results
Total revenue	\$ 302,336	\$ 1,108 (1)	\$ 303,444	\$ 270,628	\$ —	\$ 270,628
Operating income	100,679	28,582 (2)	129,261	96,966	25,124 (4)	122,090
Operating profit margin	33.3%		42.6%	35.8%		45.1%
Net income	\$ 52,585	\$ 40,183 (3)	\$ 92,768	\$ 69,983	\$ 16,141 (5)	\$ 86,124
Earnings per share – diluted:						
Earnings per share	\$ 0.61		\$ 1.07	\$ 0.80		\$ 0.98
Weighted average shares	86,709		86,709	87,811		87,811

- (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 \$13.7 million of stock-based compensation expense, \$13.4 million of amortization expense associated with intangible assets acquired in business combinations, \$0.4 million of transaction expenses related to business combinations and the \$1.1 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, decreased for the related income tax impact of \$11.0 million, excluding the impact of the Tax Cuts and Jobs Act, and rabbi trust income of \$0.1 million, and increased for total net impacts of the Tax Cuts and Jobs Act of \$22.7 million.
- (4) Amount represents \$12.7 million of amortization expense associated with intangible assets acquired in business combinations, \$8.8 million of stock-based compensation expense, \$3.4 million of restructuring charges and \$0.2 million of transaction expenses related to business combinations.
- (5) Amount represents the impact of the adjustments to operating income referred to in (4) above, adjusted for the related income tax impact of \$9.0 million.

<i>(in thousands, except percentages and per share data)</i>	Twelve Months Ended					
	December 31, 2017			December 31, 2016		
	As Reported	Adjustments	Non-GAAP Results	As Reported	Adjustments	Non-GAAP Results
Total revenue	\$ 1,095,250	\$ 2,856 (1)	\$ 1,098,106	\$ 988,465	\$ 103 (4)	\$ 988,568
Operating income	390,728	118,567 (2)	509,295	376,242	88,114 (5)	464,356
Operating profit margin	35.7%		46.4%	38.1%		47.0%
Net income	\$ 259,251	\$ 88,663 (3)	\$ 347,914	\$ 265,636	\$ 57,286 (6)	\$ 322,922
Earnings per share – diluted:						
Earnings per share	\$ 2.98		\$ 4.01	\$ 2.99		\$ 3.63
Weighted average shares	86,854		86,854	88,969		88,969

- (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 \$53.2 million of stock-based compensation expense, \$49.8 million of amortization expense associated with intangible assets acquired in business combinations, \$11.7 million of restructuring charges, \$1.1 million of transaction expenses related to business combinations and the \$2.9 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, decreased for the related income tax impact of \$52.5 million, excluding the impact of the Tax Cuts and Jobs Act, and rabbi trust income of \$0.1 million, and increased for total net impacts of the Tax Cuts and Jobs Act of \$22.7 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 \$50.8 million of amortization expense associated with intangible assets acquired in business combinations, \$33.3 million of stock-based compensation expense, \$3.4 million of restructuring charges, \$0.4 million of transaction expenses related to business combinations 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 \$30.8 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 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 research and development expense and selling, general and administrative expense. These expenses are generally not tax-deductible. Management excludes these acquisition-related transaction expenses, derived from closed acquisitions, 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.

**Tax Cuts and Jobs Act.** The Company recorded charges in its income tax provision related to the enactment of the Tax Cuts and Jobs Act, including charges for the transition tax related to unrepatriated cash and the impacts of the tax rate change on net deferred tax assets. In addition, the Company was not able to realize a tax benefit related to foreign earnings repatriation due to the enactment of the Tax Cuts and Jobs Act. Management excludes these charges and the unrealized benefit for the purpose of calculating non-GAAP net income and non-GAAP diluted earnings per share when it evaluates the continuing operational performance of the Company, as (i) the charges are not expected to recur as part of its normal operations and (ii) both the charges and unrealized tax benefit resulted from the extremely infrequent event of major U.S. tax reform, the last such reform having occurred in 1986. 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.

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**

Revenue  
Operating Income  
Operating Profit Margin  
Net Income  
Diluted Earnings Per Share

**Non-GAAP Reporting Measure**

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

**IR Contact:**

Annette N. Arribas  
(724) 820-3700  
annette.arribas@ansys.com