



**ANSYS, INC. FOURTH QUARTER 2019
EARNINGS ANNOUNCEMENT
PREPARED REMARKS
February 26, 2020**

We are providing a copy of our prepared remarks in connection with our earnings announcement. These remarks are offered to provide additional detail for analyzing our Q4 2019 results in advance of our quarterly conference call. These prepared remarks will not be read on the call.

**Conference call details:
February 27, 2020
8:30 a.m. Eastern Time**

- To access the live broadcast, please visit the Investor Relations section of our website at <https://investors.ansys.com> and click on News & Events, then Events Calendar.
- 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 asking the operator to connect you to our conference call.
- A replay will be available within two hours of the call's completion at <https://investors.ansys.com/events-and-presentations/events-calendar> or by dialing (877) 344-7529 (US), (855) 669-9658 (CAN) or (412) 317-0088 (INT'L) and referencing the access code 10138950.

SUPPLEMENTAL INFORMATION

In addition to our GAAP information, we have historically provided non-GAAP supplemental information. Our reasons for providing this information are described later in this document, as well as in our Q4 2019 earnings press release, which can be found on our website in the "About Ansys - News Center" 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.

Constant currency amounts exclude the effects of foreign currency fluctuations on the reported results. To present this information, the 2019 results 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 2018, rather than the actual exchange rates in effect for 2019. The constant currency growth rates are calculated by adjusting the 2019 reported results to exclude the 2019 currency fluctuation impacts and comparing to the 2018 reported results.

FOURTH QUARTER AND FISCAL YEAR 2019 OVERVIEW

2019 concluded with an outstanding fourth quarter that exceeded the high end of both our revenue and earnings guidance. We reported fourth quarter consolidated non-GAAP revenue of \$492.5 million, an increase of 18% in both reported and constant currency. FY 2019 consolidated non-GAAP revenue was \$1,528.4 million, an increase of 17% in reported currency and 19% in constant currency. Non-GAAP EPS of \$2.24 and \$6.58 in the fourth quarter and FY 2019, respectively, represented 5% and 10% growth over the fourth quarter and FY 2018, respectively. Our financial results included operating cash flows of \$139.5 million for the fourth quarter and \$499.9 million for FY 2019.

The following are other notable comments related to Q4 2019 and FY 2019 (non-GAAP):

- Lease license revenue grew 32% and 50%, both in constant currency, for the fourth quarter and FY 2019, respectively, driven primarily by an increase in the value of multi-year lease contracts. Under the current accounting for revenue, the value and duration of multi-year lease contracts entered into during the period significantly impact the recognition of revenue. As a result, revenue can fluctuate significantly due to the timing of such contracts. Large swings in revenue growth rates are not necessarily indicative of customers' software usage changes or payments during the period.
- Maintenance revenue grew 15% and 14%, both in constant currency, for the fourth quarter and FY 2019, respectively. Our services revenue grew 27% and 42%, both in constant currency, for the fourth quarter and FY 2019, respectively. Service revenue growth was strongly influenced by projects to assist our customers with broader adoption of our simulation tools, as well as the contributions from recent acquisitions.
- Our direct and indirect channels contributed 79% and 21%, respectively, of fourth quarter revenue and 77% and 23%, respectively, of FY 2019 revenue.
- Annual contract value (ACV) increased 13% and 12%, both in constant currency, for the fourth quarter and FY 2019, respectively. Both lease licenses and maintenance contracts contributed to a strong recurring ACV base at 78% of ACV for the fourth quarter and 77% of ACV for FY 2019.
- The fourth quarter acquisitions of Livermore Software Technology (LSTC) and Dynardo contributed a combined \$8.8 million and \$6.7 million to non-GAAP revenue and ACV, respectively.
- The Q4 tax rate of 17.3% was favorable as compared to 20.0% provided at the low end of our guidance range. The favorability was primarily driven by \$6.7 million of benefit related to the release of a valuation allowance associated with a tax law change in a foreign jurisdiction.
- Deferred revenue and backlog was \$870.7 million at December 31, 2019, an increase of 32% over December 31, 2018.
- During FY 2019, we repurchased 0.3 million shares at an average price of \$179.41 per share.
- Total headcount on December 31, 2019 was approximately 4,100 employees.

Other Recent Highlights

- We released Ansys® 2020 R1, which streamlines product development lifecycles and helps boost product performance with enhancements to the interfaces, functionality and power of our simulation solvers. Among these advances is Ansys Minerva, a knowledge management application platform that delivers an integrated suite of Ansys tools, fusing simulation and optimization to product lifecycle processes across any enterprise. Minerva spurs collaboration within global engineering teams and increases data sharing to innovate product designs and reduce development costs. From improving product development with Ansys Minerva to running complex simulations with substantially streamlined workflows with Ansys Fluent to optimizing electromagnetic design processes with Ansys HFSS, Ansys 2020 R1 helps enable companies to pioneer innovations and create cost-effective designs.
- On December 23, 2019, we were added to the NASDAQ-100 Index (Nasdaq: NDX), which is composed of the 100 largest non-financial company stocks listed on The Nasdaq Stock Market based on market capitalization.

- We announced several new partnerships, broadening our ecosystem, as follows:
 - Our strategic partnership with [Rockwell Automation](#) provides industrial companies with access to a streamlined, holistic, end-to-end solution for design, automation, production and lifecycle management. The partnership helps customers develop simulation-based digital twins of products, processes or manufacturing. Historically, manufacturers would dedicate large amounts of time and money to develop and test physical product prototypes. Now customers can design and test through simulation to accelerate development and analysis, improving product quality and reducing testing time across their organization.
 - Through our collaboration with the [TAG Heuer Porsche Formula E Team](#), Porsche Motorsport engineers are using our simulation solutions to create an advanced electric powertrain that will substantially increase energy efficiency for Porsche's fully electric race car — the Porsche 99X Electric. After proving itself on the track, Porsche plans to leverage the electric powertrain of the Porsche 99X Electric to usher in a new era of commercial e-mobility vehicles. The car's 800-volt technology is currently being used in the series production of the fully electric Porsche Taycan.
 - We extended our collaboration with [Autodesk](#) to allow interoperability across Ansys and Autodesk products and drive design and engineering agility for our customers. The collaboration connects Autodesk® Fusion 360® integrated design and manufacturing software with Ansys® Mechanical™ simulation solutions to expedite products to market. The collaboration breaks down silos in the product development process by driving a connected and interoperable designer-to-analyst workflow, helping to improve efficiency, cost cutting and innovation while speeding production.
 - Our technical collaboration with [BlackBerry Limited](#) will support next-generation automobiles. Our solutions will support BlackBerry QNX's real-time operating system (RTOS) for connected and autonomous vehicles. As part of our ongoing commitment to fostering an open ecosystem that supports RTOS leaders across industries, the collaboration will help empower automotive manufacturers to increase safety and reliability, reduce development cost and shorten time-to-market for next-generation automobiles and autonomous systems.
 - [AEye](#) is incorporating our simulation solutions into the design of its Intelligent Detection and Ranging platform — enabling customers to reduce physical prototyping and improve the safety and reliability of autonomous driving systems. Safeguarding autonomous driving requires next-generation sensors to quickly and correctly interpret certain hazardous road scenarios that cannot be reliably detected by conventional perception platforms. To validate the sensors' effectiveness, exhaustive road testing must be successfully completed — demanding significant development time and expenses.

We are collaborating with [FLIR Systems](#) to help develop hazard detection capabilities for future assisted driving and autonomous vehicles so that automakers can deliver improved vehicle safety. Through a technical collaboration, we will integrate a fully physics-based thermal sensor into our leading-edge driving simulator to model, test and validate thermal camera designs within an ultra-realistic virtual world. Current autonomous vehicles and advanced driver assistance systems (ADAS) sensors cannot dependably identify objects in darkness or through smog, inclement weather, shadows and sun glare. Thermal cameras, however, can effectively detect and classify objects in these conditions.

With our solutions, we empower AEye and FLIR Systems customers to simulate thousands of driving scenarios across millions of miles in mere days and reduce physical prototyping.

- We continue to make great strides in our academic initiatives, seeding our future users:
 - Officially opened Ansys Hall on the campus of Carnegie Mellon University.
 - Achieved over one million downloads of the Ansys Student version of our software.
 - All of the Top 10 engineering schools in the U.S. utilize Ansys for research and teaching, with our technology embedded into many engineering curriculums.
 - Over 150,000 students have registered for our self-paced, hands-on introduction to engineering simulation offered on Cornell University's massive open online course (MOOC) site.

DEFERRED REVENUE AND BACKLOG

<i>(in thousands)</i>	December 31, 2019	September 30, 2019	December 31, 2018	September 30, 2018
Current Deferred Revenue	\$ 351,353	\$ 291,385	\$ 328,584	\$ 272,872
Current Backlog	218,398	154,549	147,299	139,241
Total Current Deferred Revenue and Backlog	569,751	445,934	475,883	412,113
Long-Term Deferred Revenue	13,921	11,930	14,590	13,581
Long-Term Backlog	287,071	192,523	168,699	119,021
Total Long-Term Deferred Revenue and Backlog	300,992	204,453	183,289	132,602
Total Deferred Revenue and Backlog	\$ 870,743	\$ 650,387	\$ 659,172	\$ 544,715

The table above represents GAAP deferred revenue and backlog. As a result of the fair value provisions applicable to the accounting for business combinations, we typically record acquired deferred revenue at an amount that is lower than the historical carrying value. This results in expected reductions in reported revenue of \$3.9 million and \$8.0 million for the quarter ending March 31, 2020 and the year ending December 31, 2020, respectively.

ACV

<i>(in thousands, except percentages)</i>	Q4 QTD 2019	Q4 QTD 2018	% Change	% Change in Constant Currency
ACV	\$ 541,268	\$ 480,487	12.6%	13.1%
Recurring ACV as a percentage of ACV	78.4%	77.8%		

<i>(in thousands, except percentages)</i>	FY 2019	FY 2018	% Change	% Change in Constant Currency
ACV	\$ 1,461,759	\$ 1,325,211	10.3%	12.0%
Recurring ACV as a percentage of ACV	77.4%	76.9%		

NON-GAAP REVENUE HIGHLIGHTS

<i>(in thousands, except percentages)</i>	Q4 QTD 2019	% of Total	Q4 QTD 2018	% of Total	% Change	% Change in Constant Currency
Lease	\$ 166,286	33.8%	\$ 126,824	30.3%	31.1%	31.7%
Perpetual	104,520	21.2%	99,597	23.8%	4.9%	5.3%
Maintenance	205,205	41.7%	178,466	42.7%	15.0%	15.5%
Service	16,482	3.3%	13,090	3.1%	25.9%	26.6%
Total	<u>\$ 492,493</u>		<u>\$ 417,977</u>		17.8%	18.3%

<i>(in thousands, except percentages)</i>	FY 2019	% of Total	FY 2018	% of Total	% Change	% Change in Constant Currency
Lease	\$ 406,621	26.6%	\$ 275,661	21.2%	47.5 %	49.6 %
Perpetual	295,480	19.3%	301,098	23.1%	(1.9)%	(0.5)%
Maintenance	770,606	50.4%	686,283	52.7%	12.3 %	14.2 %
Service	55,699	3.6%	40,036	3.1%	39.1 %	41.6 %
Total	<u>\$ 1,528,406</u>		<u>\$ 1,303,078</u>		17.3 %	19.2 %

The impact of our application of the fair value provisions applicable to the accounting for business combinations reduced GAAP revenue by \$6.3 million and \$2.5 million for the fourth quarters of 2019 and 2018, respectively, and \$12.5 million and \$9.4 million for FY 2019 and 2018, respectively.

We continue to experience increased interest by some of our larger customers in enterprise agreements that often include longer-term, time-based licenses involving a larger number of our software products. While these arrangements typically involve a higher overall transaction price, the upfront recognition of license revenue related to these larger, multi-year transactions can result in significantly higher lease license revenue volatility. As software products, across a large variety of applications and industries, become increasingly distributed in software-as-a-service, cloud and other subscription environments in which the licensing approach is time-based rather than perpetual, we are also experiencing a shifting preference from perpetual licenses to time-based licenses across a broader spectrum of our customers.

GEOGRAPHIC NON-GAAP REVENUE HIGHLIGHTS

<i>(in thousands, except percentages)</i>	Q4 QTD 2019	% of Total	Q4 QTD 2018	% of Total	% Change	% Change in Constant Currency
Americas	\$ 223,259	45.3%	\$ 184,857	44.2%	20.8 %	20.8 %
Germany	65,416	13.3%	43,602	10.4%	50.0 %	53.9 %
United Kingdom	12,347	2.5%	9,915	2.4%	24.5 %	24.0 %
Other EMEA	79,004	16.0%	70,287	16.8%	12.4 %	14.4 %
EMEA	156,767	31.8%	123,804	29.6%	26.6 %	29.1 %
Japan	46,644	9.5%	37,523	9.0%	24.3 %	20.4 %
Other Asia-Pacific	65,823	13.4%	71,793	17.2%	(8.3)%	(7.5)%
Asia-Pacific	112,467	22.8%	109,316	26.2%	2.9 %	2.0 %
Total	<u>\$ 492,493</u>		<u>\$ 417,977</u>		17.8 %	18.3 %

<i>(in thousands, except percentages)</i>	FY 2019	% of Total	FY 2018	% of Total	% Change	% Change in Constant Currency
Americas	\$ 669,203	43.8%	\$ 531,176	40.8%	26.0%	26.1%
Germany	159,820	10.5%	141,644	10.9%	12.8%	18.1%
United Kingdom	44,958	2.9%	38,378	2.9%	17.1%	21.5%
Other EMEA	237,274	15.5%	224,744	17.2%	5.6%	9.8%
EMEA	442,052	28.9%	404,766	31.1%	9.2%	13.8%
Japan	163,416	10.7%	148,358	11.4%	10.1%	8.9%
Other Asia-Pacific	253,735	16.6%	218,778	16.8%	16.0%	19.2%
Asia-Pacific	417,151	27.3%	367,136	28.2%	13.6%	15.0%
Total	\$ 1,528,406		\$ 1,303,078		17.3%	19.2%

Industry and Regional Commentary

Under the current accounting for revenue, the value and duration of multi-year lease contracts entered into during the period significantly impact the recognition of revenue. As a result, regional revenue may fluctuate significantly, particularly on a quarterly basis, due to the timing of such contracts. Large swings in revenue growth rates are not necessarily indicative of customers' software usage changes or payments in the regions during the periods presented.

2019 Q4 and Full Year Commentary

In Q4 and throughout 2019, our three largest industry sectors - high tech, automotive and aerospace and defense - showed consistently strong performance. All three industries have persistent and meaningful tailwinds, with significant customer investment to capture the trends of autonomy and electrification, the increase in defense spending and the race to 5G communications systems. Each is underpinned by a global push to digitally transform and leverage the potential of the digital thread and the industrial internet of things (IIoT). In 2019 we were successful in capturing the opportunities in these industries for several reasons, including:

- **The leadership of our foundational technology and expertise.** The complexity of today's disruptive trends can only be addressed by the most capable products - and our leadership in simulation, combined with our integrated multiphysics workflow, open environment and technical support excellence, are consistent factors in our success.
- **Our ability to capture emerging high-growth opportunities.** Throughout 2019, our customers continued to invest in the areas of 5G, electrification, IIoT and autonomy - emerging high-growth areas that we have identified in previous calls and gave specific focus to at our investor day last September. By continuing to enhance our foundational technology and supported by our acquisitions and partner strategy, we have been able to provide the solutions needed in these areas. By investing in solutions for these areas, we achieved marquee deals with BMW for autonomy and Volkswagen Group for electric vehicles, while continuing our expansion at other key accounts. All three major regions performed strongly in automotive, with North America lagging slightly over the full year due to a very strong comparable.
- **Continued focus on, and refinement of, our go-to-market model.** Our continued success has been supported by the execution of our go-to-market model. As an example, in Q4 an enterprise level customer and major European automotive tier 1 supplier invested in a multi-million-dollar multi-year deal. This was

made possible in part through coordinated global activities involving both direct and indirect channels, aligned with a holistic account strategy and supported by dedicated technical resources.

- **Ansys' key acquisitions.** We significantly strengthened our solution portfolio in several key strategic areas. An example of an early and notable success included one of the largest deals in Granta Design history at an aircraft engine manufacturer resulting from the combined value proposition of Ansys and Granta tools.

Outside of these high-growth industries, the energy sector remained in a low-growth cycle with a subsequent impact on our traditional business; however, the latter half of the year demonstrated the industry's move to digital transformation.

While still a relatively small portion of our business, we have continued to increase our growth rate in the healthcare industry, fueled primarily by the North American market. This has resulted from a focus on the large medical device companies. These healthcare market leaders are progressively standardizing on Ansys due to the accuracy and breadth of our solutions, our technical excellence and our leadership role in the coming in-silico revolution.

NON-GAAP INCOME STATEMENT HIGHLIGHTS

	Three Months Ended		Twelve Months Ended	
	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Gross margin	92.0%	91.6%	91.1%	90.5%
Operating margin	48.0%	51.6%	45.3%	47.4%
Effective tax rate	17.3%	17.6%	19.2%	18.2%

BALANCE SHEET AND CASH FLOW HIGHLIGHTS

- Cash and short-term investments totaled \$872.4 million as of December 31, 2019, of which 72% was held domestically.
- Operating cash flows were \$139.5 million for the fourth quarter of 2019 as compared to \$131.5 million for the fourth quarter of 2018. Operating cash flows were \$499.9 million for FY 2019 as compared to \$485.0 million for FY 2018.
- Cash paid for acquisitions, net of cash acquired, totaled \$787.2 million for FY 2019 as compared to \$283.0 million for FY 2018.
- Capital expenditures totaled \$19.2 million and \$44.9 million for the fourth quarter and FY 2019, respectively. We are currently planning total 2020 capital expenditures in the range of \$45.0 - \$55.0 million.

SHARE COUNT AND SHARE REPURCHASES

We had 87.0 million fully diluted weighted average shares outstanding in Q4. We repurchased 0.3 million shares in FY 2019 at an average price of \$179.41 per share. Those repurchases occurred during the first half of 2019; there were no repurchases during the second half of 2019. As of December 31, 2019, we had 3.5 million shares remaining available for repurchase under our authorized share repurchase program.

STOCK-BASED COMPENSATION EXPENSE

<i>(in thousands, except per share data)</i>	Three Months Ended		Twelve Months Ended	
	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Cost of sales:				
Maintenance and service	\$ 2,470	\$ 1,344	\$ 8,494	\$ 5,224
Operating expenses:				
Selling, general and administrative	16,231	13,811	60,639	47,099
Research and development	12,705	9,304	47,057	31,023
Stock-based compensation expense before taxes	31,406	24,459	116,190	83,346
Related income tax benefits	(17,379)	(4,207)	(47,454)	(34,518)
Stock-based compensation expense, net of taxes	\$ 14,027	\$ 20,252	\$ 68,736	\$ 48,828
Net impact on earnings per share:				
Diluted earnings per share	\$ (0.16)	\$ (0.24)	\$ (0.80)	\$ (0.57)

CURRENCY

CURRENCY IMPACTS: The fourth quarter and FY 2019 revenue and operating income, as compared to the fourth quarter and FY 2018, were impacted by fluctuations in the exchange rates of foreign currencies against the U.S. Dollar. The impacts on non-GAAP revenue and operating income are reflected in the table below. Amounts in brackets indicate an adverse impact from currency fluctuations.

<i>(in thousands)</i>	Non-GAAP	
	Three Months Ended December 31, 2019	Twelve Months Ended December 31, 2019
Revenue	\$ (2,125)	\$ (24,235)
Operating income	\$ (1,023)	\$ (11,062)

The foreign exchange impacts on deferred revenue and backlog were \$7.4 million favorable and \$1.5 million unfavorable for the fourth quarter and FY 2019, respectively.

OUTLOOK

Guidance Commentary on China Trade Restrictions and Coronavirus Outbreak:

In fiscal year 2019, total non-GAAP revenue attributed to China was \$65.4 million, or 4.3% of total non-GAAP revenue. During 2019, trade discussions between the U.S. and China led to certain entities being placed on a restricted entity list. These restrictions limited our ability to deliver products and services to these customers. While our 2019 results were adversely impacted by these restrictions for a portion of the year, the 2019 operating results include approximately \$20 million each of ACV and revenue related to transactions that occurred prior to the placement of the restrictions. Our FY 2020 guidance provided below assumes that the existing trade restrictions related to these entities will remain in 2020. Additional restrictions or a further deterioration in the trade environment could have a material adverse impact on our business, as well as on our ability to achieve the financial guidance.

The recent outbreak of respiratory illness caused by the COVID-19 coronavirus first identified in Wuhan, Hubei Province, China is expected to delay ACV and related revenue that was originally planned for the first half of 2020 into the second half of the year. While our current expectation, and that reflected in our financial guidance, is that the impact will be a delay in business with an insignificant impact on our full year results, this expectation is subject to significant uncertainty and dependent upon how widespread the virus becomes, the duration and severity of its

impact, the geographic markets affected and other factors. Further spreading of the virus or economic deterioration caused by the virus could have a material adverse impact on our business, as well as on our ability to achieve the financial guidance.

We are currently forecasting the following:

Q1 2020 OUTLOOK:

(in millions, except percentages and per share data)

	<u>GAAP</u>	<u>non-GAAP</u>
Revenue	\$296.1 - \$316.1	\$300.0 - \$320.0
Operating margin	9.0% - 14.5%	27.5% - 30.0%
Effective tax rate	(14.0%) - (30.0%)	20.0% - 21.0%
Diluted earnings per share	\$0.43 - \$0.59	\$0.75 - \$0.88

FY 2020 OUTLOOK:

(in millions, except percentages and per share data)

	<u>GAAP</u>	<u>non-GAAP</u>
Revenue	\$1,632.0 - \$1,692.0	\$1,640.0 - \$1,700.0
Operating margin	28.0% - 31.0%	42.0% - 43.0%
Effective tax rate	15.0% - 17.0%	20.0% - 21.0%
Diluted earnings per share	\$4.36 - \$5.02	\$6.19 - \$6.71

In addition, we are currently forecasting the following for FY 2020:

<i>(in millions)</i>	<u>Other Financial Metrics</u>
ACV	\$1,605.0 - \$1,650.0
Operating cash flows	\$500.0 - \$530.0

We are currently expecting approximately 87.0 - 88.0 million fully diluted shares outstanding for both Q1 2020 and FY 2020.

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

	<u>Euro</u>	<u>Japanese Yen</u>
Q1 2020	1.08 - 1.11	108 - 111
FY 2020	1.07 - 1.10	109 - 112

The outlook presented above factors 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 factors over which we have no control, 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 composed 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 annualized value of fixed-term services contracts with start dates or anniversary dates during the period, plus
- the value of work performed during the period on fixed-deliverable services contracts.

Example 1: A \$300,000 lease or maintenance contract with a term of January 1, 2019 - December 31, 2021 would contribute \$100,000 to ACV in each of fiscal years 2019, 2020 and 2021.

Example 2: A perpetual license valued at \$200,000 with a contract start date of March 1, 2019 sold in connection with three years of annual maintenance valued at a total of \$120,000 would contribute to ACV as follows: fiscal year 2019: \$240,000 (\$200,000 + \$40,000); fiscal years 2020 and 2021: \$40,000 in each year.

Backlog: Installment billings for periods beyond the current quarterly billing cycle.

Deferred Revenue: Billings made or payments received in advance of revenue recognition.

Lease or Time-Based License: A license of a stated product of our 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 for the maintenance portion and up front for the license portion.

Perpetual / Paid-Up License: A license of a stated product and version of the our 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.

FORWARD-LOOKING STATEMENTS AND RISK FACTORS

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that provide current expectations or forecasts of future events based on certain assumptions. Forward-looking statements are subject to risks, uncertainties, and factors relating to our business which could cause our actual results to differ materially from the expectations expressed in or implied by such forward-looking statements. Forward-looking statements use words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “forecast,” “intend,” “likely,” “may,” “outlook,” “plan,” “predict,” “project,” “should,” “target,” or other words of similar meaning. Forward-looking statements include those about market opportunity, including our total addressable market. Risks, uncertainties, and factors that could cause actual results to differ materially from those implied by these forward-looking statements include: adverse changes in global economic and/or political conditions; declines in our customers’ businesses resulting in adverse changes in customer procurement patterns; uncertainties regarding demand for our products and services in the future and our customers’ acceptance of new products; plans for future capital spending; investments in complementary companies, products, services and technologies; our ability to complete and successfully integrate our acquisitions and realize the financial and business benefits of the transactions; political, economic, and regulatory risks and

uncertainties in the countries and regions in which we operate; impacts from tariffs, trade sanctions, export license requirements or other trade barriers; the effect of changes in currency exchange rates and changes in interest rates; potential variations in our sales forecasts compared to actual sales; the volatility of our stock price; failures or errors in our products and services; our industry's rapidly changing technology; the quality of our products, including the strength of features, functionality and integrated multi-physics capabilities; lease license volatility; the investment of more resources in research and development than anticipated; increased pricing pressure as a result of the competitive environment in which we operate; our ability to recruit and retain key personnel; our ability to protect our proprietary technology; cybersecurity threats or other security breaches; disclosure and misuse of employee or customer data whether as a result of a cybersecurity incident or otherwise; implementation of our new IT systems; investments in global sales and marketing organizations and global business infrastructure; dependence on our channel partners for the distribution of our products; increased variability in our revenue due to the adoption of Accounting Standards Codification 606; our reliance on high renewal rates for annual lease and maintenance contracts; catastrophic events including pandemics such as the coronavirus which may damage our facilities or otherwise disrupt our business; operational disruptions or the failure of our technological infrastructure; periodic reorganization of our sales force; the repatriation of previously taxed earnings in excess of working capital and capital expenditure requirements; the outcome of contingencies, including legal proceedings and government or regulatory investigations and service tax audit cases; uncertainty regarding income tax estimates in the jurisdictions in which we operate; the effect of changes in tax laws and regulations in the jurisdictions in which we operate; changes in accounting principles or standards; the uncertainty of estimates relating to the impact on reported revenue related to the acquisition accounting treatment of deferred revenue; and other risks and uncertainties described in our reports filed from time to time with the Securities and Exchange Commission. We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

RECONCILIATION OF GAAP TO NON-GAAP MEASURES

ANSYS, INC. AND SUBSIDIARIES Reconciliation of Non-GAAP Measures (Unaudited)

Three Months Ended

<i>(in thousands, except percentages and per share data)</i>	December 31, 2019			December 31, 2018		
	GAAP Results	Adjustments	Non-GAAP Results	GAAP Results	Adjustments	Non-GAAP Results
Total revenue	\$ 486,228	\$ 6,265 (1)	\$ 492,493	\$ 415,432	\$ 2,545 (4)	\$ 417,977
Operating income	185,716	50,496 (2)	236,212	179,936	35,646 (5)	215,582
Operating profit margin	38.2%		48.0%	43.3%		51.6%
Net income	\$ 165,852	\$ 28,861 (3)	\$ 194,713	\$ 153,163	\$ 28,919 (6)	\$ 182,082
Earnings per share – diluted:						
Earnings per share	\$ 1.91		\$ 2.24	\$ 1.79		\$ 2.13
Weighted average shares	86,992		86,992	85,472		85,472

- (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 \$31.4 million of stock-based compensation expense, \$0.4 million of excess payroll taxes related to stock-based awards, \$11.5 million of amortization expense associated with intangible assets acquired in business combinations, \$0.9 million of transaction expenses related to business combinations and the \$6.3 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 \$21.5 million and rabbi trust income of \$0.1 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 \$24.5 million of stock-based compensation expense, \$0.5 million of excess payroll taxes related to stock-based awards, \$7.0 million of amortization expense associated with intangible assets acquired in business combinations, \$1.2 million of transaction expenses related to business combinations and the \$2.5 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, decreased for the related income tax impact of \$6.9 million and increased for rabbi trust expense of \$0.2 million.

ANSYS, INC. AND SUBSIDIARIES
Reconciliation of Non-GAAP Measures
(Unaudited)

Twelve Months Ended

<i>(in thousands, except percentages and per share data)</i>	December 31, 2019			December 31, 2018		
	GAAP Results	Adjustments	Non-GAAP Results	GAAP Results	Adjustments	Non-GAAP Results
Total revenue	\$ 1,515,892	\$ 12,514 (1)	\$ 1,528,406	\$ 1,293,636	\$ 9,442 (4)	\$ 1,303,078
Operating income	515,040	177,093 (2)	692,133	476,574	141,442 (5)	618,016
Operating profit margin	34.0%		45.3%	36.8%		47.4%
Net income	\$ 451,295	\$ 113,702 (3)	\$ 564,997	\$ 419,375	\$ 94,510 (6)	\$ 513,885
Earnings per share – diluted:						
Earnings per share	\$ 5.25		\$ 6.58	\$ 4.88		\$ 5.98
Weighted average shares	85,925		85,925	85,913		85,913

- (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 \$116.2 million of stock-based compensation expense, \$4.9 million of excess payroll taxes related to stock-based awards, \$36.9 million of amortization expense associated with intangible assets acquired in business combinations, \$6.6 million of transaction expenses related to business combinations and the \$12.5 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 \$61.2 million, adjustments related to the transition tax associated with the Tax Cuts and Jobs Act of \$1.8 million, and rabbi trust income of \$0.4 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 \$83.3 million of stock-based compensation expense, \$4.3 million of excess payroll taxes related to stock-based awards, \$40.8 million of amortization expense associated with intangible assets acquired in business combinations, \$3.5 million of transaction expenses related to business combinations and the \$9.4 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, decreased for the related income tax impact of \$47.9 million and increased for a measurement-period adjustment related to the Tax Cuts and Jobs Act of \$0.9 million and rabbi trust expense of \$0.1 million.

In the first quarter and fiscal year 2020 guidance, the expected impacts of non-GAAP adjustments to revenue associated with the acquisition accounting for deferred revenue are \$3.9 million and \$8.0 million, respectively. Over the same periods, the impacts of non-GAAP adjustments associated with stock-based compensation result in a higher non-GAAP effective tax rate. See below for a reconciliation of GAAP to non-GAAP operating margins and diluted earnings per share:

ANSYS, INC. AND SUBSIDIARIES
Reconciliation of Forward-Looking Guidance
Quarter Ending March 31, 2020

	Operating Margin	Earnings Per Share - Diluted
U.S. GAAP expectation	9.0% - 14.5%	\$0.43 - \$0.59
Adjustment to exclude acquisition adjustments to deferred revenue	1.2% - 1.3%	\$0.03
Adjustment to exclude acquisition-related amortization	4.1% - 4.8%	\$0.12 - \$0.13
Adjustment to exclude stock-based compensation	10.2% - 12.4%	\$0.14 - \$0.16
Non-GAAP expectation	27.5% - 30.0%	\$0.75 - \$0.88

ANSYS, INC. AND SUBSIDIARIES
Reconciliation of Forward-Looking Guidance
Year Ending December 31, 2020

	Operating Margin	Earnings Per Share - Diluted
U.S. GAAP expectation	28.0% - 31.0%	\$4.36 - \$5.02
Adjustment to exclude acquisition adjustments to deferred revenue	0.5%	\$0.07
Adjustment to exclude acquisition-related amortization	3.1% - 3.4%	\$0.48 - \$0.51
Adjustment to exclude stock-based compensation	8.4% - 10.1%	\$1.14 - \$1.25
Non-GAAP expectation	42.0% - 43.0%	\$6.19 - \$6.71

NON-GAAP MEASURES

We provide 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 our operational performance. These financial measures exclude the impact of certain items and, therefore, have not been calculated in accordance with GAAP. A detailed explanation of each of the adjustments to such financial measures is described below. These prepared remarks also contain a reconciliation of each of these non-GAAP financial measures to its most comparable GAAP financial measure.

We use non-GAAP financial measures (a) to evaluate our historical and prospective financial performance as well as our performance relative to our 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 employees. In addition, many financial analysts that follow us focus on and publish both historical results and future projections based on non-GAAP financial measures. We believe that it is in the best interest of our investors to provide this information to analysts so that they accurately report the non-GAAP financial information. Moreover, investors have historically requested, and we have historically reported, these non-GAAP financial measures as a means of providing consistent and comparable information with past reports of financial results.

While we believe 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 our competitors and may not be directly comparable to similarly titled measures of our competitors due to potential differences in the exact method of calculation. We compensate 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, we have consummated acquisitions in order to support our 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 our business or cash flow, it adversely impacts our 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, we provide non-GAAP financial measures which exclude the impact of the acquisition accounting adjustment. We believe 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 us in our financial and operational decision-making, and (b) compare our past and future reports of financial results 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. We incur amortization of intangible assets, included in our GAAP presentation of amortization expense, related to various acquisitions we have made. We exclude 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 we evaluate our continuing operational performance 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 us after the acquisition. Accordingly, we do not consider these expenses for purposes of evaluating our performance during the applicable time period after the acquisition, and we exclude such expenses when making decisions to allocate resources. We believe 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 us in our financial and operational decision-making, and (b) compare our past reports of financial results as we have historically reported these non-GAAP financial measures.

Stock-based compensation expense and its related tax impact. We incur expense related to stock-based compensation included in our GAAP presentation of cost of software licenses; cost of maintenance and service; research and development expense; and selling, general and administrative expense. This non-GAAP adjustment also includes excess payroll tax expense related to stock-based compensation. Stock-based compensation expense (benefit) incurred in connection with our 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 and viewed as a form of compensation, we exclude 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 we evaluate our continuing operational performance. We similarly exclude income (expense) related to assets held in a rabbi trust in connection with our deferred compensation plan. Specifically, we exclude stock-based compensation and income (expense) related to assets held in the deferred compensation plan rabbi trust during our annual budgeting process and our quarterly and annual assessments of our performance. The annual budgeting process is the primary mechanism whereby we allocate resources to various initiatives and operational requirements. Additionally, the annual review by our board of directors during which it compares our 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 our senior management and department

managers, charges related to stock-based compensation are excluded from expenditure and profitability results. In fact, we record stock-based compensation expense into a stand-alone cost center for which no single operational manager is responsible or accountable. In this way, we can 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. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate our operating results and the effectiveness of the methodology used by us to review our operating results, and (b) review historical comparability in our financial reporting as well as comparability with competitors' operating results.

Restructuring charges and the related tax impact. We occasionally incur expenses for restructuring our workforce included in our GAAP presentation of cost of software licenses; cost of maintenance and service; research and development expense; and selling, general and administrative expense. We exclude 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 we evaluate our continuing operational performance, as we generally do not incur these expenses as a part of our operations. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate our operating results and the effectiveness of the methodology used by us to review our operating results, and (b) review historical comparability in our financial reporting as well as comparability with competitors' operating results.

Transaction costs related to business combinations. We incur expenses for professional services rendered in connection with business combinations, which are included in our GAAP presentation of selling, general and administrative expense. These expenses are generally not tax-deductible. We exclude these acquisition-related transaction expenses, derived from announced 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 we evaluate our continuing operational performance, as we generally would not have otherwise incurred these expenses in the periods presented as a part of our operations. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate our operating results and the effectiveness of the methodology used by us to review our operating results, and (b) review historical comparability in our financial reporting as well as comparability with competitors' operating results.

Tax Cuts and Jobs Act. We recorded impacts to our income tax provision related to the enactment of the Tax Cuts and Jobs Act, specifically for the transition tax related to unrepatriated cash and the impacts of the tax rate change on net deferred tax assets. We exclude these impacts for the purpose of calculating non-GAAP net income and non-GAAP diluted earnings per share when we evaluate our continuing operational performance, as (i) the charges are not expected to recur as part of our normal operations and (ii) the charges resulted from the extremely infrequent event of major U.S. tax reform, the last such reform having occurred in 1986. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate our operating results and the effectiveness of the methodology used by us to review our operating results, and (b) review historical comparability in our financial reporting.

Non-GAAP financial measures are not in accordance with, or an alternative for, GAAP. Our 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 our consolidated financial statements prepared in accordance with GAAP.

We have 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, IRC
(724) 820-3700
annette.arribas@ansys.com