



January–June 2018

Half-Year Report



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Introductory Notes

This half-year group report meets the requirements of German Accounting Standard No. 16 “Half-yearly Financial Reporting” (GAS 16). We prepared the financial data in the Half-Year Report section for SAP SE and its subsidiaries in accordance with International Financial Reporting Standards (IFRS). In doing so, we observed the IFRS both as issued by the International Accounting Standards Board (IASB) and as endorsed by the European Union (EU). This does not apply to numbers expressly identified as non-IFRS. For additional IFRS and non-IFRS information, see the Supplementary Financial Information section.

This half-year group report complies with the legal requirements in accordance with the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) for a half-year financial report, and comprises the consolidated half-year management report, consolidated half-year financial statements, and the responsibility statement in accordance with the German Securities Trading Act, section 37w (2).

This half-year financial report updates our consolidated financial statements 2017, presents significant events and transactions of the first half of 2018, and updates the forward-looking information contained in our Management Report 2017. This half-year financial report only includes half-year numbers, our quarterly numbers are available in the Quarterly Statement. Both the 2017 consolidated financial statements and the 2017 management report are part of our Integrated Report 2017, which is available at www.sapintegratedreport.com.

All of the information in this half-year group report is unaudited. This means the information has been subject neither to any audit nor to any review by an independent auditor.

Consolidated Half-Year Management Report

Strategy and Business Model

We did not change our strategy or our business model in the first half of 2018. For a detailed description, see our Integrated Report 2017.

Products, Research and Development, and Services

SAP made several acquisitions in the first half of 2018 to focus on opportunities in the customer relationship management (CRM) market. We continued to innovate, simplifying product and services portfolios and delivering best-in-class solutions to lead customers on their journey to the intelligent enterprise. We launched SAP C/4HANA, a fourth-generation CRM system designed to completely reimagine customer service software. SAP C/4HANA consolidates existing CRM cloud solutions, enriching them with newly-acquired Callidus Software Inc. and Coresystems applications in an offering to help businesses win lifetime customers.

SAP Customer Experience Reinvents CRM

SAP C/4HANA, a unified suite of cloud solutions to manage the customer experience, was announced in June 2018 at our customer conference SAPPHIRE NOW. It brings together cloud offerings previously on the market under the SAP Hybris brand, as well as offerings from Gigya, Callidus, and Coresystems. This is available in a simplified portfolio with consistent naming, a common user experience, integration model (through SAP Cloud Platform), and with embedded intelligence (through SAP Leonardo). With these changes, the portfolio and people behind SAP Hybris, Gigya, and Callidus became part of SAP Customer Experience. SAP C/4HANA consists of the following cloud solutions:

- **SAP Commerce Cloud** evolved from the SAP Hybris flagship on-premise offering to its recent launch on Microsoft Azure. The solution allows customers to personalize the buying experience across all touchpoints.
- **SAP Customer Data Cloud** from Gigya consists of three tightly integrated products – SAP Customer Consent, SAP Customer Profile, and SAP Customer Identity. With these solutions, businesses can turn unknown visitors into

known, loyal customers by securely identifying consumers across devices and channels, managing their permissions and consent, and turning data into unified customer profiles that are governed and analyzed from a central and secure environment. These solutions enable businesses to address many aspects of General Data Protection Regulation (GDPR) compliance without breaking the customer experience.

- **SAP Marketing Cloud** now integrates with SAP Commerce Cloud and allows marketers to quickly address the needs of each individual customer.
- **SAP Sales Cloud** combines the former SAP Hybris Cloud for Customer with SAP Hybris Revenue Cloud, and the recently-acquired Callidus solutions for configure-price-quote and sales performance management.
- **SAP Service Cloud** focuses on field service and sales automation, bolstered by the SAP Customer Engagement Center solution and Service Core option (in SAP S/4HANA) and further strengthened by SAP's acquisition of Coresystems in June 2018.

SAP SuccessFactors

SAP continues to drive the role of HR in digital transformation with solutions such as SAP SuccessFactors **Visa and Permits Management**, simplifying the complex ways in which HR managers source international talent. Meanwhile, **candidate relationship management** capabilities of the SAP SuccessFactors Recruiting solution have been enhanced, to further enable organizations to nurture, attract, and hire top talent. In parallel, new **advanced data protection and privacy capabilities** have been added to the SAP SuccessFactors HCM suite, making it easier to comply with data protection and privacy laws – including the European Union's General Data Protection Regulation (GDPR).

SAP Fieldglass

SAP Fieldglass launched **SAP Fieldglass Digital Network**, a new ecosystem network to help customers transform how they engage and manage an external workforce of freelancers, contingent workers, independent contractors, and other service providers. Additionally, machine learning-powered resume matching automatically reads and ranks candidate resumes based on role requirements, identifying the best-fit candidates and increasing efficiency and speed to hire.

SAP Ariba

SAP Ariba remains focused on providing customers with a deeper, more intelligent and ethical view into their spend and extending the value that its solutions can deliver into new markets and industries.

The **SAP Ariba Spend Analysis** solution includes new microservices that use artificial intelligence (AI) and machine learning to reduce the time it takes to classify invoice data. The **SAP Ariba Snap** program provides scalable options for fast-growing midsize companies to implement SAP Ariba's enterprise-class sourcing solutions. **Manufacturing Network** is delivered as part of the SAP Digital Manufacturing Cloud solution to help manufacturers and service providers collaborate across the manufacturing process. The **SAP Sourcing Simulation and Optimization for Industries** solution helps optimize direct material price re-negotiations with existing suppliers. **SAP Ariba Strategic Sourcing Suite is a solution that** delivers new retail industry capabilities. The **SAP Ariba Supplier Risk** solution provides new insights, in partnership with leading providers of sustainability and risk analytics and research – EcoVadis and Verisk Maplecroft – to help customers track more than 200 risk types.

SAP Concur

Further supporting the intelligent enterprise, new innovations from SAP Concur help businesses to leverage travel, expense, and invoice data to give instant, real-time, and actionable insights. SAP Concur travel, expense, and invoice technologies use machine learning, AI, and analytics so that customers can automate tasks and use intelligence to increase visibility, efficiency, control, and savings, and improve compliance, employee satisfaction, and user experience.

The **Concur Detect** service works with the Concur Expense solution to uncover potential policy compliance violations. In conjunction with the **Audit service from SAP Concur**, it uses SAP Concur partner AppZen's AI technology to analyze receipts, credit card transactions, and bookings. The **Budget Web service from SAP Concur** provides a holistic view of employee spend, making budgets across the organization visible. **Concur Drive** is a Web service that automatically captures distance and offers an alternative to self-reported mileage. Additionally, **Expenselt from SAP Concur** is a fully integrated value-added service for the SAP Concur mobile app – previously a separate mobile application called Expenselt Pro – that turns receipts into expense line items and sends them directly to Concur Expense.

SAP Cloud Platform

Our new consumption-based commercial model simplifies the configuration and use of SAP Cloud Platform services. A

single provisioning cockpit enables customers to buy credits and activate services. Detailed analytics give a clear overview of cloud credit consumption, making it easier for customers to identify, procure, and monitor services for their applications.

At SAPHIRE NOW, we announced the general availability of **blockchain as a service**, which allows partners, customers, and developers to build business applications across different underlying blockchain technologies. Blockchain-extended solutions for IoT and digital supply chain are also now available.

We also announced the general availability of **SAP Conversational AI**, our first bot development environment. This enables customers to develop enterprise chatbot solutions, such as for customer service or to address younger target audiences.

SAP HANA Data Management Suite

Launched during SAPHIRE NOW as the foundation for the intelligent enterprise, **SAP HANA Data Management Suite** combines our SAP HANA and SAP Data Hub offerings in a seamless cloud service, offering a modern and open framework for data integration and data management. The suite will foster the development of data-driven applications for multi-cloud and hybrid environments.

IoT and Digital Supply Chain

In April, we introduced the **SAP Digital Manufacturing Cloud** solution. Through the industrial Internet of Things, the offering tightly integrates manufacturing with business operations, across the extended digital supply chain, serving manufacturers of varying sizes in discrete and process industries.

The **SAP S/4HANA Cloud solution for intelligent product design** provides shared views of digital twin information (a digital twin is a digital model created to represent an asset or device) giving customers live insights on new products. This offering makes it possible to store, share, and review engineering documents with internal and external participants.

Our **SAP Predictive Engineering Insights** solution replaces the need for physical inspections with ongoing, live digital inspection and analysis. It combines a standard engineering methodology for calculating forces, stresses, and fatigue based on sensor data, using a high-performance 3D engine to provide visualized engineering insights.

SAP Analytics Cloud

In May, we released Search-to-Insight natural-language query capabilities, making it easier for business users to extract

answers from data by using conversational phrases. We also released more than 130 new cloud data connectors.

SAP Digital Business Services

SAP Digital Business Services continues to help customers realize the intelligent enterprise and become best-run businesses. During 2018, we further simplified the portfolio services by producing a framework that groups SAP Digital Business Services offerings into three categories – premium success, project success, and continuous success.

Premium Success

SAP MaxAttention has been redesigned, with a holistic engagement model and comprehensive services portfolio to help turn customer ideas and concepts into value-based predictable outcomes. The new SAP MaxAttention offering delivers precise business and technical guidance and now features the following:

- One service portfolio – provides coverage for all SAP solutions and deployments
- One team – delivers a holistic engagement model and team with clear accountabilities
- One commercial framework – offers services with predictable outcomes and flexible consumption

Project Success

Our Project Success services portfolio helps companies reap the benefits of SAP solutions faster and with lower risk. During implementation, customers can choose from an array of services that have been newly extended. While the SAP Integrated Report 2017 describes existing offerings – SAP Value Assurance and SAP Model Company – we have added even more services in this portfolio category, as follows:

- **SAP Innovation and Advisory Services** enable us to guide customers through the innovation process, focusing on economic, social, and environmental impacts, and on creating new opportunities. With simplified SAP Leonardo Services offerings, we provide a fast path from idea to prototype, helping customers redesign their business models and processes.
- **SAP Advanced Deployment** allows SAP to fully invest in a customer's success by serving as primary implementation partner. Delivered through the proven SAP Activate innovation adoption framework and tailored to the customer's specific transition scenario, SAP Advanced Deployment streamlines the implementation of a high-performing, sustainable digital core.

Continuous Success

Our support and success plans, embedded in all SAP cloud offerings and available for all on-premise installations, enable us to help customers succeed. Two of these plans – SAP

Enterprise Support and SAP Preferred Success – have already been presented in the SAP Integrated Report 2017, and we have now added **Next-Generation Support** services. Next-Generation Support services bring more real-time support channels, automatic translation, a newly-piloted 'ask an expert peer' service, and our first machine learning pilot – 'incident/solution matching'.

Intelligent Tools and Platforms

We also use intelligent tools and platforms to help customers implement SAP solutions faster and simpler. While several have already been described in the SAP Integrated Report 2017 – SAP Transformation Navigator, SAP Readiness Check, SAP Solution Manager, and SAP Innovation and Optimization Pathfinder, for example – we recently added the **integration content advisor for the SAP Cloud Platform Integration service**. This feature allows users to define, maintain, share, and deploy business-to-business (B2B) integration content and interfaces using machine-learning algorithms to significantly reduce build time and effort.

Acquisitions

In the second quarter of 2018, SAP acquired Callidus Software Inc. and Coresystems AG – cloud-based customer relationship management (CRM) vendors. The acquisitions of Callidus and Coresystems complete SAP's design of a new front office that extends beyond legacy CRM to an intelligent customer experience suite. For more information, see the [Products, Research and Development](#) section and [Note \(4\)](#).

Employees and Social Performance

Our people are key in supporting our customers to successfully drive their digital transformation. Therefore, we are fully committed to enabling our employees to grow their skills at every stage of their career at SAP. We are evolving our Human Resources (HR) Strategy to continuously drive great HR experiences for our people. The framework as outlined in the [Employees and Social Investments](#) section of our Integrated Report 2017 has not materially changed in the first half of 2018.

An important factor in our long-term success is the creation of a workplace that attracts and retains the best talent in the market. At the end of the first half of 2018, the employee retention rate was still on a high level of 94.3% (compared to 94.7% at the end of the first half of 2017). The retention rate is calculated as per the new definition (see the [Employees and Social Investments](#) section in our Integrated Report 2017) and the prior-period number has been adjusted to align with this definition. We define retention as the ratio of the average number of employees minus the employees who voluntarily departed, to the average number of employees (all in full-time equivalents).

Besides the aim to keep a high Employee Engagement Index for 2018, one of SAP's overall non-financial goals is to foster a diverse workforce, specifically to increase the number of women in management. At the end of 2017, the Executive Board extended its commitment to further increase the percentage of women in management positions by 1pp each year with a target of 30% by the end of 2022. At the end of the first half of 2018, 25.8% of all management positions at SAP were held by women, compared to 25.0% at the end of June 2017 and 25.4% at the end of December 2017.

On June 30, 2018, we had 93,846 full-time equivalent (FTE) employees worldwide (June 30, 2017: 87,114; December 31, 2017: 88,543). The increase in headcount of 5,303 FTEs comprises 3,279 coming from organic growth and 2,024 employees from acquisitions. The overall headcount numbers included 20,391 FTEs based in Germany (June 30, 2017: 19,375; December 31, 2017: 19,845), and 20,138 FTEs based in the United States (June 30, 2017: 18,368; December 31, 2017: 18,673).

Environmental Performance: Energy and Emissions

Over the past several years, we have worked to better understand the connections between our energy consumption, its related cost, and the resulting environmental impact. Today we measure and address our energy usage throughout SAP, as well as our greenhouse gas (GHG) emissions across our entire value chain. We have calculated that over the last three years, energy efficiency initiatives have contributed to a cumulative cost avoidance of €212 million compared to a business-as-usual extrapolation, €45.4 million of which were avoided this year.

Our goal is to become carbon neutral by 2025. SAP's GHG emissions for the first half of 2018 totaled 175 kilotons of CO₂ compared to 155 kilotons in the first half of 2017. This increase is primarily due to an increase in our business flights in Q2 2018 compared to Q2 in 2017.

To gain insight into our efficiency as we grow, we also measure our emissions per employee and per euro of revenue. At the end of the first half of 2018, our GHG emissions (in tons) per employee was 3.7 (compared to 3.6 at the end of the first half of 2017) and our GHG emissions (in grams) per euro revenue was 14.7 (compared to 13.5 at the end of the first half of 2017) (rolling four quarters).

In recognition of the exemplary actions SAP has taken to embed sustainability across its business worldwide, SAP was included in various ratings and rankings. In the first half of 2018, SAP was once again granted the best environmental, social, and governance (ESG) rating "AAA" by MSCI (Morgan Stanley Capital International).

Financial Performance: Review and Analysis

Economy and the Market Global Economic Trends

During the first half of 2018, the global economy expanded due to supportive financial conditions. That is what the European Central Bank (ECB) reports in its June 2018 Economic Bulletin.¹ However, according to the ECB, conditions tightened in some emerging countries, which is why last year's ECB projections as described in our Integrated Report 2017 might not be entirely achievable.

In the Europe, Middle East, and Africa (EMEA) region, the ECB finds a solid and broad-based economic expansion across countries and sectors in the euro area in the first half of 2018. According to the ECB, favorable financing conditions, rising corporate profitability, and solid demand fostered business investment in the euro area since the beginning of 2018.

However, increasing uncertainty and some temporary and supply-side factors at both the domestic and the global level caused a slight moderation, reflecting a pull-back from the very high levels of growth in 2017, says the ECB.

As for the Americas region, economic growth in the United States slowed during the first months of 2018, states the ECB, as predicted in our Integrated Report 2017. This deceleration was due to a slow-down in consumer spending. At the same time, according to the ECB, labor market improvements and continuing monetary accommodation supported the economy in Brazil.

According to the ECB, the Asia Pacific Japan (APJ) region in 2018 saw Japan's gross domestic product (GDP) register the first quarter-on-quarter fall in two years, which was earlier than anticipated in our Integrated Report 2017. By contrast, China's economy expanded at the same time at a robust pace, due to strong consumption, government support, and solid export performance.

The IT Market

In 2018, digital transformation is no longer an option, but a requirement for companies determined to remain relevant, says IDC (International Data Corporation), a U.S.-based market research firm.² Thus, digital technologies and services such as cloud, Internet of Things (IoT), and cognitive technology have recently transformed entire organizations² as had been predicted in our Integrated Report 2017.

IDC reports that since the beginning of 2018, the number of enterprises solely using SaaS and cloud-enabled software has grown once more.² By exiting the world of traditional on-premises software completely, these enterprises hope for faster innovation from technologies such as blockchain and new generations of artificial intelligence and analytics.² Hence, according to IDC and in line with our Integrated Report 2017, software vendors in 2018 so far have scaled back their commitment to developing new functionality for their traditional on-premises software suites.² Instead, they have focused on building consistent single-technology platforms for multiple cloud products or end-to-end cloud suites with common look and feel and other common features,² says IDC.

In particular, the adoption of IoT strategies, as described in the Integrated Report 2017, has continued in 2018: organizations around the world have striven for operational efficiencies or new offerings with the help of IoT, evolving from a product-based to a service-based business model³, states IDC. IoT platform vendors at the same time have created more value for their core products by adding complementary IoT products and services.³

IDC reports that since the beginning of 2018, ERP and enterprise application vendors have also made great strides with intelligent applications, utilizing curated data sets, advanced analytics, and

machine learning⁴. IDC now calls this process the "evolution of intelligence" within ERP and enterprise applications.⁴

Sources:

- 1) European Central Bank, Economic Bulletin, Issue 4/2018, Publication Date: June 28, 2018 (<http://www.ecb.europa.eu/pub/pdf/ecbu/eb201804.en.pdf>) (<http://www.ecb.europa.eu/pub/pdf/ecbu/eb201708.en.pdf>)
- 2) IDC Perspective: The DX World: SaaS and Cloud-Enabled Technology Bring Business Impact, Doc #US43759218, May 2018
- 3) IDC Market Forecast: Worldwide Internet of Things Software Platform Forecast, 2018–2022, Doc #US42635618, May 2018
- 4) IDC Market Perspective: Intelligent ERP and Intelligent Enterprise Applications Are Growing in Significance, Doc #US43704418, March 2018

Impact on SAP

SAP continues to benefit from the consistent strategy enabling customers to become intelligent enterprises. On top of a solid first quarter in 2018, SAP had a very strong performance in Q2 in the EMEA region, with cloud and software revenue increasing 10% (IFRS) and 12% (non-IFRS at constant currencies). Cloud subscriptions and support revenue was very strong and grew by 40% (IFRS) and 46% (non-IFRS at constant currencies), with Germany and the UK being highlights. In addition, SAP had strong double-digit software revenue growth in the UK and the Middle East, and Germany had another strong quarter with solid single-digit growth.

The Company had a solid performance in the Americas region with a significant currency headwind. Cloud and software revenue decreased by 3% (IFRS) and increased by 8% (non-IFRS at constant currencies). Cloud subscriptions and support revenue increased by 24% (IFRS) and 35% (non-IFRS at constant currencies), with Brazil being a highlight.

In the APJ region, SAP had a strong performance. Cloud and software revenue was up by 4% (IFRS) and grew by 11% (non-IFRS at constant currencies). Cloud subscriptions and support revenue was exceptional and grew by 42% (IFRS) and 52% (non-IFRS at constant currencies), with China and Japan being highlights. Australia, China, and India had impressive quarters in terms of software revenue and grew double-digit.

Key Figures – SAP Group in the First Half of 2018 (IFRS)

€ millions, unless otherwise stated	Q1-Q2 2018	Q1-Q2 2017	Δ	Δ in %
Cloud subscriptions and support	2,283	1,837	446	24
Software licenses	1,621	1,781	-159	-9
Software support	5,391	5,467	-76	-1
Cloud and software	9,295	9,085	210	2
Total revenue	11,260	11,066	194	2
Operating expense	-9,192	-9,467	276	-3
Operating profit	2,069	1,599	470	29
Operating margin (in %)	18.4	14.5	3.9pp	NA
Profit after tax	1,428	1,197	231	19
Effective tax rate (in %)	29.3	24.1	5.2pp	NA
Earnings per share, basic (in €)	1.20	0.99	0.20	21

Bookings and Order Entry

Cloud Bookings

New cloud bookings increased 20% (28% at constant currencies) to €667 million (first half of 2017: €555 million).

Software Order Entry

The total number of completed transactions for on-premise software grew to 28.1 thousand (first half of 2017: 27.5 thousand). Of all our software orders received in the first half of 2018, 25% were attributable to deals worth more than €5 million (first half of 2017: 29%), while 45% were attributable to deals worth less than €1 million (first half of 2017: 42%).

Operating Results (IFRS)

Revenue

Noteworthy is the successful cloud business in the first half of 2018. Our revenue from cloud subscriptions and support was €2,283 million (first half of 2017: €1,837 million), an increase of 24% compared to the same period in 2017, with the cloud revenue growth rates remaining on a high level.

Software licenses revenue was €1,621 million (first half of 2017: €1,781 million), a decrease of 9% compared to the same period in 2017.

Total revenue was €11,260 million (first half of 2017: €11,066 million), an increase of 2% compared to the same period in 2017.

Operating Expense

Our operating expenses decreased by 3% to €9,192 million (first half of 2017: €9,467 million). The decrease was mainly driven by a reduction of restructuring expenses and lower cost of software

licenses and support. Share-based payment expenses decreased as well, by 21%. The reduction in share-based compensation expenses is mainly due to a lower increase in SAP's share price in the first half of 2018 compared to the same period in 2017. In line with the decline of share-based payment expenses, personnel expenses remained stable despite the addition of more than 5,900 full-time employees compared to the prior-year period.

Operating Profit and Operating Margin

Operating profit increased 29% compared with the same period in the previous year to €2,069 million (first half of 2017: €1,599 million). This was mainly a result of the aforementioned expense decreases. Our operating margin increased by 3.9pp to 18.4% (first half of 2017: 14.5%).

Profit After Tax and Earnings per Share

Profit after tax was €1,428 million (first half of 2017: €1,197 million), an increase of 19%. Basic earnings per share was €1.20 (first half of 2017: €0.99), an increase of 21%.

The effective tax rate was 29.3% (first half of 2017: 24.1%). The year-over-year increase in the effective tax rate mainly resulted from tax effects relating to intercompany financing, the application of hyperinflation accounting in Venezuela, valuation allowances on deferred tax assets, and changes in taxes for prior years which were partly compensated by changes in the regional allocation of income.

Performance Against Outlook (Non-IFRS)

In this section, all discussion of the contribution to target achievement is based exclusively on non-IFRS measures. In contrast, the discussion of operating results in the previous section refers to IFRS figures only, so those figures are not expressly identified as IFRS figures.

We present, discuss, and explain the reconciliation from IFRS measures to non-IFRS measures in the [Supplementary Financial Information](#) section.

Guidance for 2018 (Non-IFRS)

For our guidance based on non-IFRS numbers, see the [Operational Targets for 2018 \(Non-IFRS\)](#) section in this consolidated half-year management report.

Key Figures – SAP Group in the First Half of 2018 (Non-IFRS)

€ millions, unless otherwise stated	Q1-Q2 2018	Q1-Q2 2017	Δ in %	Non-IFRS
				Δ in % (Constant Currency)
Cloud subscriptions and support	2,299	1,837	25	36
Software licenses	1,621	1,781	-9	-4
Software support	5,391	5,467	-1	6
Cloud and software	9,311	9,085	2	10
Total revenue	11,276	11,067	2	10
Operating expense	-8,401	-8,299	1	8
Operating profit	2,876	2,768	4	13
Operating margin (in %)	25.5	25.0	0.5pp	0.7pp
Profit after tax	2,041	2,006	2	NA
Effective tax rate (in %)	27.8	26.9	0.9pp	NA
Earnings per share, basic (in €)	1.71	1.67	3	NA

Performance (Non-IFRS)

Our revenue from cloud subscriptions and support (non-IFRS) was €2,299 million (first half of 2017: €1,837 million), an increase of 25% (36% at constant currencies) compared to the same period in 2017. Our cloud subscriptions and support margin decreased by 0.1pp to 63.4% (first half of 2017: 63.5%).

Cloud and software revenue (non-IFRS) was €9,311 million (first half of 2017: €9,085 million), an increase of 2%. On a constant currency basis, the increase was 10%. This increase was mainly driven by strong cloud revenue growth as mentioned before. Software license revenue decreased by 4% at constant currencies.

Total revenue (non-IFRS) was €11,276 million (first half of 2017: €11,067 million), an increase of 2%. On a constant currency basis, the increase was 10%.

Operating expense (non-IFRS) was €8,401 million (first half of 2017: €8,299 million), an increase of 1%. On a constant currency basis, the increase was 8%. Cost of cloud subscriptions and support increased by 25%. In contrast, costs of software licenses and support dropped by 9%. This

development reflects ongoing investments into our cloud infrastructure and our aim to further improve the profitability of our on-premise software business.

In total, operating expenses increased at a lower percentage rate as compared to 2017, which is mainly driven by our successful cost-saving initiatives and restructuring measures of prior years.

Operating profit (non-IFRS) was €2,876 million (first half of 2017: €2,768 million), an increase of 4%. On a constant currency basis, the increase was 13%.

Operating margin (non-IFRS) was 25.5%, an increase of 0.5pp (first half of 2017: 25.0%). Operating margin (non-IFRS) on a constant currency basis was 25.8%, an increase of 0.7pp.

Profit after tax (non-IFRS) was €2,041 million (first half of 2017: €2,006 million), an increase of 2%. Basic earnings per share (non-IFRS) was €1.71 (first half of 2017: €1.67), an increase of 3%.

The effective tax rate (non-IFRS) was 27.8% (first half of 2017: 26.9%). The year-over-year increase in the effective tax

rate mainly resulted from tax effects relating to intercompany financing, the application of hyperinflation accounting in Venezuela, valuation allowances on deferred tax assets, and changes in taxes for prior years which were partly compensated by changes in the regional allocation of income.

Segment Performance

Applications, Technology & Services Segment

€ millions, unless otherwise stated	Q1–Q2 2018		Q1–Q2 2017	Δ in %	
	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud subscriptions and support revenue – SaaS/PaaS ¹⁾	847	911	671	26	36
Cloud subscriptions and support gross margin – SaaS/PaaS ¹⁾ (in %)	59	60	62	–3pp	–2pp
Cloud subscriptions and support revenue – IaaS ²⁾	217	235	157	38	50
Cloud subscriptions and support gross margin – IaaS ²⁾ (in %)	10	12	9	1pp	3pp
Cloud subscriptions and support revenue	1,064	1,145	827	29	38
Cloud subscriptions and support margin (in %)	49	51	52	–3pp	–2pp
Segment revenue	9,480	10,171	9,483	0	7
Gross margin (in %)	72	72	72	–0pp	–0pp
Segment profit	3,676	3,997	3,656	1	9
Segment margin (in %)	39	39	39	0pp	1pp

¹⁾ Software as a Service/Platform as a Service

²⁾ Infrastructure as a Service

The Applications, Technology & Services segment recorded strong growth in our cloud subscriptions and support revenue and solid growth in support revenue as well as in services revenue at constant currency basis. The SaaS/PaaS business in this segment grew by 36% at constant currency basis driven by an ongoing strong demand in our cloud solutions. The IaaS business even grew by 50% at constant currency basis year over year.

As a result of our ongoing efforts to further improve our offerings and invest in our cloud infrastructure, our SaaS/PaaS gross margin showed a decline of 2pp at constant currencies compared to the first half of 2017. This could not be fully offset by the positive development of the IaaS gross margin. As a result, the overall cloud subscription and support gross margin dropped 3pp to 49%.

SAP Business Network Segment

€ millions, unless otherwise stated	Q1-Q2 2018		Q1-Q2 2017	Δ in %	Δ in %
	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud subscriptions and support revenue – SaaS/PaaS ¹⁾	1,014	1,113	925	10	20
Cloud subscriptions and support gross margin – SaaS/PaaS ¹⁾ (in %)	77	77	77	0pp	0pp
Cloud subscriptions and support revenue	1,014	1,113	925	10	20
Cloud subscriptions and support margin (in %)	77	77	77	0pp	0pp
Segment revenue	1,233	1,352	1,138	8	19
Gross margin (in %)	69	69	68	1pp	1pp
Segment profit	227	251	189	20	33
Segment margin (in %)	18	19	17	2pp	2pp

¹⁾ Software as a Service/Platform as a Service

In the first half of 2018, cloud subscriptions and support revenue growth was 20% and segment revenue growth was 19% at constant currencies. With approximately \$2.4 trillion

in global commerce transacted annually in more than 180 countries, the SAP Business Network is the largest commerce platform in the world.

Customer Experience Segment

€ millions, unless otherwise stated	Q1-Q2 2018		Q1-Q2 2017	Δ in %	Δ in %
	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud subscriptions and support revenue – SaaS/PaaS ¹⁾	216	231	84	>100	>100
Cloud subscriptions and support gross margin – SaaS/PaaS ¹⁾ (in %)	73	74	65	8pp	9pp
Cloud subscriptions and support revenue	216	231	84	>100	>100
Cloud subscriptions and support margin (in %)	73	74	65	8pp	9pp
Segment revenue	385	409	261	47	57
Gross margin (in %)	79	80	78	2pp	2pp
Segment profit	31	34	-7	<-100	<-100
Segment margin (in %)	8	8	-3	11pp	11pp

¹⁾ Software as a Service/Platform as a Service

The new Customer Experience segment recorded strong growth in total revenue of 57% at constant currencies in the first half of 2018. The positive development was mainly influenced by the strong growth in Cloud subscriptions and support of 173% at constant currencies. The acquisition of Callidus and SAP's cloud strategy result in an increasing cloud revenue share compared to software licenses and support revenue. Callidus contributed €48 million in Cloud subscriptions and support revenue to the total performance

of the new segment since its acquisition in the second quarter of 2018.

For more information about our segments, see the Notes to the Consolidated Half-Year Financial Statements, *Note (14)*.

Reconciliation of Cloud Subscription Revenues and Margins

€ millions, unless otherwise stated		Q1–Q2 2018		Q1–Q2 2017	Δ in %	Δ in %
		Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud subscriptions and support revenue – SaaS/PaaS ¹⁾	SAP Business Network segment	1,014	1,113	925	10	20
	Other ³⁾	1,068	1,142	755	41	51
	Total	2,082	2,255	1,681	24	34
Cloud subscriptions and support revenue – IaaS ²⁾		217	235	157	38	50
Cloud subscriptions and support revenue		2,299	2,490	1,837	25	36
Cloud subscriptions and support gross margin – SaaS/PaaS ¹⁾ (in %)	SAP Business Network segment	77	77	77	0pp	0pp
	Other ³⁾	61	60	58	3pp	2pp
	Total	69	69	69	0pp	0pp
Cloud subscriptions and support gross margin – IaaS ²⁾ (in %)		10	12	9	1pp	3pp
Cloud subscriptions and support gross margin (in %)		63	63	63	–0pp	–0pp

¹⁾ Software as a Service/Platform as a Service

²⁾ Infrastructure as a Service

³⁾ Other includes the Application, Technology & Services segment, the Customer Experience segment, and miscellaneous. The individual revenue and margin numbers for the Application, Technology & Services segment and the Customer Experience segment are disclosed on the previous pages.

Finances and Assets (IFRS)

Cash Flow

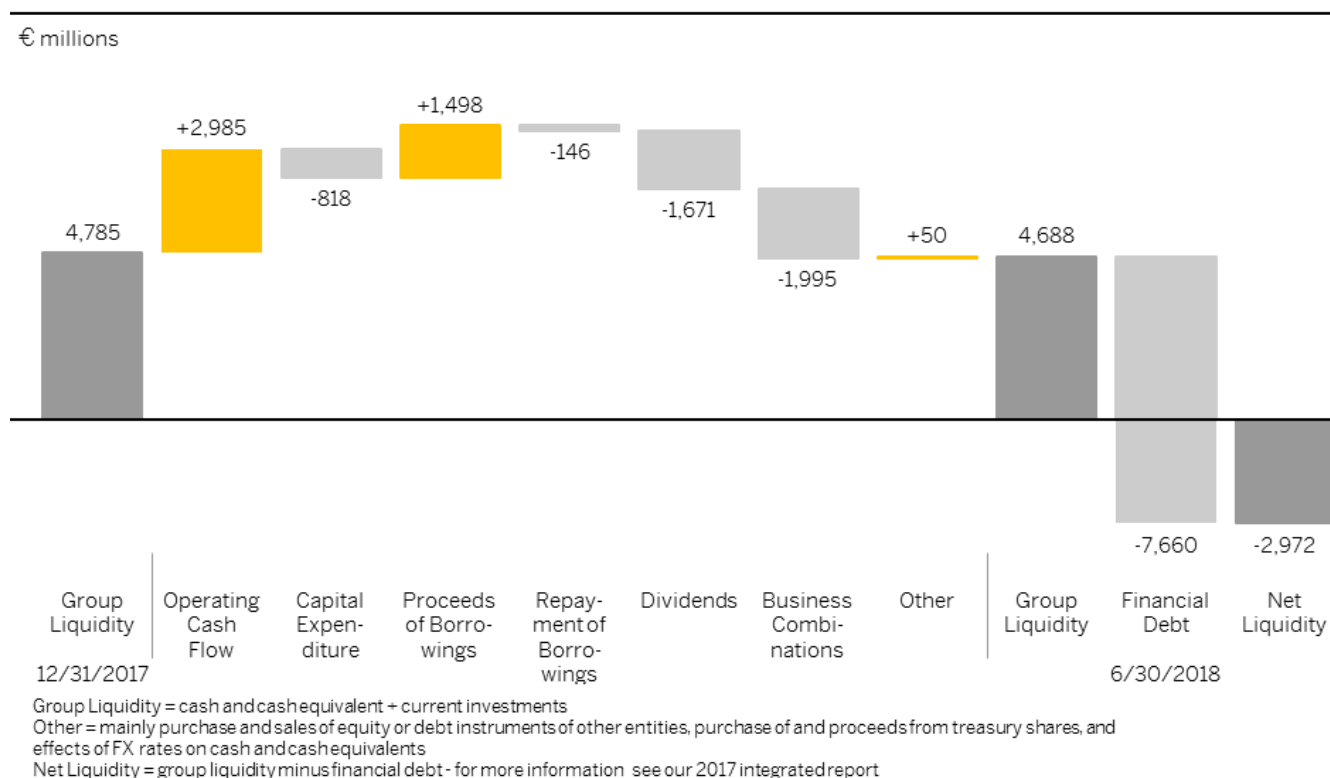
€ millions	Q1-Q2 2018	Q1-Q2 2017	Δ
Net cash flows from operating activities	2,985	3,514	-15%
Capital expenditure	-818	-610	+34%
Free cash flow	2,167	2,903	-25%
Free cash flow (as a percentage of total revenue)	19	26	-7pp
Free cash flow (as a percentage of profit after tax)	152	243	-91pp
Days' sales outstanding (DSO, in days)	68	72	-4

The decrease in operating cash flow resulted mainly from higher payments for income taxes, insurance payments related to employees' time credits, and share-based payments.

The expansion of our data centers as well as consolidation of our cloud infrastructure and technology platforms underlying our cloud solution portfolio are a key component of our investments in 2018 and led to higher cash outflows in the first half of 2018.

We calculate free cash flow as net cash flows from operating activities minus purchases of intangible assets and property, plant, and equipment without acquisitions (capital expenditure). DSO for receivables is defined as the average number of days from the raised invoice to the cash receipt from the customer.

Group Liquidity



Liquidity and Financial Position

€ millions	6/30/2018	12/31/2017	Δ
Cash and cash equivalents	4,515	4,011	+505
Current investments	173	774	-602
Group liquidity	4,688	4,785	-97
Financial debt	-7,660	-6,264	-1,396
Net liquidity	-2,972	-1,479	-1,493
Goodwill	23,377	21,267	+2,110
Total assets	45,481	42,506	+2,976
Total equity	25,857	25,540	+318
Equity ratio (total equity as a percentage of total assets)	57	60	-3pp

Competitive Intangibles

The resources that are the basis for our current as well as future success do not appear in the Consolidated Statements of Financial Position. This is apparent from a comparison of the market capitalization of SAP SE with the carrying amount of our equity. With €122 billion at the end of the first half of 2018, the market capitalization of our equity (based on all outstanding shares) is nearly five times higher than its carrying amount.

Some of the most important competitive intangibles that influence our market value include: customer capital, our employees and their knowledge and skills, our ecosystem of partners, software we developed ourselves, our ability to innovate, the brands we have built up – in particular, the SAP brand itself – and our organization.

SAP was recognized as the world's 17th most valuable brand in the 2018 BrandZ Top 100 Most Valuable Global Brands ranking. The ranking estimates SAP's brand value at US\$55 billion, an increase of 22% in brand value for SAP year over year.

Risk Management and Risks

We have comprehensive risk-management structures in place that are intended to enable us to recognize and analyze risks early and to take the appropriate action as well as to mitigate any risks that materialize as presented in the Risk Management and Risks chapter in our Integrated Report 2017 and our Annual Report on Form 20-F for 2017. In this section, we present relevant changes and new developments with regards to our risk factors. For changes in our Litigation, Claims, and Legal Contingencies since our last Integrated Report, see *Note (11)* in the Notes to the Consolidated Half-Year Financial Statements.

	Probability	Impact	Risk Level	Evo- lution ¹⁾
Security				
Integrated Report 2017	<i>unlikely</i>	<i>business-critical</i>	<i>medium</i>	→
Half-Year Report 2018	<i>likely</i>	<i>business-critical</i>	<i>high</i>	↗
Data Protection and Privacy				
Integrated Report 2017	<i>unlikely</i>	<i>business-critical</i>	<i>medium</i>	→
Half-Year Report 2018	<i>likely</i>	<i>business-critical</i>	<i>high</i>	↗

¹⁾ Evolution: Risk level compared with previous year.

As we continue to grow both organically and through acquisitions, deliver a full portfolio of solutions via the cloud, and offer more mobile solutions to end users, we face a progressively more complex security environment while we rely upon a high-performing cyberspace. The complexity of this security environment is amplified due to the increasingly malicious global cybersecurity threat landscape in which we operate and the sophisticated techniques employed by threat actors targeting IT products and businesses. Cybersecurity attacks, as well as the exploitation of undetected security vulnerabilities in our products and infrastructure by external threat actors, could have a material adverse effect on our customers, our partners, our reputation and our business. As we continuously observe and investigate a globally increasing number of cyber threats, and given that we anticipate attacker techniques to continuously evolve in sophistication, we increase our estimate of the probability of occurrence of this Security Risk (referring to: A cybersecurity breach or economic espionage could have an adverse effect on our customers, our reputation, and our business; Integrated Report 2017 and Annual Report Form 20-F for 2017) to be likely and still cannot exclude the possibility that if this risk were to occur that it could have a business-critical impact on our operations, financial

position, profit and cash flows. We now classify this increased risk as a high risk.

Both the German Federal Office for the Protection of the Constitution and security industry experts warn against a globally growing number of cybersecurity attacks aimed at obtaining or violating company data including personal data. Considering these warnings and the increasingly complex and stringent data protection and privacy regulatory environment in a progressive digitalization in which we operate, we updated the Data Protection and Privacy Risk (referring to: Non-compliance with applicable data protection and privacy laws or failure to adequately meet the requirements of SAP's customers with respect to our products and services; Integrated Report 2017 and Annual Report Form 20-F for 2017). Specifically, we are subject to evolving regulations and new laws (such as the recently effective EU General Data Protection Regulation (GDPR), the China Cybersecurity Law, and the European Union's proposed e-Privacy Regulation) globally regarding data protection and privacy. These regulations and other standards increasingly aimed at the use of personal information, such as for marketing purposes and the tracking of individuals' online activities. Non-compliance with these increasingly complex and evolving regulations could lead to civil liabilities and significant fines as well as a loss of customers and damage to SAP's reputation.

As a result of this progressively more complex and stringent regulatory environment and the globally increasing number of hacker attacks we estimate the increased probability of occurrence of this risk to be likely and can still not exclude the possibility that if the risk were to occur, it could have a business-critical impact on our operations, financial position, profit, and cash flows. We now classify this increased risk as a high risk.

We closely monitor the corresponding mitigations, as per the Risk Management and Risks chapter in our Integrated Report 2017 and Annual Report on Form 20-F for 2017, addressing the aforementioned Security Risk and Data Protection and Privacy Risk, and continuously enhance as required.

Based on our aggregation approach, we subsequently see changes in the consolidated risk profile related to the percentages of all reported risks categorized as "high" or "medium" in our risk level matrix. The number of risks categorized as "high" now account for 26% (previously 17%) of all reported risks, while the risks categorized as "medium" now account for 43% (previously 52%).

We do not believe that any of the risks we have identified in our Integrated Report 2017 and Annual Report on Form 20-F for 2017, and as outlined in the update above, jeopardize our ability to continue as a going concern.

Other than as reflected in the update above, we do not see any relevant changes to our assessment of the risk factors since the

issuing of the Integrated Report 2017 and Annual Report on Form 20-F for 2017.

Expected Developments and Opportunities

Future Trends in the Global Economy

The near-term global economic outlook remains essentially solid and broad-based. This is what the European Central Bank (ECB) reports in its June 2018 Economic Bulletin¹, corresponding with our Integrated Report 2017. However, over the medium term, it expects the positive momentum to slow down to below pre-crisis rates. In addition, the implementation of higher trade tariffs and the possibility of wider protectionism represent a key risk to global growth, says the ECB.

Regarding the Europe, Middle East, and Africa (EMEA) region, the ECB confirms the projections cited in our Integrated Report 2017: It expects more moderate but still solid growth momentum in the euro area. In central and eastern Europe, it counts on a robust economic activity, supported by strong investment. According to the ECB, Russia is facing supportive factors such as rising oil prices, declining inflation, and improving business and consumer confidence.

As for the Americas region, the ECB expects economic activity in the United States to rebound this year, due to improvement in investment and favorable financial conditions. In Brazil, the stabilization in commodity prices and terms of trade should be supportive while political uncertainty and financial conditions might weigh on demand, projects the ECB.

In the Asia Pacific Japan (APJ) region, the ECB believes the effects of the Japanese fiscal stimulus might already fade this year, earlier than anticipated in our Integrated Report 2017. At the same time, China and other export-oriented Asian economies will benefit from the predicted global trade revival. However, the ECB expects China's transition to a lower growth path to continue.

Economic Trends – Year-Over-Year GDP Growth

%	2017	2018p	2019p
World	3.8	3.9	3.9
Advanced economies	2.3	2.5	2.2
Emerging market and developing economies	4.8	4.9	5.1
Europe, the Middle East, and Africa (EMEA)			
Euro area	2.3	2.4	2.0
Germany	2.5	2.5	2.0
Emerging and developing Europe	5.8	4.3	3.7
Middle East, North Africa, Afghanistan, and Pakistan	2.6	3.4	3.7
Sub-Saharan Africa	2.8	3.4	3.7
Americas			
United States	2.3	2.9	2.7
Canada	3.0	2.1	2.0
Latin America and the Caribbean	1.3	2.0	2.8
Asia-Pacific-Japan (APJ)			
Japan	1.7	1.2	0.9
Emerging and developing Asia	6.5	6.5	6.6
China	6.9	6.6	6.4

p = projection

Source: International Monetary Fund (IMF), World Economic Outlook April 2018, Cyclical Upswing, Structural Change (http://www.imf.org/en/publications/weo/issues/2018/03/20/~/_/media/Files/Publications/WEO/2018/April/text.ashx?la=en), p. 32.

The IT Market: Outlook for 2018 and Beyond

One-third of new technology investments will be driven by digital transformation initiatives through the next few years, says IDC (International Data Corporation), a U.S.-based market research firm.⁴ Meanwhile, digital transformation itself will further accelerate toward SaaS and cloud-enabled ERP and enterprise applications⁴, according to IDC and in line with our Integrated Report 2017. By 2021, IDC expects at least 50% of global GDP to be digitized, with growth in every industry.⁵

It is only as a whole, says IDC, that the worldwide market for IT outsourcing services will decline at a five-year compound annual growth rate of 1.6% to \$91.8 billion in 2022.⁶ This includes EMEA declining at 3.7% and the Americas declining at 2.0% (United States -3.3%), but Asia/Pacific growing at 2.1%.⁶ The most successful market segment, managed cloud services, will however outperform and gradually substitute traditional labor-centric service delivery models,⁶ says IDC, confirming our Integrated Report 2017.

The ongoing enterprise transformation to the cloud will steadily increase and bring forward outsourcers and service providers,⁶ predicts IDC. Pure-play cloud service providers will aim at replacing “cloud first” by “cloud only” over the next years.² However, even though managed cloud services benefit from lower costs over traditional service providers, they will also face downward price pressure in the medium term, says IDC.⁶

IDC expects, in unison with our Integrated Report 2017, that in order to meet this challenge, SaaS and cloud-enabled software vendors will release new functionalities such as Internet of Things (IoT), blockchain, analytics, mobile, and new generations of Artificial Intelligence (AI) at unprecedented speed.² For the IoT software platform market, for example, IDC estimates \$4.9 billion in revenue by 2022 at a compound annual growth rate of 36% (EMEA 40.0%, Americas 30.2%, Asia/Pacific 42.5%).³ With regards to AI, 60% of organizations will apply intelligent features in their ERP applications by 2019, says IDC.⁴

Sources:

¹ European Central Bank, Economic Bulletin, Issue 4/2018, Publication Date: June 28, 2018 (<http://www.ecb.europa.eu/pub/pdf/ecbu/eb201804.en.pdf>) (<http://www.ecb.europa.eu/pub/pdf/ecbu/eb201708.en.pdf>)

² IDC Perspective: The DX World: SaaS and Cloud-Enabled Technology Bring Business Impact, Doc #US43759218, May 2018

³ IDC Market Forecast: Worldwide Internet of Things Software Platform Forecast, 2018–2022, Doc #US42635618, May 2018

⁴ IDC Market Perspective: Intelligent ERP and Intelligent Enterprise Applications Are Growing in Significance, Doc #US43704418, March 2018

⁵ IDC FutureScape: Worldwide IT Industry 2018 Predictions, #US43171317, Oct 2017

⁶ IDC Market Forecast: Worldwide and U.S. IT Outsourcing Services Forecast, 2018–2022: Continuing Shift to Managed Cloud Services, Doc #US42630018, April 2018

Impact on SAP

Despite growing geopolitical uncertainties and trade war discussions, SAP expects to benefit further from the digitalization of the global economy.

The strategy to enable customers to become intelligent enterprises continues to resonate well in the market, and our combination of technologies such as artificial intelligence, blockchain, and internet of things (IoT) around the digital core is unique. Very fast growth in the cloud and a strong adoption of our core solution SAP S/4 HANA shows that we are consistently expanding our reach. This is reflected in the raise of our 2018 outlook and 2020 ambition.

In addition, and as projected in the Integrated Report 2017, the expansion of profitability shows our operational excellence and solid execution.

On this basis, we consider ourselves well-prepared for the future and expect profitable growth beyond 2018 as well. Balanced in terms of regions as well as industries, we remain well-positioned with our product offering to offset individual fluctuations in the global economy and IT market.

SAP expects to outperform the global economy and the IT industry again in 2018 in terms of revenue growth.

Operational Targets for 2018 (Non-IFRS)

Revenue and Operating Profit Outlook

Due to the strong momentum in SAP's cloud business, the Company is raising its outlook for the full year 2018 as follows:

- Non-IFRS cloud subscriptions and support revenue is now expected to be in a range of €5.050 billion to €5.200 billion at constant currencies (2017: €3.77 billion), up 34.0% to 38.0% at constant currencies. The previous range was €4.95 billion to €5.15 billion at constant currencies.
- Non-IFRS cloud and software revenue is now expected to be in a range of €21.025 to €21.250 billion at constant currencies (2017: €19.55 billion), up 7.5% to 8.5% at constant currencies. The previous range was €20.85 billion to €21.25 billion at constant currencies.
- Non-IFRS total revenue is now expected to be in a range of €24.975 billion to €25.300 billion at constant currencies (2017: €23.46 billion), up 6.0% to 7.5% at constant currencies. The previous range was €24.80 billion to €25.30 billion at constant currencies.
- Non-IFRS operating profit is now expected to be in a range of €7.400 billion to €7.500 billion at constant currencies (2017: €6.77 billion), up 9.0% to 11.0% at constant currencies. The previous range was €7.35 billion to €7.50 billion at constant currencies.

While SAP's full-year 2018 business outlook is at constant currencies, actual currency reported figures are expected to be impacted by currency exchange rate fluctuations as the Company progresses through the year. See the table below for the currency impacts expected in Q3 and FY 2018.

Expected Currency Impact Based on June 2018 Level for the Rest of the Year		
In percentage points	Q3	FY
Cloud subscriptions and support	1 to -1pp	-4 to -6pp
Cloud and software	1 to -1pp	-2 to -4pp
Operating profit	1 to -1pp	-2 to -4pp

We expect that non-IFRS total revenue will continue to depend largely on the revenue from both cloud and software. However, we expect cloud revenue to overtake software license revenue in 2018 and beyond. In 2018, we expect an increase in our operating margin.

In 2018, we expect our organic headcount to increase at a similar pace as in 2017. Including acquisitions we expect to add headcount at a faster pace than in 2017.

We continuously strive for profit expansion in all of our operating segments.

The following table shows the estimates of the items that represent the differences between our IFRS financial measures and our non-IFRS financial measures.

Non-IFRS Measures

€ millions	Estimated Amounts for Full Year 2018	Q1-Q2 2018	Q1-Q2 2017
Revenue adjustments	30-60	16	0
Acquisition related charges	550-610	278	309
Share-based payment expenses	800-1.100	491	618
Restructuring	25-35	22	242

The company continues to expect a full-year 2018 effective tax rate (IFRS) of 27.0% to 28.0% (2017: 19.3%) and an effective tax rate (non-IFRS) of 27.0% to 28.0% (2017: 22.6%) but now expects to reach the upper end of these ranges.

Impact of the New Accounting Standard IFRS 15 'Revenue from Contracts with Customers'

As of January 1, 2018, SAP changed several of its accounting policies to adopt IFRS 15 'Revenue from Contracts with Customers'. Under the IFRS 15 adoption method chosen by SAP, prior years are not restated to conform to the new policies. Consequently, the year-over-year growth of revenue and profit in 2018 will be impacted by the new policies.

Unchanged from our Integrated Report 2017, the Company still expects the full year 2018 impact of the policy change on revenue, operating expenses and profit to be as follows:

- Revenues are expected to experience a benefit of substantially less than €0.1 billion, with most of the difference resulting from exercises of customer software purchase options granted in prior years which result in software revenue.
- Operating expenses are expected to benefit, in cost of sales and marketing, in the amount of approximately €0.2 billion from higher capitalization of sales commissions. Other policy changes will weigh on operating expenses with an additional cost of revenue of substantially less than €0.1 billion.

- The above-mentioned effects will result in a net positive impact on operating profit of approximately €0.2 billion.

For more information about the adoption of IFRS 15, see [Note \(3\)](#) of the Notes to the Consolidated Half-Year Financial Statements.

Goals for Liquidity, Finance, and Investments

On June 30, 2018, we had negative net liquidity. We believe that our liquid assets combined with our undrawn credit facilities are sufficient to meet our operating financing needs in the second half of 2018 as well and, together with expected cash flows from operations, will support debt repayments and our currently planned capital expenditure requirements over the near term and medium term.

In 2018, we anticipate operating cash flow to reach a level similar to 2017. Furthermore, we repaid U.S. private placements totaling US\$150 million in June 2018 and intend to repay €400 million and €750 million in Eurobonds in August and November 2018, respectively.

Our planned capital expenditures for 2018 and 2019, other than from business combinations, consist primarily of the construction activities described in the Assets (IFRS) section of our Integrated Report 2017. We expect investments from these activities of approximately €376 million in 2018 (an increase of approximately 16% compared to the previous year). The expansion of our data centers is an important aspect of our planned investments again for 2018 and 2019. In addition, we aim to extend our office space to cover currently anticipated future growth. In 2019, we expect investments of approximately €380 million.

Premises on Which Our Outlook Is Based

In preparing our outlook, we have taken into account all events known to us at the time we prepared this report that could influence SAP's business going forward.

Among the premises on which this outlook is based are those presented concerning economic development and the assumption that there will be no further major acquisitions in 2018 and 2019.

Medium-Term Prospects

In this section, all numbers are based exclusively on non-IFRS measures.

We expect to grow our more predictable revenue while steadily increasing operating profit. Our strategic objectives are focused primarily on our main financial and non-financial objectives:

growth, profitability, customer loyalty, and employee engagement.

SAP's 2020 ambition reflects our consistent fast growth in the cloud, solid software momentum, and operating profit expansion. Our 2020 targets, last published at the beginning of 2018, have been updated, primarily to reflect the acquisition of Callidus Software Inc. and the changed currency environment. SAP now aims to achieve the following targets by 2020:

- €8.2 billion to €8.7 billion in non-IFRS cloud subscriptions and support revenue (previously: €8.0 billion to €8.5 billion; 2017: €3.77 billion)
- €28 billion to €29 billion in non-IFRS total revenue (unchanged; 2017: €23.46 billion)
- €8.5 billion to €9.0 billion in non-IFRS operating profit (unchanged; 2017: €6.77 billion)

The updated ambition is based on estimated average 2018 currencies, assuming the current foreign exchange environment prevails until year-end. The previous ambition was based on average 2017 currencies. Approximately, the change in currency assumptions negatively impacts the cloud subscriptions and support revenue ambition by -€0.35 billion, the total revenue ambition by -€1.0 billion and the operating profit ambition by -€0.4 billion.

The midpoints of the updated 2020 total revenue and operating profit ranges imply an operating margin of 30.7%. Beyond 2020, SAP currently expects further increases of its operating margin.

We continue to expect the share of more predictable revenue (defined as the total of cloud subscriptions and support revenue and software support revenue) to reach 70% to 75% in 2020 (2017: 63%).

We continue to expect that, by 2020, our public cloud offerings will contribute approximately half of cloud subscription and support revenue, followed by our business network offerings. Both of these offerings we continue to expect to each generate, in 2020, cloud subscriptions and support revenues that are significantly higher than the cloud subscriptions and support revenue generated from our private cloud offerings.

We continue to expect our revenue growth trajectory through 2020 to be driven by continued strong growth in the cloud and continued growth in our software support revenue. We continue to expect low to mid-single-digit declines in software revenue. This is all expected to result in high single-digit growth in cloud and software revenue through 2020.

We also continue to strive to significantly improve, over the next few years, the profitability of our cloud business. Starting in 2018, we continue to expect to see the benefits from previous efficiency-based investments, and thus an increasing cloud gross margin. We continue to expect these profitability improvements to accelerate in the following years till 2020.

We expect that the individual gross margins of our different cloud operating models will increase at different rates over the next years to reach the following mid-term targets:

- We continue to expect that, in 2020, the gross margin from our business network business will be higher than 80% (2017: 77%).
- We continue to expect that, in 2020, the gross margin from our public cloud offerings to reach about 70% (2017: 57%), and to expand to about 80% over the course of the two years thereafter.
- We continue to expect the gross margin for our private cloud offerings to reach about 40% by 2020 (2017: 6%).

Therefore, we continue to expect our overall cloud gross margin to be approximately 71% by 2020 (2017: 62.2%).

We also aim to further improve the profitability of our on-premise software business. We continue to expect the 2020 gross margin for our software licenses and support to be slightly higher than in 2017 (2017: 87.0%).

In addition, we continue to expect our 2020 services gross margin to be slightly higher than in 2017 (2017: 23.5%).

As we look to increase our profitability through 2020, we continue to expect our cost ratios (cost as a % of total revenue) to develop as follows through 2020, relative to 2017: Research and development is expected to remain stable. Sales and marketing as well as general and administration are expected to decline slightly.

With regards to cash flow, starting in 2019 we continue to expect growth rates of our capital expenditures to massively decline from the 2017 and 2018 levels. We also continue to expect significant growth of free cashflow in 2019 and 2020, reflecting the increasing profitability of our business.

Non-Financial Goals 2018 and Ambitions for 2020

In addition to our financial goals, we also focus on two non-financial 2020 targets: customer loyalty and employee engagement. These targets remain unchanged compared to what we disclosed in our Integrated Report 2017. For a detailed description of our Non-Financial Goals 2018 and ambitions for 2020, please see our [Integrated Report 2017](#).

Opportunities

We have comprehensive opportunity-management structures in place that are intended to enable us to recognize and analyze opportunities early and to take the appropriate action. The opportunities remain largely unchanged compared to what we disclosed in our Integrated Report 2017.

Consolidated Half-Year Financial Statements – IFRS

Consolidated Income Statements of SAP Group (IFRS) – Half Year

€ millions, unless otherwise stated	Q1-Q2 2018	Q1-Q2 2017	Δ in %
Cloud subscriptions and support	2,283	1,837	24
Software licenses	1,621	1,781	-9
Software support	5,391	5,467	-1
Software licenses and support	7,012	7,248	-3
Cloud and software	9,295	9,085	2
Services	1,965	1,981	-1
Total revenue	11,260	11,066	2
Cost of cloud subscriptions and support	-941	-793	19
Cost of software licenses and support	-1,001	-1,134	-12
Cost of cloud and software	-1,942	-1,927	1
Cost of services	-1,600	-1,628	-2
Total cost of revenue	-3,542	-3,555	0
Gross profit	7,718	7,512	3
Research and development	-1,761	-1,694	4
Sales and marketing	-3,314	-3,415	-3
General and administration	-548	-569	-4
Restructuring	(5) -22	-242	-91
Other operating income/expense, net	-5	8	<-100
Total operating expenses	-9,192	-9,467	-3
Operating profit	2,069	1,599	29
Other non-operating income/expense, net	-91	-10	>100
Finance income	185	143	30
Finance costs	-144	-156	-7
Financial income, net	41	-13	<-100
Profit before tax	2,019	1,576	28
Income tax expense	-591	-379	56
Profit after tax	1,428	1,197	19
Attributable to owners of parent	1,427	1,189	20
Attributable to non-controlling interests	0	7	-93
Earnings per share, basic (in €)¹⁾	1.20	0.99	21
Earnings per share, diluted (in €)¹⁾	1.20	0.99	21

¹⁾ For the six months ended June 30, 2018 and 2017, the weighted average number of shares was 1,193 million (diluted 1,194 million) and 1,199 million (diluted: 1,199 million), respectively (treasury stock excluded).

Due to rounding, numbers may not add up precisely.

Consolidated Statements of Comprehensive Income of SAP Group (IFRS) – Half Year

€ millions	Q1–Q2 2018	Q1–Q2 2017
Profit after tax	1,428	1,197
Items that will not be reclassified to profit or loss		
Remeasurements on defined benefit pension plans, before tax	2	12
Income taxes relating to remeasurements on defined benefit pension plans	-1	-2
Remeasurements on defined benefit pension plans, net of tax	1	10
Other comprehensive income for items that will not be reclassified to profit or loss, net of tax	1	10
Items that will be reclassified subsequently to profit or loss		
Gains (losses) on exchange differences on translation, before tax	557	-1,635
Reclassification adjustments on exchange differences on translation, before tax	0	0
Exchange differences, before tax	557	-1,635
Income taxes relating to exchange differences on translation	0	-3
Exchange differences, net of tax	557	-1,637
Gains (losses) on remeasuring available-for-sale financial assets, before tax	0	107
Reclassification adjustments on available-for-sale financial assets, before tax	0	-35
Available-for-sale financial assets, before tax	0	72
Income taxes relating to available-for-sale financial assets	0	0
Available-for-sale financial assets, net of tax	0	72
Gains (losses) on cash flow hedges, before tax	-12	42
Reclassification adjustments on cash flow hedges, before tax	-19	0
Cash flow hedges, before tax	-31	43
Income taxes relating to cash flow hedges	9	-11
Cash flow hedges, net of tax	-22	31
Other comprehensive income for items that will be reclassified to profit or loss, net of tax	536	-1,534
Other comprehensive income, net of tax	537	-1,524
Total comprehensive income	1,964	-327
Attributable to owners of parent	1,964	-334
Attributable to non-controlling interests	0	7

Due to rounding, numbers may not add up precisely.

Consolidated Statements of Financial Position of SAP Group (IFRS)

as at 6/30/2018 and 12/31/2017

€ millions		2018	2017 ¹⁾
Cash and cash equivalents		4,515	4,011
Other financial assets		396	990
Trade and other receivables	(8)	5,075	5,899
Other non-financial assets		1,005	725
Tax assets		456	306
Total current assets		11,448	11,930
Goodwill		23,377	21,267
Intangible assets		3,383	2,967
Property, plant, and equipment		3,284	2,967
Other financial assets		1,400	1,155
Trade and other receivables	(8)	115	118
Other non-financial assets		947	621
Tax assets		452	443
Deferred tax assets		1,075	1,037
Total non-current assets		34,034	30,575
Total assets		45,481	42,506
€ millions		2018	2017 ¹⁾
Trade and other payables		1,175	1,151
Tax liabilities		531	597
Financial liabilities	(9)	1,469	1,561
Other non-financial liabilities		3,283	3,946
Provisions		113	184
Contract liabilities / deferred income		4,867	2,771
Total current liabilities		11,437	10,210
Trade and other payables		119	119
Tax liabilities		513	470
Financial liabilities	(9)	6,537	5,034
Other non-financial liabilities		408	503
Provisions		269	303
Deferred tax liabilities		289	248
Contract liabilities / deferred income		52	79
Total non-current liabilities		8,187	6,756
Total liabilities		19,624	16,966
Issued capital		1,229	1,229
Share premium		543	570
Retained earnings		24,739	24,794
Other components of equity		883	508
Treasury shares		-1,580	-1,591
Equity attributable to owners of parent		25,814	25,509
Non-controlling interests		44	31
Total equity	(10)	25,857	25,540
Total equity and liabilities		45,481	42,506

¹⁾ Under the adoption methods we chose for IFRS 15 and IFRS 9, prior years are not restated to conform to the new policies.

Due to rounding, numbers may not add up precisely.

Consolidated Statements of Changes in Equity of SAP Group (IFRS)

€ millions	Equity Attributable to Owners of Parent					Non-Controlling Interests	Total Equity	
	Issued Capital	Share Premium	Retained Earnings	Other Components of Equity	Treasury Shares			Total
12/31/2016	1,229	599	22,302	3,346	-1,099	26,376	21	26,397
Profit after tax			1,189			1,189	7	1,197
Other comprehensive income			10	-1,534		-1,524		-1,524
Comprehensive income			1,199	-1,534		-335	7	-327
Share-based payments		-47				-47		-47
Dividends			-1,499			-1,499	-23	-1,522
Reissuance of treasury shares under share-based payments		13			8	22		22
Other changes			1			1	1	2
6/30/2017	1,229	565	22,004	1,812	-1,091	24,518	7	24,525
12/31/2017	1,229	570	24,794	508	-1,591	25,509	31	25,540
Adoption of IFRS 15			84			84		84
Adoption of IFRS 9			135	-160		-25		-25
1/1/2018	1,229	570	25,013	347	-1,591	25,568	31	25,598
Profit after tax			1,427			1,427	0	1,428
Other comprehensive income			1	536		537		537
Comprehensive income			1,428	536		1,964	0	1,964
Share-based payments		-40				-40		-40
Dividends			-1,671			-1,671	-4	-1,675
Reissuance of treasury shares under share-based payments		13			11	24		24
Shares to be issued			7			7		7
Hyperinflation Venezuela			-39			-39		-39
Changes in non-controlling interests							17	17
6/30/2018	1,229	543	24,739	883	-1,580	25,814	44	25,857

Due to rounding, numbers may not add up precisely.

Consolidated Statements of Cash Flows of SAP Group (IFRS)

€ millions	Q1–Q2 2018	Q1–Q2 2017
Profit after tax	1,428	1,197
Adjustments to reconcile profit after tax to net cash flows from operating activities:		
Depreciation and amortization	635	642
Income tax expense	591	379
Financial income, net	-41	13
Decrease/increase in sales and bad debt allowances on trade receivables	-43	-4
Other adjustments for non-cash items	-13	-28
Decrease/increase in trade and other receivables	1,409	303
Decrease/increase in other assets	-395	-312
Decrease/increase in trade payables, provisions, and other liabilities	-917	-634
Decrease/increase in contract liabilities/deferred income	1,240	2,722
Interest paid	-101	-125
Interest received	54	41
Income taxes paid, net of refunds	-865	-680
Net cash flows from operating activities	2,985	3,514
Business combinations, net of cash and cash equivalents acquired	-1,995	-22
Purchase of intangible assets or property, plant, and equipment	-818	-610
Proceeds from sales of intangible assets or property, plant, and equipment	32	47
Purchase of equity or debt instruments of other entities	-526	-1,843
Proceeds from sales of equity or debt instruments of other entities	1,079	2,064
Net cash flows from investing activities	-2,228	-365
Dividends paid	-1,671	-1,499
Dividends paid on non-controlling interests	-4	-23
Proceeds from borrowings	1,498	18
Repayments of borrowings	-146	-1,003
Net cash flows from financing activities	-323	-2,506
Effect of foreign currency rates on cash and cash equivalents	70	-108
Net decrease/increase in cash and cash equivalents	504	534
Cash and cash equivalents at the beginning of the period	4,011	3,702
Cash and cash equivalents at the end of the period	4,515	4,236

Due to rounding, numbers may not add up precisely.

Notes to the Consolidated Half-Year Financial Statements

(1) General Information About Consolidated Half-Year Financial Statements

The accompanying condensed Consolidated Half-Year Financial Statements of SAP SE and its subsidiaries (collectively, “we,” “us,” “our,” “SAP,” “Group,” and “Company”) have been prepared in accordance with the International Financial Reporting Standards (IFRS) and in particular in compliance with International Accounting Standard (IAS) 34. The designation IFRS includes all standards issued by the International Accounting Standards Board (IASB) and related interpretations issued by the IFRS Interpretations Committee (IFRS IC). The variances between the applicable IFRS standards as issued by the IASB and the standards as used by the European Union are not relevant to these financial statements.

Certain information and disclosures normally included in the notes to annual financial statements prepared in accordance with IFRS have been condensed or omitted. We believe that the disclosures made are adequate and that the information gives a true and fair view.

Our business activities are influenced by certain seasonal effects. Historically, our overall revenue tends to be highest in the fourth quarter. Interim results are therefore not necessarily indicative of results for a full year.

Amounts reported in previous years have been reclassified if appropriate to conform to the presentation in this half-year report.

These unaudited condensed Consolidated Half-Year Financial Statements should be read in conjunction with SAP’s audited Consolidated IFRS Financial Statements for the Year Ended December 31, 2017, included in our Integrated Report 2017 and our Annual Report on Form 20-F for 2017.

Due to rounding, numbers presented throughout these Consolidated Half-Year Financial Statements may not add up precisely to the totals we provide and percentages may not precisely reflect the absolute figures.

(2) Scope of Consolidation

The additions in the first half of 2018 relate to more than fifty entities added in connection with acquisitions and foundations. The disposals are mainly due to liquidations of legal entities.

For more information about our business combinations and the effect on our Consolidated Financial Statements, see [Note \(4\)](#) and our Integrated Report 2017.

(3) Summary of Significant Accounting Policies

(3a) New Accounting Standards Adopted in the Current Period

As of January 1, 2018, SAP changed several of its accounting policies to adopt IFRS 15 ‘Revenue from Contracts with Customers’ and IFRS 9 ‘Financial Instruments’.

IFRS 15 ‘Revenue from Contracts with Customers’ Classes of Revenue

We derive our revenue from fees charged to our customers for (a) the use of our hosted cloud offerings, (b) licenses to our on-premise software products, and (c) standardized and premium support services, consulting, customer-specific software development agreements, training, and other services.

Cloud and software revenue, as presented in our Consolidated Income Statements, is the sum of our cloud subscriptions and support revenue, our software licenses revenue, and our software support revenue.

- Revenue from cloud subscriptions and support represents fees earned from providing customers with any of the following:
 - Software as a Service (SaaS), that is, a right to use software functionality (including standard functionalities and customer-specific developed cloud applications and extensions) in a cloud-based infrastructure hosted by SAP or third parties engaged by SAP, where the customer does not have the right to terminate the hosting contract and take possession of the software to either run it on the customer’s own IT infrastructure or to engage a third-party provider unrelated to SAP for hosting and managing the software; the item also includes transaction and agent

fees for transactions that customers of our network-business execute on our cloud-based transaction platforms

- Platform as a Service (PaaS), that is, access to a cloud-based infrastructure to develop, run, and manage applications
 - Infrastructure as a Service (IaaS), that is, hosting and related application management services for software hosted by SAP or third parties engaged by SAP, where the customer has the right to take possession of the software
 - Additional premium cloud subscription support beyond the regular support that is embedded in the basic cloud subscription fees.
- Software licenses revenue represents fees earned from the sale or license of software to customers for use on the customer’s premises, in other words, where the customer has the right to take possession of the software for installation on the customer’s premises or on hardware of third-party hosting providers unrelated to SAP (on-premise software). Software licenses revenue includes revenue from both the sale of our standard software products and customer-specific on-premise-software development agreements.
- Software support revenue represents fees earned from providing customers with standardized support services which comprise unspecified future software updates, upgrades, and enhancements as well as technical product support services for on-premise software products.

Services revenue primarily represents fees earned from professional consulting services, premium support services, training services, messaging services, and payment services in connection with our travel and expense management offerings.

Policies and Judgment

Identification of Contract

We frequently enter into multiple contracts with the same customer that we treat, for accounting purposes, as one contract if the contracts are entered into at or near the same time and are economically interrelated. We do not combine contracts with closing days more than three months apart because we do not consider them being entered into near the same time. Judgment is required in evaluating whether two or more contracts are interrelated, which includes considerations as to whether they were negotiated as a package with a single commercial objective, whether the amount of consideration on one contract is dependent on the performance of the other contract, or if some or all goods in the contracts are a single performance obligation.

New arrangements with existing customers can be either a new contract or the modification of prior contracts with the customer. Our respective judgment in making this

determination considers whether there is a connection between the new arrangement and the pre-existing contracts, whether the goods and services under the new arrangement are highly interrelated with the goods and services sold under prior contracts, and how the goods and services under the new arrangement are priced. In determining whether a change in transaction price represents a contract modification or a change in variable consideration, we examine whether the change in price results from changing the contract or from applying unchanged existing contract provisions.

Identification of Performance Obligations

Our customer contracts often include various products and services. Typically, the products and services outlined in the “Classes of Revenue” section qualify as separate performance obligations and the portion of the contractual fee allocated to them is recognized separately. Judgment is required, however, in determining whether a good or service is considered a separate performance obligation. In particular for our professional services and implementation activities, judgment is required to evaluate if such services significantly integrate, customize, or modify the on-premise software or cloud service to which they relate. In this context we consider the nature of the services and their volume relative to the volume of the on-premise software or cloud service to which they relate. In general, the implementation services for our cloud services go beyond pure setup activities and qualify as separate performance obligations. Similarly, our on-premise implementation services and our custom development services typically qualify as separate performance obligations. Non-distinct goods and services are combined into one distinct bundle of goods and services (combined performance obligation).

When selling goods or services, we frequently grant customers options to acquire additional goods or services (for example, renewals of renewable offerings, or additional volumes of purchased software). We apply judgment in determining whether such options provide a material right to the customer that it would not receive without entering into that contract (material right options). In this judgment, we consider whether the options entitle the customer to a discount that exceeds the discount granted for the respective goods or services sold together with the option.

Determination of Transaction Price

We apply judgement in determining the amount to which we expect to be entitled in exchange for transferring promised goods or services to a customer. This includes estimates as to whether and to what extent subsequent concessions or payments may be granted to customers and whether the customer is expected to pay the contractual fees. In this judgment, we consider our history both with the respective customer and more broadly.

Our typical cloud services do not provide the customer with a software license because the customer does not have the right to terminate the hosting contract and take possession of the software. Consequently, cloud fees that are based on transaction volumes are considered in the transaction price based on estimates rather than being accounted for as sales-based license royalties.

Only very rarely do our contracts include significant financing components. We do not account for financing components if the period between when SAP transfers the promised goods or services to the customer and when the customer pays for those goods or services is one year or less.

Allocation of Transaction Price

We have established a hierarchy to identify the standalone selling prices (SSPs) that we use to allocate the transaction price of a customer contract to the performance obligations in the contract.

- Where standalone selling prices for an offering are observable and reasonably consistent across customers (that is, not highly variable), our SSP estimates are derived from our respective pricing history. Typically, our standardized support offerings and our professional service offerings follow this approach.
- Where sales prices for an offering are not directly observable or highly variable across customers, we use estimation techniques. For renewable offerings with highly variable pricing, these techniques consider the individual contract's expected renewal price as far as this price is substantive. Typically, our cloud subscription offerings follow this approach. For non-renewable offerings, these estimations follow a cost-plus-margin approach.
- For offerings that lack renewals and have highly variable pricing, we allocate the transaction price by applying a residual approach. We use this technique in particular for our standard on-premise software offerings.

Judgment is required when estimating SSPs. To judge whether the historical pricing of our goods and services is highly variable, we have established thresholds of pricing variability. In judging whether contractual renewal prices are substantive, we have established floor prices that we use as SSPs whenever the contractual renewal prices are below these floor prices. In judging whether contracts are expected to renew at their contractual renewal prices, we rely on our respective renewal history. The SSPs of material right options depend on the probability of option exercise. In estimating these probabilities, we apply judgment considering historical exercise patterns.

We review the stand-alone selling prices periodically or whenever facts and circumstances change to ensure the most objective input parameters available are used.

Recognition of Revenue

Cloud subscriptions and support revenue is recognized over time as the services are performed. Where our performance obligation is the grant of a right to continuously access and use a cloud offering for a certain term, revenue is recognized based on time elapsed and thus ratably over this term.

Software revenue is recognized at a point in time or over time depending on whether we deliver standard software or customer-specific software:

- Licenses of our standard on-premise software products are typically delivered by providing the customer with access to download the software, and the license period starts upon such grant of access. We recognize revenue for such on-premise licenses at the point in time when the customer has access to and thus control over the software. In judging that our on-premise software offerings grant the customers a right to use rather than a right to access our intellectual property, we have considered the usefulness of our software without subsequent updates.
- Our customer-specific on-premise-software development agreements typically
 - Are for software developed for specific needs of individual customers and thus the developed software does not have an alternative use to us, and
 - Provide us with an enforceable right to payment for performance completed to date

For such development agreements, we recognize revenue over time as the software development progresses. Judgment is required in identifying an appropriate method to measure the progress towards complete satisfaction of such performance obligations. We typically measure progress of our development agreements based on the direct costs incurred to date in developing the software as a percentage of the total reasonably estimated direct costs to fully complete the development work. This method of measuring progress faithfully depicts the transfer of the development services to the customer, as substantially all of these costs are cost of the staff or third parties performing the development work. In estimating the total cost to fully complete the development work, we consider our history with similar projects.

Support revenue is typically recognized based on time elapsed and thus ratably over the term of the support arrangement. Under our standardized support services, our performance obligation is to stand ready to provide technical product support and unspecified updates, upgrades, and enhancements on a when-and-if-available basis. Our customers simultaneously receive and consume the benefits of these support services as we perform.

Service revenue is typically recognized over time. Where we stand ready to provide the service (such as access to learning content), we recognize revenue based on time elapsed and thus ratably over the service period. Consumption-based services (such as separately identifiable consulting services and premium support services, messaging services, and class room training services) are recognized over time when the services are utilized, typically based on a percentage of completion-based method or ratably. When using the percentage-of-completion method, we typically measure the progress towards complete satisfaction in the same way and with the same reasoning and judgment as we do for customer-specific on-premise software development agreements. We apply judgment in determining whether a service qualifies as a stand-ready service or as a consumption-based service.

Revenue for combined performance obligations is recognized over the longest period of all promises in the combined performance obligation.

Judgement is also required to determine whether revenue is to be recognized at a point in time or over time. For performance obligations satisfied over time, we need to measure the progress using the method that best reflects SAP's performance. When using cost incurred as a measure of progress for recognizing revenue over time, we apply judgement in estimating the total cost to satisfy the performance obligation.

All of the above mentioned judgments and estimates can significantly impact the timing and amount of revenue to be recognized.

Contract Balances

We recognize receivables for performance obligations satisfied over time gradually as the performance obligation is satisfied and in full once the invoice is due. Judgement is required in determining whether a right to consideration is unconditional and thus qualifies as a receivable. Contract liabilities primarily reflect invoices due or payments received in advance of revenue recognition. They are recognized as revenue upon transfer of control to the customers of the promised goods and services.

Typically, we invoice fees for on-premise standard software upon contract closure and software delivery. Periodic fixed fees for cloud subscription services, software support services, and other multi-period agreements are typically invoiced yearly or quarterly in advance. Such fee prepayments account for the majority of our contract liability balance. Fees based on actual transaction volumes for cloud subscriptions and fees charged for non-periodical services are invoiced as the services are delivered. While payment terms and conditions vary by contract

type and region, our terms typically include a requirement of payment within 30 to 60 days.

Incremental Costs of Obtaining Customer Contracts

The assets we recognize for the incremental costs of obtaining a customer contract primarily consist of sales commissions earned by our sales force. Typically, we either do not pay sales commissions for customer contract renewals or such commissions are not commensurate with the commissions paid for new contracts. Consequently, we amortize sales commissions paid for new contracts on a straight-line basis over the expected contract life including probable contract renewals. Judgement is required in estimating the contract lives. In this judgement, we consider our respective renewal history adjusted for indications that the renewal history is not fully indicative for future renewals. The amortization periods range from two to eight years depending on the type of the offering. Amortization of capitalized costs of obtaining customer contracts is included in sales and marketing expense.

We expense incremental costs of obtaining a customer contract as incurred if we expect an amortization period of one year or less.

Costs to Fulfill Customer Contracts

Capitalized costs incurred to fulfill customer contracts mainly consist of direct costs for customer-specific cloud development contracts that are not in scope of other IFRSs. These costs are amortized after completion of the development on a straight-line basis over the expected life of the cloud subscription contract including expected renewals. Judgment is required in evaluating whether costs are direct or indirect and in estimating the contract lives. Based on our respective history, the amortization period is typically six years.

Amortization of capitalized costs to fulfill customer-specific developed cloud applications and extensions contracts is included in cost of cloud subscription and support.

Adoption of IFRS 15

Under the IFRS 15 adoption method chosen by SAP, prior years (including the prior-period numbers presented in the primary financial statements in this half-year report) are not restated to conform to the new policies.

The impact of the policy change¹ in the first half of 2018 was as follows:

- Software licenses and support revenues experienced a benefit of €23 million, with most of the difference resulting from exercises of customer software purchase options granted in prior years which result in software revenue.

¹ "Impact of the policy change" means the difference between a measure determined under SAP's new IFRS 15-based policies and the respective measure as it would stand had our previous accounting policies continued to apply.

- Operating expenses benefitted, in cost of sales and marketing, in the amount of €83 million from higher capitalization of sales commissions net of higher amortization of amounts capitalized.
- The abovementioned effects together with other insignificant effects resulted in a net positive impact on operating profit of approximately €98 million.
- As at June 30, 2018, balance sheet items are affected by the application of IFRS 15 as compared to our pre-IFRS 15 accounting policies as follows:
 - Non-current and current other non-financial assets were higher by €203 million and €40 million, respectively (January 1, 2018: higher by €132 million and €26 million, respectively) due to the higher capitalization of sales commissions.
 - Trade and other receivables and contract liabilities were lower by €768 million and €684 million, respectively (January 1, 2018: higher by €560 million and €648 million, respectively), resulting from changes in the timing of and amounts recognized as contract balances.
 - Provisions were lower by €17 million (January 1, 2018: lower by €25 million), reflecting lower provisions for onerous customer contracts.
 - Intangible Assets were higher by €22 million (January 1, 2018: higher by €14 million), due to capitalization of costs for certain customer-specific on-premise software development arrangements.

Please also refer to *Note (3e)* of our Integrated Report 2017 for further qualitative explanations of the changes in accounting policies as a result of the adoption of IFRS 15.

IFRS 9 'Financial Instruments'

Policies and Judgment

Trade Receivables and Contract Assets

We apply the simplified impairment approach using a provision matrix for all trade receivables and contract assets to take into account any lifetime expected credit losses already at initial recognition. For the purpose of the provision matrix, customers are clustered into different risk classes, mainly based on market information such as the country risk assessment of their country of origin. Determining our expected credit loss allowance involves significant judgement. In this judgement, we primarily consider our historical experience with credit losses in the respective provision matrix risk class and current data on overdue receivables. Based on our analyses, historical default rates generally represent a reasonable approximation for future expected defaults. Besides historical data, our judgement considers reasonable and supportable forward-looking information (for example, changes in country risk ratings, or fluctuations in credit default swaps of countries of customers we do business with) for the development of the provision matrix.

Outstanding receivables are continuously monitored locally to assess whether there is objective evidence that our trade receivables and contract assets are credit-impaired. Evidence that trade receivables and contract assets are credit-impaired include among others information about significant financial difficulty of the customer or non-adherence to a payment plan. In our Consolidated Income Statements, expenses from expected credit loss allowances from applying the provision matrix as well as from credit-impaired customer balances are included in other operating income/expense, net.

Account balances are written off either partially or in full if we judge that the likelihood of recovery is remote, which might be evidenced, for example, when bankruptcy proceedings for a customer are finalized or when all enforcement efforts have been exhausted.

Financial Assets

Our financial assets comprise non-derivative financial assets such as cash and cash equivalents (highly liquid investments with original maturities of three months or less), loans and receivables, acquired equity and debt investments, and derivative financial instruments (derivatives) with positive fair values.

As we do not designate financial assets as "at fair value through profit or loss", we generally classify financial assets into the following categories: "at amortized cost (AC)", "at fair value through other comprehensive income (FVOCI)", and "at fair value through profit or loss (FVPL)", depending on the contractual cash flows of and our business model for holding the respective asset.

Financial assets having cash flow characteristics other than solely principal and interest such as derivatives not held within a hedging relationship, embedded derivatives if the host is not a financial asset, money-market and similar funds as well as equity investments are generally classified as FVPL, except for equity investments for which we take an investment-by-investment decision whether to classify as FVPL or FVOCI.

Generally, all other financial assets with cash flows solely consisting of principal and interest are classified as AC because we follow a conservative investment approach, safeguarding our liquidity by ensuring the safety of principal investment amounts. For these financial assets, we apply considerable judgement by employing the general impairment approach as follows:

- For bank balances and debt investments such as time deposits or commercial paper, we apply the low credit risk exception as it is our policy to only invest in high-quality assets of issuers with a minimum rating of at least investment grade to minimize the risk of credit losses. Thus, these assets are always allocated to stage 1 of the three-stage credit loss model and we record a loss allowance at an

amount equal to 12-month expected credit losses. This loss allowance is calculated based on our exposure at the respective reporting date, the loss given default for this exposure, and the maturity-adjusted credit default swap spread as a measure for the probability of default. Even though we only invest in assets with at least investment-grade rating, we also closely observe the development of credit default swap spreads as a measure of market participants' assessments of the creditworthiness of a debtor, to evaluate probable significant increases in credit risk to timely react to changes should these manifest. Among other, we consider bank balances and debt investments to be in default when there is information about a counterparty's financial difficulties or in case of a drastic increase of credit default swap spread of a counterparty for a prolonged time period while the overall market environment remains rather stable. Such financial assets are written off either partially or in full if the likelihood of recovery is considered remote, which might be evidenced, for example, by the bankruptcy of a counterparty of such financial assets.

- Loans and other financial receivables are monitored based on borrower-specific internal and external information to decide whether there has been a significant increase in credit risk since initial recognition. We consider such assets to be in default if they are significantly beyond their past due date or when the borrower is unlikely to pay its obligation. A write off occurs when the likelihood of recovery is considered remote, for example when bankruptcy proceedings are finalized or when all enforcement efforts have been exhausted.

Financial Liabilities

Financial liabilities include trade and other payables, bank loans, issued bonds, private placements, other financial liabilities, derivatives, and embedded derivatives. Included in other financial liabilities are customer funding liabilities which are funds we draw from and make payments on behalf of our customers for customers' employee expense reimbursements, related credit card payments, and vendor payments. We present these funds in cash and cash equivalents and record our obligation to make these expense reimbursements and payments on behalf of our customers as customer funding liabilities.

As we do not designate financial liabilities as FVPL, we generally classify financial liabilities into the following categories: AC and FVPL in line with IFRS 9.

Expenses and gains/losses on financial liabilities mainly consist of interest expense, which is recognized based on the effective interest method.

Hedge Accounting

We use derivatives to hedge foreign currency risk or interest rate risk and designate them as cash flow or fair value hedges if they qualify for hedge accounting under IFRS 9 which involves judgement.

a) Cash Flow Hedge

In general, we apply cash flow hedge accounting to the foreign currency risk of highly probable forecasted transactions and interest rate risk on variable rate financial liabilities. With regard to foreign currency risk, hedge accounting relates to the spot price and the intrinsic values of the derivatives designated and qualifying as cash flow hedges. Accordingly, the effective portion of these components determined on a present value basis is recorded in other comprehensive income. The forward and time element as well as foreign currency basis spreads excluded from the hedging relationship are recorded as cost of hedging in other comprehensive income. All other components of the derivative and the ineffective portion are immediately recognized in profit and loss. Amounts accumulated in other comprehensive income are reclassified to profit and loss in the same period when the hedged item affects profit and loss.

b) Fair Value Hedge

We apply fair value hedge accounting for certain of our fixed rate financial liabilities.

c) Valuation and Testing of Effectiveness

At inception of a designated hedge relationship, we document our risk management strategy and the economic relationship between the hedged item and hedging instrument.

The effectiveness of the hedging relationship is tested by applying the critical terms match for our foreign currency hedges, as currencies, maturities, and the amounts are largely identical for the forecasted transactions and the spot element of the forward exchange rate contract or intrinsic value of the currency options, respectively. For interest rate swaps, effectiveness is tested using statistical methods in the form of a regression analysis, by which the validity and extent of the relationship between the change in value of the hedged items as the independent variable and the fair value change of the derivatives as the dependent variable is determined.

Adoption of IFRS 9

As of January 1, 2018, SAP changed several of its accounting policies to adopt IFRS 9 'Financial Instruments'. Under the IFRS 9 adoption method chosen by SAP, prior years are not restated to conform to the new policies.

The main impact of the policy change as of January 1, 2018, was as follows:

- Classification as FVPL of money-market and similar funds of €1.1 billion
- Classification as FVPL of equity investments of €827 million
- Classification as AC of debt investments of €39 million

These policy changes resulted in the following main impacts on retained earnings as of January 1, 2018:

- Trade receivables and opening retained earnings are lower by €25 million, resulting from the application of the expected credit loss model.
- Other comprehensive income is lower and retained earnings higher by €157 million, resulting from the reclassification of amounts attributable to available-for-sale financial assets accumulated in other comprehensive income so far to opening retained earnings.

(3b) New Accounting Standards Not Yet Adopted

In the Notes to our Consolidated Financial Statements for 2017, we disclosed, for new accounting standards that have been issued but not yet been adopted by us, our expectations regarding the timing of and our approaches to adopt these standards and known or reasonably estimable information on the possible impact that the adoption will have on our financial statements. The following provides updates to these disclosures and should be read in conjunction with these disclosures:

- On January 13, 2016, the IASB issued IFRS 16 'Leases'. We will adopt IFRS 16 as per its effective date of January 1, 2019, using the modified retrospective approach. Under this approach, the cumulative effect of initially applying the standard will be recognized as an adjustment to the opening balance of retained earnings on the date of initial application. The new standard will significantly impact especially the lease accounting by lessees as, in general, all leases need to be recognized on a company's balance sheet (represented by right-of-use assets and lease liabilities). We plan to use practical expedients offered by the standard (such as short-term leases, low-value leases, and no separation of non-lease components of a contract).
- We are in the process of developing our future IFRS 16 policies and adjusting the relevant business processes to adopt these new policies. We have established a project across SAP's finance and business functions. This project covers the implementation of a new SAP-based lease accounting and reporting solution as well as the development of new lease accounting policies. In addition to this, we have established a global roll-out and training approach for the relevant stakeholders within the organization.
- Due to the adoption of IFRS 16, we expect the total assets and total liabilities to increase, as right-of-use assets/lease liabilities will have to be recorded for those items that were previously "off balance sheet"; operating profit is also

expected to increase, as a portion of the costs that were treated as rental expenses in the past will have to be presented as interest expense going forward. As the effects of applying IFRS 16 will depend on the lease agreements in effect at the time of adoption, the impact of IFRS 16 on our Consolidated Financial Statements cannot be estimated reliably.

(3c) Foreign Currencies

We apply hyperinflation accounting for our subsidiary in Venezuela, by restating the financial statements of this subsidiary for the current period to account for changes in the general purchasing power of the local currency based on relevant price indices at the reporting date. Most significantly impacted by this accounting are other non-operating income/expense (loss of €51 million), equity (retained earnings and other comprehensive income) (decrease of €26 million), and contract liabilities (increase of €70 million). The impact on our revenues and operating profit is immaterial.

(4) Business Combinations

In the first half of 2018, we concluded several business combinations, with the Callidus Software Inc. ("Callidus") acquisition being the only material transaction.

We acquire businesses in specific areas of strategic interest to us, particularly to broaden our product and service portfolio.

The initial accounting for all of our business combinations in the first half of 2018 is incomplete because we are still obtaining the information necessary to identify and measure, for example, intangibles and tax-related assets and liabilities of the acquired businesses. Accordingly, the amounts recognized in our financial statements for these items are regarded as provisional as of June 30, 2018.

The acquisition-related costs incurred for our business combinations in the first half of 2018 were recognized in general and administration expense.

Prior-year acquisitions are described in the Consolidated Financial Statements in the Integrated Report 2017.

Acquisition of Callidus

We announced on January 30, 2018, that SAP and Callidus (NSDQ: CALD), a leading provider of customer relationship management (CRM) solutions, had entered into an agreement under which SAP would acquire Callidus.

On April 5, 2018, following satisfaction of applicable regulatory and other approvals, we acquired 100% of the shares of Callidus. SAP paid US\$36 per share, representing consideration transferred in cash of approximately US\$2.4 billion.

Financial Impact as of the Acquisition Date

€ millions	Callidus Consideration Transferred
Cash paid	1,957
Liabilities incurred	47
Total consideration transferred	2,004

The liabilities incurred relate to the earned portion of unvested share-based payment awards. These liabilities were incurred by replacing, upon acquisition, equity-settled share-based payment awards held by employees of Callidus with cash-settled share-based payment awards, which are subject to forfeiture. The respective liabilities represent the portion of the replacement awards that relates to pre-acquisition services provided by the acquiree's employees and were measured at the fair value determined under IFRS 2 as required by IFRS 3.

The following table summarizes the preliminary values of identifiable assets acquired and liabilities assumed in connection with the acquisition of Callidus, as of the acquisition date.

Recognized Amounts of Identifiable Assets Acquired and Liabilities Assumed

€ millions	Callidus Contribution
Cash and cash equivalents	63
Other financial assets	64
Trade and other receivables	32
Other non-financial assets	12
Property, plant, and equipment	26
Intangible assets	515
Thereof acquired technology	122
Thereof customer relationship and other intangibles	391
Thereof software and database licenses	4
Total identifiable assets	712
Trade and other payables	55
Current and deferred tax liabilities	50
Provisions and other non-financial liabilities	14
Contract liabilities/deferred income	56
Total identifiable liabilities	175
Total identifiable net assets	537
Goodwill	1,467
Total consideration transferred	2,004

In general, the goodwill arising from the acquisitions consists largely of the synergies and the know-how and technical skills of the acquired businesses' workforces.

Callidus goodwill is attributed to expected synergies from the acquisition, particularly in the following areas:

- Cross-selling opportunities to existing SAP customers across all regions, using SAP's sales organization
- Combining Callidus products and SAP products to strengthen SAP's intelligent customer experience suite of solutions
- Improved profitability in Callidus sales and operations

We intend to allocate the Callidus goodwill and intangibles to the newly established Customer Experience segment; additionally, we are in the process of completing the identification of the portion of goodwill previously assigned to the Applications, Technology & Services segment that is to be re-allocated to this new segment.

For more information about our segments and about the changes in our segment structure, see [Note \(14\)](#).

Impact of the Business Combination on Our Financial Statements

The amounts of revenue and profit or loss of the Callidus business acquired in 2018 since the acquisition date included in the consolidated income statements for the reporting period are as follows:

Impact on SAP's Financials

€ millions	Q1-Q2 2018 as Reported	Contribution of Callidus
Revenue	11,260	53
Profit after tax	1,428	-21

Had Callidus been consolidated as of January 1, 2018, our estimated pro forma revenue for the reporting period would have been €11,307 million, and pro forma profit after tax would have been €1,404 million.

These amounts were calculated after applying the Company's accounting policies and after adjusting the results for Callidus to reflect significant effects from, for example:

- Additional depreciation and amortization that would have been charged assuming the fair value adjustment to property, plant, and equipment, and to intangible assets had been applied from January 1, 2018
- The impact of fair value adjustments on deferred revenue on a cumulative basis
- The borrowing costs on the funding levels and debt/equity position of the Company after the business combination
- Employee benefits, such as share-based compensation
- Transaction expenses incurred as part of the acquisition
- Related tax effects

These pro forma numbers have been prepared for comparative purposes only. The pro forma revenue and profit numbers are not necessarily indicative either of the results of operations that would have actually occurred had the acquisition been in effect at the beginning of the respective period or of future results.

(5) Restructuring

€ millions	Q1-Q2 2018	Q1-Q2 2017
Employee-related restructuring expenses	20	239
Onerous contract-related restructuring expenses	1	3
Restructuring expenses	22	242

If not presented separately, these expenses would break down in our income statements as follows:

Restructuring Expenses by Functional Area

€ millions	Q1-Q2 2018	Q1-Q2 2017
Cost of cloud and software	3	105
Cost of services	8	110
Research and development	1	17
Sales and marketing	9	10
General and administration	0	0
Restructuring expenses	22	242

(6) Employee Benefits Expense and Headcount

Employee Benefits Expense

€ millions	Q1-Q2 2018	Q1-Q2 2017
Salaries	4,337	4,275
Social security expenses	697	670
Share-based payment expenses	491	618
Pension expenses	175	169
Employee-related restructuring expenses	20	239
Termination benefits	21	25
Employee benefits expense	5,741	5,996

On June 30, 2018, the breakdown of our full-time equivalent employee numbers by function and by region was as shown in the table below. The increase in headcount in the SAP Group to 93,846 employees is mainly due to the acquisition of Callidus as well as organic growth of full-time equivalents to cloud and software, services, research and development, as well as to sales and marketing.

Due to reorganizations in 2017, employees were partially reallocated from cloud and software to services. Information as at June 30, 2018, is therefore not fully comparable to prior-year numbers.

Number of Employees (in Full-Time Equivalents)

Full-time equivalents	6/30/2018				6/30/2017			
	EMEA	Americas	APJ	Total	EMEA	Americas	APJ	Total
Cloud and software	6,128	4,113	5,051	15,291	7,994	3,811	4,880	16,686
Services	7,924	5,561	5,370	18,855	5,281	4,789	4,752	14,821
Research and development	11,866	5,534	8,681	26,081	10,831	5,122	8,270	24,223
Sales and marketing	9,791	9,621	4,962	24,374	9,030	9,044	4,778	22,851
General and administration	2,814	1,922	1,096	5,832	2,708	1,824	1,039	5,572
Infrastructure	1,976	902	534	3,413	1,650	845	466	2,961
SAP Group (6/30)	40,498	27,653	25,694	93,846	37,494	25,435	24,184	87,114
Thereof acquisitions ¹⁾	638	952	434	2,024	4	13	0	17
SAP Group (six months' end average)	39,722	27,025	25,219	91,965	36,998	25,234	23,778	86,011

¹⁾ Acquisitions closed between January 1 and June 30 of the respective year

The allocations of expenses for share-based payments to the various expense items are as follows:

Share-Based Payments

€ millions	Q1-Q2 2018	Q1-Q2 2017
Cost of cloud and software	46	68
Cost of services	80	81
Research and development	123	148
Sales and marketing	185	240
General and administration	57	81
Share-based payments	491	618

For more information about our share-based payments, see our Integrated Report 2017, Notes to the Consolidated Financial Statements section, *Note (27)*.

(7) Income Taxes

There have been no significant changes in contingent liabilities from income tax-related litigation and claims for which no provision has been recognized compared to *Note (10)* in our Consolidated Financial Statements for 2017, which is included in our Integrated Report 2017.

(8) Trade and Other Receivables

€ millions	6/30/2018		
	Current	Non-Current	Total
Trade receivables, net	5,009	7	5,016
Other receivables	66	109	175
Total	5,075	115	5,191

€ millions	12/31/2017		
	Current	Non-Current	Total
Trade receivables, net	5,809	1	5,810
Other receivables	90	116	207
Total	5,899	118	6,017

The carrying amounts of our trade receivables and related allowances were as follows:

Carrying Amounts of Trade Receivables

€ millions	6/30/2018	12/31/2017
Gross carrying amount	5,228	6,047
Allowances charged to revenue	-110	-163
Allowance for doubtful accounts charged to expense	-102	-74
Carrying amount trade receivables, net	5,016	5,810

(9) Financial Liabilities

€ millions	6/30/2018				
	Nominal Volume		Carrying Amount		Total
	Current	Non-Current	Current	Non-Current	
Bonds	1,150	5,500	1,150	5,488	6,637
Private placement transactions	0	993	0	1,021	1,021
Bank loans	17	0	17	0	17
Financial debt	1,167	6,493	1,167	6,509	7,676
Derivatives	NA	NA	67	16	83
Other financial liabilities	NA	NA	236	12	248
Financial liabilities			1,469	6,537	8,006

€ millions	12/31/2017				
	Nominal Volume		Carrying Amount		Total
	Current	Non-Current	Current	Non-Current	
Bonds	1,150	4,000	1,149	3,997	5,147
Private placement transactions	125	965	125	1,005	1,130
Bank loans	24	0	24	0	24
Financial debt	1,299	4,965	1,298	5,002	6,301
Derivatives	NA	NA	57	29	86
Other financial liabilities	NA	NA	205	2	208
Financial liabilities			1,561	5,034	6,595

(10) Total Equity

Number of Shares

millions	Issued Capital	Treasury Shares
12/31/2016	1,228.5	-29.9
Reissuance under share-based payments	0	0.2
6/30/2017	1,228.5	-29.6
12/31/2017	1,228.5	-35.1
Reissuance under share-based payments	0	0.2
6/30/2018	1,228.5	-34.9

Other Components of Equity

€ millions	Exchange Differences	Available-for-Sale Financial Assets	Cash Flow Hedges	Total
12/31/2016	3,062	292	-9	3,346
Other comprehensive income	-1,637	72	31	-1,534
6/30/2017	1,425	364	23	1,812
12/31/2017	330	157	21	508
Adoption of IFRS 9		-158	-3	-160
1/1/2018	330	0	18	347
Other comprehensive income ¹⁾	557	0	-22	536
6/30/2018	887	0	-4	883

¹⁾ The exchange differences in other comprehensive income include the effect from hyperinflation accounting for our subsidiary in Venezuela of €12 million.

(11) Litigation, Claims, and Legal Contingencies

We are subject to a variety of claims and lawsuits that arise from time to time in the ordinary course of our business, including proceedings and claims that relate to companies we have acquired, claims that relate to customers demanding indemnification for proceedings initiated against them based on their use of SAP software, and claims that relate to customers being dissatisfied with the products and services that we have delivered to them. We will continue to vigorously defend against all claims and lawsuits against us. We currently believe that resolving the claims and lawsuits pending as of June 30, 2018, will neither individually nor in the aggregate have a material adverse effect on our business, financial position, profit, or cash flows. Consequently, the provisions recorded for these claims and lawsuits as of June 30, 2018, are neither individually nor in the aggregate material to SAP.

However, the outcome of litigation and claims is intrinsically subject to considerable uncertainty. Management's view of the litigation may also change in the future. Actual outcomes of litigation and claims may differ from the assessments made by management in prior periods, which could result in a material impact on our business, financial position, profit, cash flows, or reputation. Most of the lawsuits and claims are of a very individual nature and claims are either not quantified by the claimants or claim amounts quantified are, based on historical evidence, not expected to be a good proxy for the expenditure that would be required to settle the case concerned. The specifics of the jurisdictions where most of the claims are located further impair the predictability of the outcome of the cases. Therefore, it is not practicable to reliably estimate the financial effect that these lawsuits and claims would have if SAP were to incur expenditure for these cases.

Among the claims and lawsuits are the following classes (please refer to our Integrated Report 2017, Notes to the Consolidated Financial Statements section, [Note \(18b\)](#) for further detail on these classes).

Intellectual Property-Related Litigation and Claims

There have been no significant changes to the amount of provisions recorded for intellectual property-related litigation and claims compared to the amounts disclosed in our Integrated Report 2017, Notes to the Consolidated Financial Statements section, [Note \(18b\)](#). There have also been no significant changes in contingent liabilities from intellectual property-related litigation and claims for which no provision has been recognized.

For the individual cases of intellectual property-related litigation and claims disclosed in our Integrated Report 2017, there is no significant development.

Customer-Related Litigation and Claims

There have been no significant changes to the amount of provisions recorded for customer-related litigation and claims compared to the amounts disclosed in our Integrated Report 2017, Notes to the Consolidated Financial Statements section, [Note \(18b\)](#). There have also been no significant changes in contingent liabilities from customer-related litigation and claims for which no provision has been recognized.

Tax-Related Litigation and Claims

There have been no significant changes in contingent liabilities from non-income tax-related litigation and claims for which no provision has been recognized compared to [Note \(23\)](#) in our Consolidated Financial Statements for 2017, which is included in our Integrated Report 2017.

For information about income tax-related litigation, see [Note \(7\)](#).

Legal Contingencies

In 2017, SAP received communications alleging conduct that may violate anti-bribery laws (including the U.S. Foreign Corrupt Practices Act (FCPA)). Further, we voluntarily self-disclosed potential export controls and economic sanctions violations. The investigations are ongoing and neither the outcome of the investigations nor the date when substantiated findings will be available is predictable at this point in time. SAP enhanced its anti-corruption compliance program as well as its export control compliance program throughout the last months. We continue to be fully committed to anti-bribery laws and export restriction controls and will continue full cooperation with all parties involved.

As at June 30, 2018, no provisions have been recognized for these potential violations in our consolidated financial statements. It is currently also not practicable to estimate the financial effect of any contingent liabilities that may result from these potential violations.

For a detailed description, please refer to our Integrated Report 2017, Notes to the Consolidated Financial Statements section, [Note \(23\)](#).

(12) Other Financial Instruments

A detailed overview of our other financial instruments, financial risk factors, the management of financial risks, and the determination of fair value as well as the classification of our other financial instruments into the fair value hierarchy of IFRS 13 are presented in *Notes (24) to (26)* to our Consolidated Financial Statements for 2017, which are included in our Integrated Report 2017.

We do not disclose the fair value of our financial instruments as of June 30, 2018, for the following reasons:

- For a large number of our financial instruments, their carrying amounts are a reasonable approximation of their fair values, and
- For those financial instruments where the carrying amount differs from fair value, there was no material change in the relation between carrying amount and fair value since December 31, 2017.

The implementation of IFRS 9 led to the following main changes in the classification of financial assets in the first half year 2018 compared to December 31, 2017:

- Change in classification of money-market and similar funds from amortized cost to FVPL (€1.0 billion)
- Change in classification of equity investments from available-for-sale to FVPL (€1.0 million)
- Change in classification of debt investments from available-for-sale to AC (€130 million)

However, these classification changes did not have a material impact on the relation between carrying amounts and fair values since December 31, 2017.

Transfers between levels of the fair value hierarchy

During the first half year 2018, we transferred equity investments from Level 3 to Level 2 in the amount of €12 million (December 31, 2017: €100 million) due to initial public offerings of the respective investee. Transfers of equity investments from Level 2 to Level 1, which occurred because disposal restrictions lapsed and deducting a discount for such restriction was no longer necessary, were €9 million in the first half year 2018 (December 31, 2017: €360 million).

(13) Share-Based Payments

For a detailed description of our share-based payment plans, see *Note (27)* to our Consolidated Financial Statements for 2017, included in our Integrated Report 2017.

Restricted Stock Unit Plan Including Move SAP Plan (RSU Plan)

In the first half of 2018, we granted 7.8 million (first half of 2017: 7.3 million) share units to retain and motivate global executives and employees who make a significant sustained impact to our business success.

Own SAP Plan (Own)

The number of shares purchased by our employees under this plan was 2.6 million in the first half of 2018 (first half of 2017: 2.9 million). The plan enables employees to purchase shares with preferred conditions and build value by becoming an SAP shareholder.

(14) Segment and Geographic Information

reportable segment are included in the reconciliation of segment revenue and results.

General Information

SAP has four operating segments that are regularly reviewed by our Executive Board, which is responsible for assessing the performance of our Company and for making resource allocation decisions as our Chief Operating Decision Maker (CODM). The operating segments are largely organized and managed separately according to their product and service offerings, notably whether the products and services relate to our business network activities, our customer experience solutions, or messaging services, or cover other areas of our business.

The Applications, Technology & Services segment derives its revenues primarily from the sale of software licenses, subscriptions to cloud applications, and related services (mainly support services and various professional services and premium support services, as well as implementation services for our software products and education services on the use of our products).

The SAP Business Network segment derives its revenues mainly from transaction fees charged for the use of SAP's cloud-based collaborative business networks and from services relating to the SAP Business Network (including cloud applications, professional services, and education services). Within the SAP Business Network segment, we mainly market and sell the cloud offerings developed by SAP Ariba, SAP Fieldglass, and SAP Concur.

On April 5, 2018, we acquired Callidus Software Inc. and changed the structure of the Applications, Technology & Services segment. The Callidus business was combined with our existing customer experience activities into a new business unit called 'SAP Customer Experience'. This new unit, which qualifies as an operating segment (called 'Customer Experience'), comprises on premise and cloud-based products that run front office functions across the customer experience. Support revenues related to our on premise customer experience solutions continue to be reported in the Applications, Technology & Services segment since we cannot split the total software support revenues into support services provided for different solutions.

Further, the manner in which our mobile interconnection activities 'Digital Interconnect' are reported to our CODM has changed such that Digital Interconnect now qualifies as an operating segment. Due to its size, 'Digital Interconnect' does not qualify as a reportable segment.

We have retrospectively adjusted our revenue and results for the Applications, Technology & Services segment to reflect these changes. Revenues and expenses of our operating but non-

Applications, Technology & Services

€ millions, unless otherwise stated

	Q1–Q2 2018		Q1–Q2 2017
	Actual Currency	Constant Currency	Actual Currency
Cloud subscriptions and support – SaaS/PaaS ¹⁾	847	911	671
Cloud subscriptions and support – IaaS ²⁾	217	235	157
Cloud subscriptions and support	1,064	1,145	827
Software licenses	1,472	1,548	1,596
Software support	5,386	5,782	5,457
Software licenses and support	6,857	7,330	7,053
Cloud and software	7,922	8,475	7,880
Services	1,558	1,696	1,603
Total segment revenue	9,480	10,171	9,483
Cost of cloud subscriptions and support – SaaS/PaaS ¹⁾	–348	–361	–254
Cost of cloud subscriptions and support – IaaS ²⁾	–195	–206	–142
Cost of cloud subscriptions and support	–543	–567	–396
Cost of software licenses and support	–909	–968	–970
Cost of cloud and software	–1,453	–1,534	–1,366
Cost of services	–1,211	–1,300	–1,267
Total cost of revenue	–2,663	–2,834	–2,633
Segment gross profit	6,816	7,338	6,850
Other segment expenses	–3,140	–3,341	–3,194
Segment profit	3,676	3,997	3,656

¹⁾ Software as a Service/Platform as a Service

²⁾ Infrastructure as a Service

SAP Business Network

€ millions, unless otherwise stated

	Q1–Q2 2018		Q1–Q2 2017
	Actual Currency	Constant Currency	Actual Currency
Cloud subscriptions and support – SaaS/PaaS ¹⁾	1,014	1,113	925
Cloud subscriptions and support – IaaS ²⁾	0	0	0
Cloud subscriptions and support	1,014	1,113	925
Software licenses	0	0	0
Software support	8	9	11
Software licenses and support	8	9	11
Cloud and software	1,022	1,122	936
Services	210	229	202
Total segment revenue	1,233	1,352	1,138
Cost of cloud subscriptions and support – SaaS/PaaS ¹⁾	–230	–252	–214
Cost of cloud subscriptions and support – IaaS ²⁾	0	0	0
Cost of cloud subscriptions and support	–230	–252	–214
Cost of software licenses and support	–3	–4	–2
Cost of cloud and software	–233	–255	–215
Cost of services	–150	–163	–152
Total cost of revenue	–383	–418	–367
Segment gross profit	850	934	771
Other segment expenses	–623	–683	–582
Segment profit	227	251	189

¹⁾ Software as a Service/Platform as a Service

²⁾ Infrastructure as a Service

Customer Experience

€ millions, unless otherwise stated

	Q1-Q2 2018		Q1-Q2 2017
	Actual Currency	Constant Currency	Actual Currency
Cloud subscriptions and support – SaaS/PaaS ¹⁾	216	231	84
Cloud subscriptions and support – IaaS ²⁾	0	0	0
Cloud subscriptions and support	216	231	84
Software licenses	149	157	175
Software support	0	0	0
Software licenses and support	149	158	175
Cloud and software	366	388	259
Services	20	21	2
Total segment revenue	385	409	261
Cost of cloud subscriptions and support – SaaS/PaaS ¹⁾	-57	-60	-29
Cost of cloud subscriptions and support – IaaS ²⁾	0	0	0
Cost of cloud subscriptions and support	-57	-60	-29
Cost of software licenses and support	-11	-11	-28
Cost of cloud and software	-68	-71	-57
Cost of services	-11	-12	0
Total cost of revenue	-79	-83	-58
Segment gross profit	306	327	204
Other segment expenses	-275	-293	-211
Segment profit	31	34	-7

¹⁾ Software as a Service/Platform as a Service

²⁾ Infrastructure as a Service

Information about assets and liabilities and additions to non-current assets by segment are not regularly provided to our Executive Board.

Measurement and Presentation

A detailed overview of our measurement bases and reconciling items in our reconciliation of segment revenue and results are presented in *Note (28)* to our Consolidated Financial Statements for 2017, which is included in our Integrated Report 2017.

Revenues and expenses of our non-reportable segment are included in the reconciliation under the positions Other revenue and Other expenses, respectively.

Certain activities are exclusively managed on corporate level, including finance, accounting, human resources, legal, and marketing. They are disclosed in the reconciliation under Other revenue and Other expenses, respectively.

The segment information for prior periods has been restated to conform to the current year's presentation.

Reconciliation of Segment Revenue and Results

€ millions	Q1–Q2 2018		Q1–Q2 2017
	Actual Currency	Constant Currency	Actual Currency
Applications, Technology & Services	9,480	10,171	9,483
SAP Business Network	1,233	1,352	1,138
Customer Experience	385	409	261
Total segment revenue for reportable segments	11,098	11,933	10,882
Other revenue	179	189	185
Adjustment for currency impact	0	–845	0
Adjustment of revenue under fair value accounting	–16	–16	0
Total revenue	11,260	11,260	11,066
Applications, Technology & Services	3,676	3,997	3,656
SAP Business Network	227	251	189
Customer Experience	31	34	–7
Total segment profit for reportable segments	3,934	4,282	3,838
Other revenue	179	189	185
Other expenses	–1,237	–1,349	–1,255
Adjustment for currency impact	0	–246	0
Operating profit (non-IFRS) at actual currency	2,876	2,876	2,768
Adjustment for			
Revenue under fair value accounting	–16	–16	0
Acquisition-related charges	–278	–278	–309
Share-based payment expenses	–491	–491	–618
Restructuring	–22	–22	–242
Operating profit	2,069	2,069	1,599
Other non-operating income/expense, net	–91	–91	–10
Financial income, net	41	41	–13
Profit before tax	2,019	2,019	1,576

Geographic Information

The amounts for revenue by region in the following tables are based on the location of customers.

Revenue by Region

Cloud Subscriptions and Support Revenue by Region

€ millions	Q1–Q2 2018	Q1–Q2 2017
EMEA	671	479
Americas	1,333	1,159
APJ	280	200
SAP Group	2,283	1,837

Cloud and Software Revenue by Region

€ millions	Q1–Q2 2018	Q1–Q2 2017
EMEA	4,207	3,892
Americas	3,586	3,723
APJ	1,503	1,469
SAP Group	9,295	9,085

Total Revenue by Region

€ millions	Q1–Q2 2018	Q1–Q2 2017
Germany	1,617	1,455
Rest of EMEA	3,445	3,250
EMEA	5,062	4,705
United States	3,573	3,688
Rest of Americas	851	911
Americas	4,424	4,599
Japan	443	450
Rest of APJ	1,331	1,313
APJ	1,774	1,763
SAP Group	11,260	11,066

Segment Revenue by Region

€ millions	Applications, Technology & Services	SAP Business Network	Customer Experience	Non-IFRS
				Q1–Q2 2018 Actual Currency
				Total Reportable Segments
Region EMEA	4,673	222	170	5,065
Region Americas	3,263	881	164	4,308
Region APJ	1,544	130	51	1,725
Total segment revenue	9,480	1,233	385	11,098

(15) Related Party Transactions

Certain Executive Board and Supervisory Board members of SAP SE currently hold (or have held within the last year) positions of significant responsibility with other entities (see our Integrated Report 2017, Notes to the Consolidated Financial Statements section, [Note \(29\)](#)). We have relationships with certain of these entities in the ordinary course of business.

During the reporting period, we had no related party transactions that had a material effect on our business, financial position, or results in the reporting period.

For more information about related party transactions, see our Integrated Report 2017, Notes to the Consolidated Financial Statements section, [Note \(30\)](#).

(16) Events After the Reporting Period

No events that have occurred since June 30, 2018, have a material impact on the Company's Consolidated Half-Year Financial Statements.

Release of the Consolidated Half-Year Financial Statements

The Executive Board of SAP SE approved these consolidated half-year financial statements on July 18, 2018, for submission to the Audit Committee of the Supervisory Board and for subsequent issuance.

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for half-year financial reporting, the Consolidated Half-Year Financial Statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the SAP Group, and the Consolidated Half-Year Management Report of the SAP Group includes a fair review of the development and performance of the business and the position of the SAP Group, together with a description of the material opportunities and risks associated with the expected development of the SAP Group for the remaining months of the financial year.

Walldorf, July 18, 2018
SAP SE
Walldorf, Baden
The Executive Board

Bill McDermott

Robert Enslin

Adaire Fox-Martin

Christian Klein

Michael Kleinemeier

Bernd Leukert

Jennifer Morgan

Luka Mucic

Stefan Ries

Supplementary Financial Information

Financial and Non-Financial Key Facts (IFRS and Non-IFRS)

€ millions, unless otherwise stated	Q1 2017	Q2 2017	Q3 2017	Q4 2017	TY 2017	Q1 2018	Q2 2018
Revenues							
Cloud subscriptions and support (IFRS)	905	932	937	995	3,769	1,070	1,213
Cloud subscriptions and support (non-IFRS)	906	932	938	997	3,771	1,072	1,227
% change – yoy	34	29	22	21	26	18	32
% change constant currency – yoy	30	27	27	28	28	31	40
Software licenses (IFRS)	691	1,090	1,033	2,058	4,872	625	996
Software licenses (non-IFRS)	691	1,090	1,033	2,058	4,872	625	996
% change – yoy	13	5	0	-5	0	-10	-9
% change constant currency – yoy	10	4	3	-1	2	-2	-5
Software support (IFRS)	2,731	2,736	2,687	2,754	10,908	2,656	2,735
Software support (non-IFRS)	2,731	2,736	2,687	2,754	10,908	2,656	2,735
% change – yoy	7	5	1	0	3	-3	0
% change constant currency – yoy	3	4	4	5	4	5	7
Software licenses and support (IFRS)	3,422	3,826	3,720	4,813	15,780	3,281	3,731
Software licenses and support (non-IFRS)	3,422	3,826	3,720	4,813	15,781	3,281	3,731
% change – yoy	8	5	1	-2	2	-4	-2
% change constant currency – yoy	5	4	4	2	4	4	3
Cloud and software (IFRS)	4,328	4,757	4,657	5,807	19,549	4,351	4,944
Cloud and software (non-IFRS)	4,328	4,758	4,658	5,809	19,552	4,353	4,959
% change – yoy	12	9	5	1	6	1	4
% change constant currency – yoy	9	8	8	6	8	9	10
Total revenue (IFRS)	5,285	5,782	5,590	6,805	23,461	5,261	5,999
Total revenue (non-IFRS)	5,285	5,782	5,590	6,807	23,464	5,262	6,014
% change – yoy	12	10	4	1	6	0	4
% change constant currency – yoy	8	9	8	6	8	9	10
Share of predictable revenue (IFRS, in %)	69	63	65	55	63	71	66
Share of predictable revenue (non-IFRS, in %)	69	63	65	55	63	71	66
Profits							
Operating profit (IFRS)	673	926	1,314	1,964	4,877	1,025	1,044
Operating profit (non-IFRS)	1,198	1,570	1,637	2,364	6,769	1,235	1,640
% change	8	4	0	0	2	3	4
% change constant currency	2	3	4	6	4	14	12
Profit after tax (IFRS)	530	666	993	1,867	4,056	708	720
Profit after tax (non-IFRS)	887	1,120	1,214	2,136	5,356	868	1,173
% change	16	14	11	17	15	-2	5
Margins							
Cloud subscriptions and support gross margin (IFRS, in %)	57.7	56.0	54.8	55.4	56.0	59.3	58.3
Cloud subscriptions and support gross margin (non-IFRS, in %)	64.6	62.4	60.8	61.0	62.2	63.2	63.6
Software license and support gross margin (IFRS, in %)	83.3	85.3	86.2	87.8	85.8	85.7	85.8
Software license and support gross margin (non-IFRS, in %)	85.1	86.6	87.3	88.6	87.0	86.4	87.0
Cloud and software gross margin (IFRS, in %)	77.9	79.6	79.9	82.2	80.1	79.2	79.0
Cloud and software gross margin (non-IFRS, in %)	80.8	81.8	82.0	83.9	82.2	80.7	81.2
Gross margin (IFRS, in %)	66.7	69.0	70.1	73.2	69.9	68.5	68.6
Gross margin (non-IFRS, in %)	69.9	71.5	72.5	75.2	72.5	70.2	71.5

€ millions, unless otherwise stated	Q1 2017	Q2 2017	Q3 2017	Q4 2017	TY 2017	Q1 2018	Q2 2018
Operating margin (IFRS, in %)	12.7	16.0	23.5	28.9	20.8	19.5	17.4
Operating margin (non-IFRS, in %)	22.7	27.2	29.3	34.7	28.9	23.5	27.3
AT&S segment – Cloud subscriptions and support gross margin (in %)	54	51	45	46	49	49	49
AT&S segment – Gross margin (in %)	71	73	74	77	74	71	73
AT&S segment – Segment margin (in %)	36	41	42	47	42	36	41
SAP BN segment – Cloud subscriptions and support gross margin (in %)	77	77	76	77	77	77	77
SAP BN segment – Gross margin (in %)	67	68	68	68	68	69	69
SAP BN segment – Segment margin (in %)	16	17	17	17	17	16	20
SAP CE Segment – Cloud subscriptions and support gross margin (in %)	68	63	54	63	62	73	74
SAP CE Segment – Gross margin (in %)	76	80	77	87	81	82	78
SAP CE Segment – Segment margin (in %)	-15	7	13	33	14	8	8
Key Profit Ratios							
Effective tax rate (IFRS, in %)	20.6	26.6	28.6	9.4	19.3	28.5	30.0
Effective tax rate (non-IFRS, in %)	25.7	27.8	29.2	13.2	22.6	27.8	27.8
Earnings per share, basic (IFRS, in €)	0.43	0.56	0.82	1.55	3.36	0.59	0.60
Earnings per share, basic (non-IFRS, in €)	0.73	0.94	1.01	1.77	4.44	0.73	0.98
Order Entry							
New Cloud Bookings	215	340	302	591	1,448	245	421
Contract liabilities / deferred income (current)	6,215	4,898	3,531	2,771	2,771	5,041	4,867
Orders – Number of on-premise software deals (in transactions)	13,115	14,361	13,889	17,782	59,147	13,549	14,538
Share of orders greater than €5 million based on total software order entry volume (in %)	27	31	29	30	30	18	29
Share of orders smaller than €1 million based on total software order entry volume (in %)	46	40	41	37	40	50	41
Liquidity and Cash Flow							
Net cash flows from operating activities	2,872	642	611	920	5,045	2,578	407
Free cash flow	2,581	322	258	609	3,770	2,151	16
% of total revenue (IFRS)	49	6	5	9	16	41	0
% of profit after tax (IFRS)	487	48	26	33	93	304	2
Group liquidity, gross	7,345	4,927	4,960	4,785	4,785	8,270	4,688
Group debt	-7,805	-6,716	-6,667	-6,264	-6,264	-7,723	-7,660
Group liquidity, net	-460	-1,789	-1,706	-1,479	-1,479	546	-2,972
Days' sales outstanding (DSO, in days) ¹⁾	72	72	72	70	70	68	68
Financial Position							
Cash and cash equivalents	5,937	4,236	4,220	4,011	4,011	7,598	4,515
Goodwill	23,091	21,949	21,353	21,267	21,267	20,854	23,377
Total assets	47,724	42,900	41,430	42,506	42,506	45,473	45,481
Equity ratio (total equity in % of total assets)	56	57	59	60	60	56	57
Non-Financials							
Number of employees (quarter end) ²⁾	85,751	87,114	87,874	88,543	88,543	91,120	93,846
Employee retention (in %, rolling 12 months)	94.1	94.3	94.2	94.6	94.6	95.9	94.3
Women in management (in %, quarter end)	24.8	25.0	25.2	25.4	25.4	25.6	25.8
Greenhouse gas emissions (in kilotons)	100	55	80	90	325	100	75

¹⁾ Days' sales outstanding measures the average number of days from the raised invoice to cash receipt from the customer. We calculate DSO by dividing the average invoiced trade receivables balance of the last 12 months by the average monthly cash receipt of the last 12 months.

²⁾ In full-time equivalents.

Due to rounding, numbers may not add up precisely

Reconciliation from Non-IFRS Numbers to IFRS Numbers – Half Year

€ millions, unless otherwise stated	Q1–Q2 2018					Q1–Q2 2017			Δ in %		
	IFRS	Adj. ¹⁾	Non-IFRS ¹⁾	Currency Impact ²⁾	Non-IFRS Constant Currency ²⁾	IFRS	Adj. ¹⁾	Non-IFRS ¹⁾	IFRS	Non-IFRS ¹⁾	Non-IFRS Constant Currency ²⁾
Revenue Numbers											
Cloud subscriptions and support	2,283	16	2,299	191	2,490	1,837	0	1,837	24	25	36
Software licenses	1,621	0	1,621	85	1,706	1,781	0	1,781	-9	-9	-4
Software support	5,391	0	5,391	400	5,791	5,467	0	5,467	-1	-1	6
Software licenses and support	7,012	0	7,012	485	7,497	7,248	0	7,248	-3	-3	3
Cloud and software	9,295	16	9,311	675	9,987	9,085	0	9,085	2	2	10
Services	1,965	0	1,965	169	2,134	1,981	0	1,981	-1	-1	8
Total revenue	11,260	16	11,276	845	12,121	11,066	0	11,067	2	2	10
Operating Expense Numbers											
Cost of cloud subscriptions and support	-941	100	-841			-793	122	-671	19	25	
Cost of software licenses and support	-1,001	71	-930			-1,134	110	-1,024	-12	-9	
Cost of cloud and software	-1,942	171	-1,771			-1,927	232	-1,695	1	4	
Cost of services	-1,600	86	-1,514			-1,628	85	-1,543	-2	-2	
Total cost of revenue	-3,542	257	-3,285			-3,555	317	-3,237	0	1	
Gross profit	7,718	273	7,992			7,512	318	7,829	3	2	
Research and development	-1,761	127	-1,635			-1,694	153	-1,541	4	6	
Sales and marketing	-3,314	319	-2,995			-3,415	375	-3,041	-3	-2	
General and administration	-548	67	-481			-569	82	-487	-4	-1	
Restructuring	-22	22	0			-242	242	0	-91	NA	
Other operating income/expense, net	-5	0	-5			8	0	8	<-100	<-100	
Total operating expenses	-9,192	791	-8,401	-599	-8,999	-9,467	1,168	-8,299	-3	1	8
Profit Numbers											
Operating profit	2,069	807	2,876	246	3,122	1,599	1,168	2,768	29	4	13
Other non-operating income/expense, net	-91	0	-91			-10	0	-10	>100	>100	
Finance income	185	0	185			143	0	143	30	30	
Finance costs	-144	0	-144			-156	0	-156	-7	-7	
Financial income, net	41	0	41			-13	0	-13	<-100	<-100	
Profit before tax	2,019	807	2,826			1,576	1,168	2,744	28	3	
Income tax expense	-591	-194	-785			-379	-359	-738	56	6	
Profit after tax	1,428	613	2,041			1,197	810	2,006	19	2	
Attributable to owners of parent	1,427	613	2,040			1,189	810	1,999	20	2	
Attributable to non-controlling interests	0	0	0			7	0	7	-93	-93	
Key Ratios											
Operating margin (in %)	18.4		25.5		25.8	14.5		25.0	3.9pp	0.5pp	0.7pp
Effective tax rate (in %)³⁾	29.3		27.8			24.1		26.9	5.2pp	0.9pp	
Earnings per share, basic (in €)	1.20		1.71			0.99		1.67	21	3	

¹⁾ Adjustments in the revenue line items are for software support revenue, cloud subscriptions and support revenue, and other similarly recurring revenues that entities acquired by SAP would have recognized had they remained stand-alone entities but that SAP is not permitted to recognize as revenue under IFRS as a result of business combination accounting rules. Adjustments in the operating expense line items are for acquisition-related charges, share-based payment expenses, as well as restructuring expenses.

²⁾ Constant currency revenue and operating income figures are calculated by translating revenue and operating income of the current period using the average exchange rates from the previous year's respective period instead of the current period. Constant currency period-over-period changes are calculated by comparing the current year's non-IFRS constant currency numbers with the non-IFRS number of the previous year's respective period.

For a more detailed description of these adjustments and their limitations as well as our constant currency figures, see [Explanation of Non-IFRS Measures](#).

³⁾ The difference between our effective tax rate (IFRS) and effective tax rate (non-IFRS) in the first half of 2018 and 2017 mainly results from tax effects of acquisition-related charges and share-based payment expenses.

Due to rounding, numbers may not add up precisely.

Explanation of Non-IFRS Adjustments – Half Year

€ millions	Estimated Amounts for Full Year 2018	Q1–Q2 2018	Q1–Q2 2017
Operating profit (IFRS)		2,069	1,599
Revenue adjustments	30–60	16	0
Adjustment for acquisition-related charges	550–610	278	309
Adjustment for share-based payment expenses	800–1,100	491	618
Adjustment for restructuring	25–35	22	242
Operating expense adjustments		791	1,168
Operating profit adjustments		807	1,168
Operating profit (non-IFRS)		2,876	2,768

Non-IFRS-Adjustments by Functional Areas – Half Year

€ millions	Q1–Q2 2018					Q1–Q2 2017				
	IFRS	Acqui- sition- Related	SBP ¹⁾	Restruc- turing	Non-IFRS	IFRS	Acqui- sition- Related	SBP ¹⁾	Restruc- turing	Non- IFRS
Cost of cloud and software	-1,942	126	46	0	-1,771	-1,927	164	68	0	-1,695
Cost of services	-1,600	5	80	0	-1,514	-1,628	4	81	0	-1,543
Research and development	-1,761	3	123	0	-1,635	-1,694	5	148	0	-1,541
Sales and marketing	-3,314	134	185	0	-2,995	-3,415	135	240	0	-3,041
General and administration	-548	10	57	0	-481	-569	1	81	0	-487
Restructuring	-22	0	0	22	0	-242	0	0	242	0
Other operating income/expense, net	-5	0	0	0	-5	8	0	0	0	8
Total operating expenses	-9,192	278	491	22	-8,401	-9,467	309	618	242	-8,299

¹⁾ Share-based payments

Due to rounding, numbers may not add up precisely.

Revenue by Region (IFRS and Non-IFRS) – Half Year

€ millions	Q1–Q2 2018					Q1–Q2 2017			Δ in %		
	IFRS	Adj. ¹⁾	Non-IFRS ¹⁾	Currency Impact ²⁾	Non-IFRS Constant Currency ²⁾	IFRS	Adj. ¹⁾	Non-IFRS ¹⁾	IFRS	Non-IFRS ¹⁾	Non-IFRS Constant Currency ²⁾
Cloud subscriptions and support revenue by region											
EMEA	671	0	671	26	697	479	0	479	40	40	46
Americas	1,333	16	1,349	140	1,488	1,159	0	1,159	15	16	28
APJ	280	0	280	25	304	200	0	200	40	40	52
Cloud subscriptions and support revenue	2,283	16	2,299	191	2,490	1,837	0	1,837	24	25	36
Cloud and software revenue by region											
EMEA	4,207	0	4,207	98	4,306	3,892	0	3,892	8	8	11
Americas	3,586	16	3,602	462	4,064	3,723	0	3,724	-4	-3	9
APJ	1,503	0	1,503	115	1,618	1,469	0	1,469	2	2	10
Cloud and software revenue	9,295	16	9,311	675	9,987	9,085	0	9,085	2	2	10
Total revenue by region											
Germany	1,617	0	1,617	2	1,619	1,455	0	1,455	11	11	11
Rest of EMEA	3,445	0	3,445	117	3,562	3,250	0	3,250	6	6	10
Total EMEA	5,062	0	5,062	120	5,182	4,705	0	4,705	8	8	10
United States	3,573	16	3,589	387	3,976	3,688	0	3,688	-3	-3	8
Rest of Americas	851	0	851	202	1,053	911	0	911	-7	-7	16
Total Americas	4,424	16	4,440	589	5,029	4,599	0	4,599	-4	-3	9
Japan	443	0	443	37	480	450	0	450	-1	-1	7
Rest of APJ	1,331	0	1,331	99	1,430	1,313	0	1,313	1	1	9
Total APJ	1,774	0	1,774	136	1,910	1,763	0	1,763	1	1	8
Total revenue	11,260	16	11,276	845	12,121	11,066	0	11,067	2	2	10

¹⁾ Adjustments in the revenue line items are for support revenue, cloud subscriptions and support revenue, and other similarly recurring revenues that entities acquired by SAP would have recognized had they remained stand-alone entities but that SAP is not permitted to recognize as revenue under IFRS as a result of business combination accounting rules.

²⁾ Constant currency revenue figures are calculated by translating revenue of the current period using the average exchange rates from the previous year's respective period instead of the current period. Constant currency period-over-period changes are calculated by comparing the current year's non-IFRS constant currency numbers with the non-IFRS number of the previous year's respective period.

For a more detailed description of these adjustments and their limitations as well as our constant currency figures, see [Explanation of Non-IFRS Measures](#).

Due to rounding, numbers may not add up precisely.

General Information

Forward-Looking Statements

This half-year report contains forward-looking statements and information based on the beliefs of, and assumptions made by, our management using information currently available to them. Any statements contained in this report that are not historical facts are forward-looking statements as defined in the U.S. Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations, assumptions, and projections about future conditions and events. As a result, our forward-looking statements and information are subject to uncertainties and risks, many of which are beyond our control. If one or more of these uncertainties or risks materializes, or if management's underlying assumptions prove incorrect, our actual results could differ materially from those described in or inferred from our forward-looking statements and information. We describe these risks and uncertainties in the *Risk Management and Risks* section, respectively in the three-mentioned sources.

The words "aim," "anticipate," "assume," "believe," "continue," "could," "counting on," "is confident," "development," "estimate," "expect," "forecast," "future trends," "guidance," "intend," "may," "might," "outlook," "plan," "project," "predict," "seek," "should," "strategy," "want," "will," "would," and similar expressions as they relate to us are intended to identify such forward-looking statements. Such statements include, for example, those made in the *Operating Results* section, the *Risk Management and Risks* section, the *Expected Developments and Opportunities* section, and other forward-looking information appearing in other parts of this half-year financial report. To fully consider the factors that could affect our future financial results, both our Integrated Report 2017 and our Annual Report on Form 20-F for December 31, 2017, should be considered, as well as all of our other filings with the Securities and Exchange Commission (SEC). Readers are cautioned not to place undue reliance on these forward-looking statements,

which speak only as of the date specified or the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements as a result of new information that we receive about conditions that existed upon issuance of this report, future events, or otherwise unless we are required to do so by law.

This report includes statistical data about the IT industry and global economic trends that comes from information published by sources including International Data Corporation (IDC), the European Central Bank (ECB), and the International Monetary Fund (IMF). This type of data represents only the estimates of IDC, ECB, IMF, and other sources of industry data. SAP does not adopt or endorse any of the statistical information provided by sources such as IDC, ECB, IMF, or other similar sources that is contained in this report. The data from these sources is subject to risks and uncertainties, and subject to change based on various factors, including those described above, in the *Risk Management and Risks* section, and elsewhere in this report. These and other factors could cause our results to differ materially from those expressed in the estimates made by third parties and SAP. We caution readers not to place undue reliance on this data.

All of the information in this report relates to the situation on June 30, 2018, or the half year ended on that date unless otherwise stated.

Non-IFRS Financial Information

This half-year report contains non-IFRS measures as well as financial data prepared in accordance with IFRS. We present and discuss the reconciliation of these non-IFRS measures to the respective IFRS measures in the *Supplementary Financial Information* section. For more information about non-IFRS measures, see our Web site www.sap.com/investors/sap-non-ifrs-measures.

Additional Information

Financial Calendar

October 18, 2018

Third-quarter 2018 earnings release, telephone conference

January 29, 2019

Fourth-quarter and full-year 2018 preliminary earnings release, telephone conference

May 15, 2019

Annual General Meeting of Shareholders, Mannheim, Germany

Investor Services

Additional information about this half-year report is available online at www.sap.com/investors, including the official quarterly statement, a presentation about the quarterly results, and a recording of the conference call for financial analysts.

The tab "Financial Reports" contains the following publications:

- SAP Integrated Report (IFRS, PDF, www.sapintegratedreport.com)
- SAP Annual Report on Form 20-F (IFRS, PDF)
- SAP SE Statutory Financial Statements and Review of Operations (HGB, German only, PDF)
- Half-Year Report (IFRS, PDF)
- XBRL version of the Consolidated Financial Statements and Notes
- Quarterly Statements (IFRS, PDF)

www.sap.com/investors is also the place to look for in-depth information about stock, debt, and corporate governance; financial and event news; and various services designed to help investors find the information they need fast (see "Investor Services"). These include an e-mail and text message news service, and a Twitter feed.

For sustainability reasons and faster distribution, SAP decided to refrain from printing reports.

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