SAP Announces Q4 and FY 2022 Results

- All financial outlook metrics met in FY 2022
- Cloud revenue up 33% and up 24% at constant currencies in FY 2022. Q4 S/4HANA cloud revenue further accelerates, up 101% and up 90% at constant currencies
- Current cloud backlog exceeds €12 billion, up 27% and up 24% at constant currencies
- IFRS cloud gross profit up 38%, non-IFRS cloud gross profit up 37% and up 28% at constant currencies in FY 2022
- IFRS operating profit flat, non-IFRS operating profit down 2% and down 7% at constant currencies in FY 2022. Q4 IFRS operating profit up 17%, non-IFRS operating profit up 5% and up 2% at constant currencies
- 2023 outlook anticipates accelerating topline and double-digit non-IFRS operating profit growth
- Targeted restructuring in 2023 reflects focus on strategic growth areas and accelerated cloud transformation
- SAP has decided to explore a sale of its stake in Qualtrics

FY 2022 | in € millions, unless otherwise stated

Total revenue
30,871
▲ +11% (+5% @cc)

Cloud & Software revenue
26,522
▲ +10% (+4% @cc)

Share of more predictable revenue
79%
▲ +4pp

Cloud revenue
12,556
▲ +33% (+24% @cc)

Current cloud backlog
12,030
▲ +27% (+24% @cc)

S/4HANA cloud revenue
2,082
▲ +91% (+79% @cc)

S/4HANA current cloud backlog
3,171
▲ +86% (+82% @cc)

Gross profit (Gross margin in %)

IFRS
21,936 (71.1%)
▲ +10%

Non-IFRS
22,585 (73.2%)
▲ +10% (+4% @cc)

Cloud gross profit (Cloud gross margin in %)

IFRS
8,703 (69.3%)
▲ +38%

Non-IFRS
8,946 (71.3%)
▲ +37% (+28% @cc)

Operating profit

IFRS
4,672
● 0%

Non-IFRS
8,033
▼ –2% (–7% @cc)

Earnings per Share (in €)

IFRS basic
1.96
▼ –56%

IFRS diluted
1.95
▼ –56%

Non-IFRS basic
4.08
▼ –39%



Christian Klein, CEO:

"SAP is more resilient than ever. We end 2022 with continued strong cloud momentum and a return to operating profit growth in the fourth quarter, marking an important inflection point. Heading into 2023, this gives us great confidence in delivering on our promise of accelerating topline and double-digit non-IFRS operating profit growth. As we enter the next chapter of SAP, I want to thank Luka for his great partnership on this journey."



Luka Mucic, CFO:

"In my 37th and final earnings for SAP, I am proud that the SAP team is announcing excellent results and continued cloud momentum. We are on track to deliver our growth and profitability commitments for 2023. I am extremely confident in the continued success of SAP's most exciting transformation in its history. Thank you to the wonderful SAP family that I have been part of for 27 years."

Walldorf, Germany – January 26, 2023.
SAP SE (NYSE: SAP) today announced its financial results for the fourth quarter and fiscal year ended December 31, 2022.

Financial Performance

Group results at a glance – Fourth quarter 2022

	IFRS			Non-IFRS[1]			
€ million, unless otherwise stated	**Q4 2022**	Q4 2021	Δ in %	**Q4 2022**	Q4 2021	Δ in %	Δ in % const. curr.
Cloud revenue	3,392	2,611	30	3,392	2,611	30	22
Software licenses	907	1,458	–38	907	1,458	–38	–39
Software support	2,993	2,920	3	2,993	2,920	3	–1
Software licenses and support revenue	3,900	4,379	–11	3,900	4,379	–11	–14
Cloud and software revenue	7,292	6,990	4	7,292	6,990	4	0
Total revenue	8,436	7,981	6	8,436	7,981	6	1
Share of more predictable revenue (in %)	76	69	6pp	76	69	6pp	
Operating profit (loss)	1,707	1,463	17	2,581	2,468	5	2
Profit (loss) after tax	332	1,440	–77	1,028	2,274	–55	
Earnings per share - Basic (in €)	0.47	1.23	–62	1.00	1.85	–46	
Earnings per share - Diluted (in €)	0.47	1.23	–62				
Net cash flows from operating activities	2,048	1,269	61				
Free cash flow				1,805	916	97	
Number of employees (FTE, December 31)	111,961	107,415	4				

[1] For a breakdown of the individual adjustments see table “Non-IFRS Adjustments by Functional Areas” in this Quarterly Statement.

Due to rounding, numbers may not add up precisely.

Group results at a glance – Full year 2022

	IFRS			Non-IFRS[1]			
€ million, unless otherwise stated	**Q1–Q4 2022**	Q1–Q4 2021	Δ in %	**Q1–Q4 2022**	Q1–Q4 2021	Δ in %	Δ in % const. curr.
Cloud revenue	12,556	9,418	33	12,556	9,418	33	24
Software licenses	2,056	3,248	–37	2,056	3,248	–37	–39
Software support	11,909	11,412	4	11,909	11,412	4	0
Software licenses and support revenue	13,965	14,660	–5	13,965	14,660	–5	–9
Cloud and software revenue	26,522	24,078	10	26,522	24,078	10	4
Total revenue	30,871	27,842	11	30,871	27,842	11	5
Share of more predictable revenue (in %)	79	75	4pp	79	75	4pp	
Operating profit (loss)	4,672	4,656	0	8,033	8,230	–2	–7
Profit (loss) after tax	1,714	5,376	–68	4,549	8,337	–45	
Earnings per share - Basic (in €)	1.96	4.46	–56	4.08	6.73	–39	
Earnings per share - Diluted (in €)	1.95	4.46	–56				
Net cash flows from operating activities	5,646	6,223	–9				
Free cash flow				4,348	5,049	–14	
Number of employees (FTE, December 31)	111,961	107,415	4				

[1] For a breakdown of the individual adjustments see table “Non-IFRS Adjustments by Functional Areas” in this Quarterly Statement.

Due to rounding, numbers may not add up precisely.

Financial Highlights[1]

Fourth Quarter 2022

In the fourth quarter, cloud revenue was up 30% to €3.39 billion and up 22% at constant currencies. SAP S/4HANA cloud revenue further accelerated and was up 101% to €0.66 billion and up 90% at constant currencies.

Software licenses revenue was down 38% to €0.91 billion and down 39% at constant currencies. Cloud and software revenue was up 4% to €7.29 billion and flat at constant currencies. Services revenue was up 15% to €1.14 billion and up 10% at constant currencies. Total revenue was up 6% to €8.44 billion and up 1% at constant currencies.

The share of more predictable revenue increased by 6 percentage points to 76% in the fourth quarter.

Cloud gross profit was up 36% (IFRS), up 34% (non-IFRS) and up 27% (non-IFRS at constant currencies). Cloud gross margin was up 2.9 percentage points to 69.4% (IFRS), up 2.3 percentage points to 71.3% (non-IFRS) and up 2.7 percentage points to 71.6% (non-IFRS at constant currencies). This increase was driven by expanding gross margins across all cloud business models, with efficiency gains overcompensating increased investments into our next generation cloud delivery program.

IFRS operating profit increased 17% to €1.71 billion and IFRS operating margin increased by 1.9 percentage points to 20.2%. Non-IFRS operating profit was up 5% to €2.58 billion and up 2% at constant currencies. Non-IFRS operating margin decreased by 0.3 percentage points to 30.6% and was up 0.3 percentage points to 31.2% at constant currencies. The increase in profitability was supported by disciplined spend management in the fourth quarter. In addition, IFRS operating profit included a disposal gain of €175 million and non-IFRS operating profit of €109 million related to the sale of the SAP Litmos business.

IFRS earnings per share decreased 62% to €0.47 and non-IFRS earnings per share decreased 46% to €1.00. The year-over-year decline of earnings per share reflects a contribution to financial income by Sapphire Ventures that, mainly due to market conditions, was significantly lower than in the same period last year. The effective tax rate was 56.3% (IFRS) and 37.0% (non-IFRS). The year-over-year increase mainly resulted from changes in tax-exempt income related to Sapphire Ventures, which were partly compensated by changes in non-deductible expenses in IFRS.

Full Year 2022

SAP met all of its financial outlook metrics as follows:

	Actual 2021	Revised 2022 Outlook (as of October 25)	**Actual 2022**
Cloud revenue (at constant currencies)	€9.42 billion	€11.55 – 11.85 billion	€11.68 billion
Cloud and software revenue (at constant currencies)	€24.08 billion	€25.0 – 25.5 billion	€25.02 billion
Operating profit (non-IFRS, at constant currencies)	€8.23 billion	€7.6 – 7.9 billion	€7.68 billion
Share of more predictable revenue	75%	approx. 78%	79%
Free cash flow	€5.05 billion	approx. €4.5 billion	€4.35 billion
Effective tax rate (IFRS)	21.5%	around 45.0%	44.6%
Effective tax rate (non-IFRS)	20.0%	around 30.0%	29.5%

At year end, current cloud backlog expanded to €12.03 billion, growing by 27% and 24% at constant currencies. Current cloud backlog growth was negatively impacted by approximately 1.5 percentage points from the divestiture of our Litmos business and the wind down of our business operations in Russia and Belarus. SAP S/4HANA current cloud backlog was up 86% to €3.17 billion and up 82% at constant currencies.

As of December 31, total cloud backlog – which is defined as the contractually committed cloud revenue we expect to recognize in future periods – was up 35% to €34.2 billion.

[1] The Q4 and full-year 2022 results were also impacted by other effects. For details, please refer to the disclosures on page 32 of this document.

For the full year, cloud revenue was up 33% to €12.56 billion and up 24% at constant currencies, driven by double-digit growth across the SaaS and PaaS portfolio. SAP S/4HANA cloud revenue was up 91% to €2.08 billion and up 79% at constant currencies.

Software licenses revenue was down 37% to €2.06 billion and down 39% at constant currencies. Despite lower software licenses revenue, cloud and software revenue was up 10% to €26.52 billion and up 4% at constant currencies. Services revenue was up 16% to €4.35 billion and up 9% at constant currencies. Total revenue was up 11% to €30.87 billion and up 5% at constant currencies.

The share of more predictable revenue increased by 4 percentage points year over year to 79% for the full year 2022.

Cloud gross profit was up 38% (IFRS), 37% (non-IFRS) and 28% (non-IFRS at constant currencies). Cloud gross margin was up 2.3 percentage points to 69.3% (IFRS), up 1.8 percentage points to 71.3% (non-IFRS) and up 2.1 percentage points to 71.6% (non-IFRS at constant currencies). This 2.1 percentage point increase was driven by expanding gross margins across all cloud business models, with efficiency gains overcompensating increased investments into the next generation cloud delivery program.

IFRS operating profit was flat at €4.67 billion and IFRS operating margin decreased by 1.6 percentage points to 15.1%. Non-IFRS operating profit decreased 2% to €8.03 billion and decreased 7% at constant currencies and non-IFRS operating margin decreased by 3.5 percentage points to 26.0% and was down 3.2 percentage points to 26.4% at constant currencies. Operating profit performance was impacted by the decision to wind down business operations in Russia and Belarus, and a reduced contribution from software licenses revenue as well as accelerated investments into research and development and sales & marketing to capture current and future growth opportunities.

IFRS earnings per share decreased 56% to €1.96 and non-IFRS earnings per share decreased 39% to €4.08. The year-over-year decline of earnings per share reflects a contribution to financial income by Sapphire Ventures that, due to market conditions faced throughout the year, was significantly lower than in the same period last year. Effective tax rate was 44.6% (IFRS) and 29.5% (non-IFRS). The year-over-year increase mainly resulted from changes in tax-exempt income related to Sapphire Ventures.

Free cash flow for the full year was down 14% to €4.35 billion, in line with the revised outlook of approximately €4.5 billion. This is predominantly due to lower profitability and adverse working capital impacts in other assets. While tax payments developed positively, smaller negative impacts came from share-based payments as well as capital expenditures and leasing. In addition, the increased volume of trade receivables sold in 2022 amounting to €0.8 billion versus €0.5 billion in 2021 had a positive impact on free cash flow. At year end, net debt was €2.07 billion.

Impact of War in Ukraine

In 2022, SAP's business was impacted by the war in Ukraine and SAP's decision to wind down its business operations in Russia and Belarus.

At the end of the fourth quarter, current cloud backlog was approximately €62 million lower due to the termination of existing cloud engagements in Russia and Belarus, reducing current cloud backlog growth by approximately half a percentage point at constant currencies. The impact on full-year IFRS operating profit was approximately €410 million (fourth quarter: €70 million) and approximately €290 million (fourth quarter: €70 million) on non-IFRS operating profit, mainly due to reduced revenues and bad debt provisions.

Other impacts due to this evolving situation are currently unknown and could potentially subject our business to materially adverse consequences should the situation escalate beyond its current scope.

Non-Financial Performance 2022

Customer Net Promoter Score (NPS) decreased 7 points year over year to 3 in 2022, achieving the lower end of the revised outlook range.

SAP's Employee Engagement Index decreased 3 percentage points to 80%, reflecting a continued high level of engagement at the low end of the revised outlook range. SAP's retention rate was 92.3%, closely aligning with 2021 at 92.8%. The proportion of women in management increased to 29.4%, an increase of 1.1 percentage points year over year. In the fourth quarter, the Company also reached 35% of women in the workforce.

Net carbon emissions continued to decrease, at 95 kilotons in 2022, down 15 kt year over year. This result is at the upper end of the revised outlook range.

Business Highlights

In the fourth quarter, customers around the globe continued to choose “RISE with SAP” to drive their end-to-end business transformations. These customers included Al-Futtaim Group, City of Vancouver, ExxonMobil, Fujitsu Limited, German Football Association (DFB), Imperial Brands, Kanton Aargau, Lockheed Martin, Merck KGaA, Munich Leukemia Laboratory (MLL), Lenovo, Lumen Technologies, Natuzzi, PETRONAS, Port of Rotterdam, Renault Group, Swarovski, Warsteiner Brauerei, and ZF Friedrichshafen AG. Accenture, Canon Production Printing, Daimler Truck AG, Ducati Motor Holding, Mahindra Group, Walgreens Boots Alliance, and Zespri went live on SAP S/4HANA Cloud in the fourth quarter.

Key customer wins across SAP’s solution portfolio included: ArcelorMittal Europe, C6 Bank, Caixabank Tech, Euronews, Groupe SEB, Groupe TF1, Fressnapf, Haier, Hisense, Macquarie Banking and Financial Services, NBA, DOUGLAS, Qualcomm, Robert Bosch, SCOTT Sports, Soriana, Technical University of Munich, Transport for London, VINCI ENERGIES.

In the fourth quarter, SAP’s cloud revenue performance was strong across all regions. Brazil, Germany and Japan had outstanding cloud revenue performances while China, India, the Netherlands, Switzerland, and the United States were particularly strong.
For the full year, Germany, the United States, and Japan all had outstanding performances while Brazil, Chile, China, Italy, Saudi Arabia, South Korea, and Switzerland were particularly strong.

On November 15, 2022, SAP launched SAP Build which enables business users to integrate systems; intelligently monitor, analyze and automate processes; and build applications using SAP BTP and business application data from SAP – all without moving data to an external system. In addition, SAP also announced a partnership with Coursera to empower a new generation of developers.

On December 1, SAP announced that Francisco Partners had completed the acquisition of SAP’s Litmos business.

On December 5, SAP and PwC announced a new co-innovation strategy to make sustainability an integral part of standard business operations to help organizations achieve their ESG and net zero target.

Among other recognitions, in the fourth quarter SAP was:

- named a Leader in 2022 Gartner® Magic Quadrant™ for Configure, Price, and Quote Application Suites[2]
- named a Leader in Forrester Wave™: Digital Operations Platforms for Manufacturing & Distribution in Q3 2022
- recognized as a Leader in IDC MarketScape: Worldwide Holistic Supply Chain Planning 2022 Vendor Assessment[3]

As of January 1, 2023, SAP maintained its position as an industry leader in the software industry in the S&P Global Corporate Sustainability Assessment for the 16th consecutive year.

On January 18, SAP was named one of the 100 most sustainable companies in the world, joining the Corporate Knights Global 100 once again.

On January 25, BMW Group chose RISE with SAP together with additional cloud solutions from SAP to support their transformation to S/4HANA as well as their strategic cloud transformation. Further, through a Platinum Partnership, BMW and SAP are creating a joint approach for the entire automotive industry and related digital end-to-end processes.

[2] Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner’s research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose. Gartner and Magic Quadrant are registered trademarks and service marks of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved. The Gartner content described herein, (the "Gartner Content") represent(s) research opinion or viewpoints published, as part of a syndicated subscription service, by Gartner, Inc. ("Gartner"), and are not representations of fact. Gartner Content speaks as of its original publication date (and not as of the date of this Quarterly Statement) and the opinions expressed in the Gartner Content are subject to change without notice.

[3] IDC MarketScape: Worldwide Holistic Supply Chain Planning, September 2022, IDC #US49578717

SAP is not responsible for the content of third-party research reports.

Segment Results at a Glance

SAP's two reportable segments showed the following performance:

Applications, Technology & Services[1]	Q4 2022			Q1-Q4 2022		
€ million, unless otherwise stated (Non-IFRS)	**Actual Currency**	Δ in %	Δ in % Constant Currency	**Actual Currency**	Δ in %	Δ in % Constant Currency
SaaS[2]	2,137	31	23	7,848	33	24
PaaS[3]	423	50	43	1,487	50	41
IaaS[4]	205	–16	–19	905	–2	–8
Cloud revenue	2,765	28	21	10,239	31	22
Segment revenue	7,741	4	–1	28,298	9	3
Segment profit (loss)	2,734	2	–1	8,812	–5	–9
SaaS[2] (in %)	67.8	0.3pp	–0.0pp	68.6	1.1pp	1.1pp
PaaS[3] (in %)	79.5	1.6pp	2.3pp	78.6	–0.7pp	0.5pp
IaaS[4] (in %)	27.9	1.3pp	9.7pp	27.8	–4.3pp	0.5pp
Cloud gross margin (in %)	66.6	2.4pp	2.8pp	66.5	1.6pp	2.2pp
Segment margin (in %)	35.3	–0.6pp	–0.0pp	31.1	–4.5pp	–4.0pp

[1] Segment information for comparative prior periods were restated to conform with the new segment composition.

[2] Software as a service

[3] Platform as a service

[4] Infrastructure as a service

In the fourth quarter, segment revenue in AT&S was up 4% to €7.74 billion year-over-year, down 1% at constant currencies, primarily due to strong cloud revenue growth, supported by SAP S/4HANA as well as Business Technology Platform. Software licenses revenue decreased due to the shift to the cloud as more customers chose our 'RISE with SAP' offering. Segment support revenue was up 2% to €2.99 billion year-over-year and down 1% at constant currencies.

Qualtrics	Q4 2022			Q1-Q4 2022		
€ million, unless otherwise stated (Non-IFRS)	**Actual Currency**	Δ in %	Δ in % Constant Currency	**Actual Currency**	Δ in %	Δ in % Constant Currency
Cloud revenue – SaaS[2]	328	40	25	1,198	58	41
Segment revenue	389	37	22	1,423	53	37
Segment profit (loss)	34	>100	>100	95	>100	>100
Cloud gross margin – SaaS[2] (in %)	88.6	–1.6pp	–1.7pp	88.9	–2.6pp	–2.7pp
Segment margin (in %)	8.7	7.1pp	9.3pp	6.7	1.9pp	3.4pp

Qualtrics segment revenue was up 37% to €389 million year-over-year, up 22% at constant currencies in the fourth quarter. The continued strong growth was driven by robust renewal rates and expansions.

Cloud Performance

€ millions, unless otherwise stated (non-IFRS)	Q4 2022 Actual currency	Q4 2022 Δ in %	Q4 2022 Δ in % Constant currency	Q1 - Q4 2022 Actual currency	Q1 - Q4 2022 Δ in %	Q1 - Q4 2022 Δ in % Constant currency
Current Cloud Backlog						
Total	**12,030**	**27**	**24**	**12,030**	**27**	**24**
Thereof SAP S/4HANA	3,171	86	82	3,171	86	82
Cloud Revenue						
SaaS[1]	2,735	32	24	10,066	35	25
PaaS[2]	452	51	44	1,586	53	45
IaaS[3]	205	–16	–19	905	–2	–8
Total	**3,392**	**30**	**22**	**12,556**	**33**	**24**
Thereof SAP S/4HANA	660	101	90	2,082	91	79
Thereof Qualtrics	328	40	25	1,198	58	41
Cloud Gross Profit						
SaaS[1]	2,000	33	24	7,435	37	27
PaaS[2]	363	55	49	1,260	53	46
IaaS[3]	57	–11	11	252	–15	–6
Total	**2,420**	**34**	**27**	**8,946**	**37**	**28**
Thereof Qualtrics	291	37	23	1,065	54	37
Cloud Gross Margin (in %)						
SaaS[1] (in %)	73.1	0.5pp	0.2pp	73.9	1.2pp	1.0pp
PaaS[2] (in %)	80.3	1.7pp	2.4pp	79.4	–0.3pp	0.9pp
IaaS[3] (in %)	28.0	1.3pp	9.7pp	27.8	–4.3pp	0.5pp
Total	**71.3**	**2.3pp**	**2.7pp**	**71.3**	**1.8pp**	**2.1pp**
Thereof Qualtrics	88.6	-1,6pp	-1,7pp	88.9	–2.6pp	–2.7pp

Due to rounding, numbers may not add up precisely

The full-year 2022 results were also impacted by other effects. For details, please refer to the disclosure on page 32 of this document.

Business Outlook

Financial Outlook 2023

For the full-year 2023, SAP expects:

- €15.3 – 15.7 billion cloud revenue at constant currencies (2022: €12.56 billion), up 22% to 25% at constant currencies.
- €28.2 – 28.7 billion cloud and software revenue at constant currencies (2022: €26.52 billion), up 6% to 8% at constant currencies.
- €8.8 – 9.1 billion non-IFRS operating profit at constant currencies (2022: €8.03 billion), up 10% to 13% at constant currencies.
- The share of more predictable revenue (defined as the total of cloud revenue and software support revenue divided by total revenue) is expected to reach approximately 83% (2022: 79%).
- Free cash flow of approximately €5.0 billion (2022: €4.35 billion).
- A full-year effective tax rate (IFRS) of 28.0% to 32.0% (2022: 44.6%) and an effective tax rate (non-IFRS) of 26.0% to 28.0% (2022: 29.5%), strongly depending on the development of Sapphire Ventures' investments.

While SAP's full-year 2023 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.

Currency Impact Assuming December 2022 Rates Apply for 2023

In percentage points	Q1 2023	FY 2023
Cloud revenue growth	+2pp to +4pp	0pp to –2pp
Cloud and software revenue growth	+1pp to +3pp	0pp to –2pp
Operating profit growth (non-IFRS)	0pp to –2pp	–1pp to –3pp

Non-Financial Outlook 2023

SAP is focusing on three non-financial indicators: customer loyalty, employee engagement, and carbon emissions.

In 2023, SAP expects:

- a Customer Net Promoter Score of 8 to 12[4].
- an Employee Engagement Index to be in a range of 76% to 80%.
- Net carbon emissions of 0kt, meaning the Company will be carbon neutral in its own operations.

Ambition 2025

By 2025, SAP continues to expect:

- More than €22 billion cloud revenue.
- More than €36 billion total revenue.
- More than €11.5 billion non-IFRS operating profit.
- A non-IFRS cloud gross margin of approximately 80%.
- A significant expansion of the Company's more predictable revenue share to approximately 85%.
- A free cash flow of approximately €8 billion.

SAP expects to update its mid-term ambition in the first half of 2023.

For 2025 non-financial performance SAP continues to aim for:

- Employee Engagement Index between 84% and 86%.
- Steadily increasing the Customer Net Promoter Score through 2025.
- Maintaining net carbon emissions in our own operations of 0 kt. Further, SAP is also committed to achieving net-zero along our value chain by 2030.

Increased Focus on Strategic Growth Areas and Accelerated Cloud Transformation

In 2023, SAP will conduct a targeted restructuring program in selected areas of the company. The purpose is to further focus on strategic growth areas by aligning our operating models and go-to-market approach with our accelerated cloud transformation. Furthermore, SAP intends to strengthen its core business and improve overall process efficiency. The program is expected to affect approximately 2.5% of SAP's employees. The vast majority of the €250 million to €300 million restructuring costs associated with the program is expected to be recognized in the first quarter 2023, impacting IFRS operating profit. The program is expected to provide a moderate cost benefit in 2023 and €300 million to €350 million in annual cost savings as of 2024, impacting both IFRS and Non-IFRS operating profit which will help to fuel investments into strategic growth areas. The expected cost savings and reinvestments are fully reflected in SAP's financial outlook for 2023 and 2025 ambitions.

[4] The guidance is based on an adjusted methodology for 2023 to better reflect the business priorities of the company. The baseline for 2022 calculated using the new methodology is 7.

SAP to Explore a Sale of its Stake in Qualtrics

In line with SAP's strategic initiative to streamline its portfolio, SAP has decided to explore a sale of its stake in Qualtrics.

This would be a continuation of the strategy we set at the time of the Qualtrics IPO in 2021. SAP believes that this potential transaction could unlock significant value for both companies and their shareholders: for SAP, to focus more on its core cloud growth and profitability; for Qualtrics, to extend its leadership in the XM category that it pioneered.

Since the acquisition, Qualtrics has increased revenue by 3.5x to ~ $1.5 billion while delivering profitability, and has significantly expanded its offerings and enterprise customer adoption. In the event of a successful transaction, SAP intends to remain a go-to-market and technology partner, servicing its joint customers and contributing to its growth and category leadership.

A final decision on any transaction, its conditions and timing is subject to market conditions, agreement on acceptable terms, regulatory approvals and the approval of the SAP SE Supervisory Board. SAP has retained Morgan Stanley as financial advisor to assist in the exploration of the sale of its stake in Qualtrics.

Additional Information

This press release and all information therein is preliminary and unaudited.

New consensus provider

As of February 1st, 2023, Visible Alpha will replace VARA Research as new consensus provider. Analysts and Investors will be able to access the official consensus for SAP SE directly on our website by using the following link: *https://www.sap.com/investors/consensus*

The consensus estimates published by VARA Research are no longer used for official consensus measurements.

SAP Annual General Meeting of Shareholders

The Annual General Meeting of Shareholders will take place on May 11, 2023, as a physical event in the SAP Arena in Mannheim, Germany. The whole event will be webcast on the Company's website and online voting options will be available. Further details will be published at *https://www.sap.com/agm* in early April.

SAP Performance Measures

For more information about our key growth metrics and performance measures, their calculation, their usefulness, and their limitation, please refer to the following document on our Investor Relations website: *https://www.sap.com/investors/performance-measures*

Webcast

SAP senior management will host a press conference on Thursday, January 26th at 10:00 AM (CET) / 9:00 AM (GMT) / 4:00 AM (Eastern) / 1:00 AM (Pacific), followed by a financial analyst conference call at 2:00 PM (CET) / 1:00 PM (GMT) / 8:00 AM (Eastern) / 5:00 AM (Pacific). Both conferences will be webcast on the Company's website at *https://www.sap.com/investor* and will be available for replay. Supplementary financial information pertaining to the full-year and quarterly results can be found at *https://www.sap.com/investor*.

About SAP

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

€ millions, unless otherwise stated	Q1 2021	Q2 2021	Q3 2021	Q4 2021	TY 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	TY 2022
Revenues										
Cloud	2,145	2,276	2,386	2,611	9,418	2,820	3,056	3,288	**3,392**	**12,556**
% change – yoy	7	11	20	28	17	31	34	38	**30**	**33**
% change constant currency – yoy	13	17	20	24	19	25	24	25	**22**	**24**
SAP S/4HANA Cloud	227	257	276	329	1,090	404	472	546	**660**	**2,082**
% change – yoy	36	33	46	65	46	78	84	98	**101**	**91**
% change constant currency – yoy	43	39	46	61	47	71	72	81	**90**	**79**
Software licenses	483	650	657	1,458	3,248	317	426	406	**907**	**2,056**
% change – yoy	7	–16	–8	–14	–11	–34	–34	–38	**–38**	**–37**
% change constant currency – yoy	11	–13	–8	–17	–11	–36	–38	–42	**–39**	**–39**
Software support	2,801	2,823	2,867	2,920	11,412	2,923	2,977	3,016	**2,993**	**11,909**
% change – yoy	–5	–2	1	3	–1	4	5	5	**3**	**4**
% change constant currency – yoy	0	1	1	1	1	1	0	–2	**–1**	**0**
Software licenses and support	3,283	3,474	3,524	4,379	14,660	3,240	3,403	3,422	**3,900**	**13,965**
% change – yoy	–3	–5	–1	–4	–3	–1	–2	–3	**–11**	**–5**
% change constant currency – yoy	1	–2	–1	–6	–2	–4	–7	–9	**–14**	**–9**
Cloud and software	5,428	5,750	5,910	6,990	24,078	6,060	6,459	6,710	**7,292**	**26,522**
% change – yoy	1	1	7	6	4	12	12	14	**4**	**10**
% change constant currency – yoy	6	5	6	3	5	7	5	5	**0**	**4**
Total revenue	6,348	6,669	6,845	7,981	27,842	7,077	7,517	7,841	**8,436**	**30,871**
% change – yoy	–3	–1	5	6	2	11	13	15	**6**	**11**
% change constant currency – yoy	2	3	5	3	3	7	5	5	**1**	**5**
Share of more predictable revenue (in %)	78	76	77	69	75	81	80	80	**76**	**79**
Profits										
Operating profit (loss) (IFRS)	960	984	1,249	1,463	4,656	1,053	673	1,239	**1,707**	**4,672**
Operating profit (loss) (non-IFRS)	1,738	1,922	2,102	2,468	8,230	1,677	1,680	2,094	**2,581**	**8,033**
% change	17	–2	2	–11	–1	–4	–13	0	**5**	**–2**
% change constant currency	24	3	2	–12	1	–7	–16	–8	**2**	**–7**
Profit (loss) after tax (IFRS)	1,070	1,449	1,418	1,440	5,376	632	203	547	**332**	**1,714**
Profit (loss) after tax (non-IFRS)	1,720	2,214	2,129	2,274	8,337	1,166	1,093	1,263	**1,028**	**4,549**
% change	70	59	1	12	28	–32	–51	–41	**–55**	**–45**
Margins										
Cloud gross margin (IFRS, in %)	67.2	67.5	67.0	66.6	67.0	68.2	69.8	69.8	**69.4**	**69.3**
Cloud gross margin (non-IFRS, in %)	69.5	70.0	69.4	69.0	69.5	70.0	71.9	71.7	**71.3**	**71.3**
Software license and support gross margin (IFRS, in %)	85.7	86.5	87.1	87.9	86.9	87.0	87.7	87.8	**88.8**	**87.9**
Software license and support gross margin (non-IFRS, in %)	86.3	87.3	87.8	88.5	87.6	87.5	88.5	88.6	**89.6**	**88.6**
Cloud and software gross margin (IFRS, in %)	78.4	79.0	79.0	79.9	79.1	78.2	79.2	79.0	**79.8**	**79.1**
Cloud and software gross margin (non-IFRS, in %)	79.7	80.5	80.4	81.2	80.5	79.4	80.6	80.3	**81.1**	**80.4**
Gross margin (IFRS, in %)	70.3	70.8	71.4	73.0	71.5	70.3	70.7	71.1	**71.9**	**71.1**
Gross margin (non-IFRS, in %)	72.3	73.4	73.6	75.1	73.7	72.0	73.1	73.3	**74.1**	**73.2**
Operating margin (IFRS, in %)	15.1	14.8	18.2	18.3	16.7	14.9	8.9	15.8	**20.2**	**15.1**
Operating margin (non-IFRS, in %)	27.4	28.8	30.7	30.9	29.6	23.7	22.4	26.7	**30.6**	**26.0**
ATS segment – Cloud gross margin (in %)	65.1	65.3	64.8	64.3	64.8	65.0	67.0	67.0	**66.6**	**66.5**
ATS segment – Segment gross margin (in %)	72.2	73.2	73.7	74.2	73.4	70.9	72.1	71.9	**73.1**	**72.1**
ATS segment – Segment margin in %	34.1	35.5	36.8	35.9	35.6	29.1	27.9	31.7	**35.3**	**31.1**
Qualtrics segment – Cloud gross margin (in %)	92.2	92.4	91.6	90.2	91.5	89.6	88.6	88.9	**88.6**	**88.9**
Qualtrics segment – Segment gross margin (in %)	79.5	80.3	80.7	78.1	79.6	78.9	77.5	77.5	**77.7**	**77.9**
Qualtrics segment – Segment margin (in %)	6.3	6.3	6.0	1.6	4.8	3.1	5.1	9.1	**8.7**	**6.7**
Key Profit Ratios										
Effective tax rate (IFRS, in %)	20.0	19.7	18.9	26.4	21.5	33.1	62.2	35.7	**56.3**	**44.6**
Effective tax rate (non-IFRS, in %)	18.7	19.2	18.2	23.2	20.0	25.7	29.3	26.0	**37.0**	**29.5**

€ millions, unless otherwise stated	Q1 2021	Q2 2021	Q3 2021	Q4 2021	TY 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	TY 2022
Earnings per share, basic (IFRS, in €)	0.88	1.15	1.19	1.23	4.46	0.63	0.29	0.57	**0.47**	**1.96**
Earnings per share, basic (non-IFRS, in €)	1.40	1.75	1.74	1.85	6.73	1.00	0.96	1.12	**1.00**	**4.08**
Order Entry and current cloud backlog										
Current cloud backlog	7,628	7,766	8,171	9,447	9,447	9,731	10,403	11,267	**12,030**	**12,030**
% change – yoy	15	17	24	32	32	28	34	38	**27**	**27**
% change constant currency – yoy	19	20	22	26	26	23	25	26	**24**	**24**
SAP S/4HANA Current cloud backlog	1,036	1,130	1,283	1,707	1,707	1,925	2,258	2,662	**3,171**	**3,171**
% change – yoy	39	45	60	84	84	86	100	108	**86**	**86**
% change constant currency – yoy	43	48	58	76	76	79	87	90	**82**	**82**
Share of cloud orders greater than €5 million based on total cloud order entry volume (in %)[3]	25	29	38	45	41	41	48	44	**50**	**48**
Share of cloud orders smaller than €1 million based on total cloud order entry volume (in %)[3]	45	38	35	27	28	31	28	24	**20**	**25**
Share of on-premise orders greater than €5 million based on total software order entry volume (in %)	23	22	31	24	25	40	33	28	**29**	**31**
Share of on-premise orders smaller than €1 million based on total software order entry volume (in %)	42	43	41	36	39	33	40	49	**37**	**40**
Liquidity and Cash Flow										
Net cash flows from operating activities	3,085	686	1,183	1,269	6,223	2,482	268	849	**2,048**	**5,646**
Capital expenditure	–153	–191	–202	–255	–800	–221	–235	–281	**–136**	**–874**
Payments of lease liabilities	–84	–92	–99	–98	–374	–95	–120	–103	**–107**	**–424**
Free cash flow	2,848	403	881	916	5,049	2,165	–86	464	**1,805**	**4,348**
% of total revenue	45	6	13	11	18	31	–1	6	**21**	**14**
% of profit after tax (IFRS)	266	28	62	64	94	343	–42	85	**544**	**254**
Group liquidity	11,573	8,548	9,375	11,530	11,530	11,283	8,256	8,577	**9,693**	**9,693**
Financial debt (–)	–14,230	–13,116	–12,994	–13,094	–13,094	–12,171	–12,282	–12,282	**–11,764**	**–11,764**
Net debt (–)	–2,658	–4,568	–3,619	–1,563	–1,563	–888	–4,026	–3,705	**–2,071**	**–2,071**
Financial Position										
Cash and cash equivalents	10,332	7,764	7,943	8,898	8,898	8,942	7,492	7,316	**9,006**	**9,006**
Goodwill	29,328	29,020	29,600	31,089	31,089	32,168	33,909	35,696	**33,106**	**33,106**
Total assets	66,477	63,075	65,029	71,174	71,174	73,754	72,605	74,840	**72,160**	**72,160**
Contract liabilities (current)	6,568	5,958	4,627	4,431	4,431	7,630	6,883	5,487	**5,357**	**5,357**
Equity ratio (total equity in % of total assets)	52	54	57	58	58	58	59	62	**59**	**59**
Non-Financials										
Number of employees (quarter end)[1]	103,142	103,876	105,015	107,415	107,415	109,798	110,409	112,632	**111,961**	**111,961**
Employee retention (in %, rolling 12 months)	95.4	94.8	93.7	92.8	92.8	92.1	91.6	91.8	**92.3**	**92.3**
Women in management (in %, quarter end)	27.6	27.9	28.2	28.3	28.3	28.6	28.8	29.1	**29.4**	**29.4**
Net carbon emissions[2] (in kilotons)	30	20	25	35	110	20	25	25	**25**	**95**

[1] In full-time equivalents.

[2] In CO2 equivalents

[3] To conform to refined calculation logic prior quarters have been adjusted

Due to rounding, numbers may not add up precisely.

Primary Financial Statements of SAP Group (IFRS)

(A) Consolidated Income Statements

(A.1) Consolidated Income Statements – Quarter

€ millions, unless otherwise stated	Q4 2022	Q4 2021	Δ in %
Cloud	3,392	2,611	30
Software licenses	907	1,458	–38
Software support	2,993	2,920	3
Software licenses and support	3,900	4,379	–11
Cloud and software	**7,292**	**6,990**	**4**
Services	**1,144**	**991**	**15**
Total revenue	**8,436**	**7,981**	**6**
Cost of cloud	–1,037	–873	19
Cost of software licenses and support	–436	–531	–18
Cost of cloud and software	–1,473	–1,405	5
Cost of services	–900	–753	19
Total cost of revenue	**–2,372**	**–2,157**	**10**
Gross profit	**6,064**	**5,823**	**4**
Research and development	–1,621	–1,412	15
Sales and marketing	–2,356	–2,169	9
General and administration	–517	–757	–32
Restructuring	–27	–6	>100
Other operating income/expense, net	164	–16	<-100
Total operating expenses	**–6,729**	**–6,518**	**3**
Operating profit (loss)	**1,707**	**1,463**	**17**
Other non-operating income/expense, net	**–68**	**–29**	**>100**
Finance income	133	858	–84
Finance costs	–1,013	–335	>100
Financial income, net	**–880**	**523**	**<-100**
Profit (loss) before tax	**759**	**1,958**	**–61**
Income tax expense	–427	–517	–17
Profit (loss) after tax	**332**	**1,440**	**–77**
Attributable to owners of parent	547	1,454	–62
Attributable to non-controlling interests	–215	–14	>100
Earnings per share, basic (in €)[1]	**0.47**	**1.23**	**–62**
Earnings per share, diluted (in €)[1]	**0.47**	**1.23**	**–62**

[1] For the three months ended December 31, 2022 and 2021, the weighted average number of shares was 1,166 million (diluted 1,172 million) and 1,180 million (diluted: 1,180 million), respectively (treasury stock excluded).

Due to rounding, numbers may not add up precisely.

(A.2) Consolidated Income Statements – Year-to-Date

€ millions, unless otherwise stated	**Q1–Q4 2022**	Q1–Q4 2021	Δ in %
Cloud	12,556	9,418	33
Software licenses	2,056	3,248	–37
Software support	11,909	11,412	4
Software licenses and support	13,965	14,660	–5
Cloud and software	**26,522**	**24,078**	**10**
Services	**4,350**	**3,764**	**16**
Total revenue	**30,871**	**27,842**	**11**
Cost of cloud	–3,853	–3,105	24
Cost of software licenses and support	–1,694	–1,925	–12
Cost of cloud and software	–5,547	–5,030	10
Cost of services	–3,388	–2,916	16
Total cost of revenue	**–8,936**	**–7,946**	**12**
Gross profit	**21,936**	**19,897**	**10**
Research and development	–6,165	–5,190	19
Sales and marketing	–8,943	–7,505	19
General and administration	–2,072	–2,431	–15
Restructuring	–138	–157	–12
Other operating income/expense, net	55	43	27
Total operating expenses	**–26,199**	**–23,186**	**13**
Operating profit (loss)	**4,672**	**4,656**	**0**
Other non-operating income/expense, net	**–195**	**17**	**<-100**
Finance income	820	3,123	–74
Finance costs	–2,205	–949	>100
Financial income, net	**–1,385**	**2,174**	**<-100**
Profit (loss) before tax	**3,092**	**6,847**	**–55**
Income tax expense	–1,378	–1,471	–6
Profit (loss) after tax	**1,714**	**5,376**	**–68**
Attributable to owners of parent	2,290	5,256	–56
Attributable to non-controlling interests	–576	121	<-100
Earnings per share, basic (in €)[1]	**1.96**	**4.46**	**–56**
Earnings per share, diluted (in €)[1]	**1.95**	**4.46**	**–56**

[1] For the twelve months ended December 31, 2022 and 2021, the weighted average number of shares was 1,170 million (diluted: 1,175 million) and 1,180 million (diluted: 1,180 million), respectively (treasury stock excluded).

Due to rounding, numbers may not add up precisely.

(B) Consolidated Statements of Financial Position

as at 12/31/2022 and 12/31/2021

€ millions	2022	2021
Cash and cash equivalents	9,006	8,898
Other financial assets	856	2,758
Trade and other receivables	6,258	6,352
Other non-financial assets	2,152	1,633
Tax assets	297	403
Total current assets	**18,570**	**20,044**
Goodwill	33,106	31,089
Intangible assets	3,835	3,965
Property, plant, and equipment	4,934	4,977
Other financial assets	5,626	6,275
Trade and other receivables	169	147
Other non-financial assets	3,546	2,628
Tax assets	324	263
Deferred tax assets	2,051	1,786
Total non-current assets	**53,590**	**51,130**
Total assets	**72,160**	**71,174**

€ millions	2022	2021
Trade and other payables	2,106	1,580
Tax liabilities	278	304
Financial liabilities	4,824	4,528
Other non-financial liabilities	4,799	5,203
Provisions	90	89
Contract liabilities	5,357	4,431
Total current liabilities	**17,452**	**16,136**
Trade and other payables	79	122
Tax liabilities	890	827
Financial liabilities	9,547	11,042
Other non-financial liabilities	705	860
Provisions	359	355
Deferred tax liabilities	242	296
Contract liabilities	33	13
Total non-current liabilities	**11,856**	**13,515**
Total liabilities	**29,308**	**29,650**
Issued capital	1,229	1,229
Share premium	3,080	1,918
Retained earnings	36,368	37,022
Other components of equity	3,800	1,756
Treasury shares	–4,341	–3,072
Equity attributable to owners of parent	**40,135**	**38,852**
Non-controlling interests	**2,717**	**2,670**
Total equity	**42,852**	**41,523**
Total equity and liabilities	**72,160**	**71,174**

Due to rounding, numbers may not add up precisely.

(C) Consolidated Statements of Cash Flows

€ millions	Q1–Q4 2022	Q1–Q4 2021
Profit (loss) after tax	**1,714**	**5,376**
Adjustments to reconcile profit (loss) after tax to net cash flows from operating activities:		
Depreciation and amortization	1,896	1,775
Share-based payment expense	2,612	2,794
Income tax expense	1,378	1,471
Financial income, net	1,385	–2,174
Decrease/increase in allowances on trade receivables	89	–11
Other adjustments for non-cash items	–174	39
Decrease/increase in trade and other receivables	128	414
Decrease/increase in other assets	–1,294	–706
Increase/decrease in trade payables, provisions, and other liabilities	120	475
Increase/decrease in contract liabilities	733	100
Share-based payments	–1,182	–1,120
Interest paid	–248	–202
Interest received	166	56
Income taxes paid, net of refunds	–1,675	–2,063
Net cash flows from operating activities	**5,646**	**6,223**
Business combinations, net of cash and cash equivalents acquired	–679	–1,142
Proceeds from sales of subsidiaries or other businesses	289	–72
Purchase of intangible assets or property, plant, and equipment	–874	–800
Proceeds from sales of intangible assets or property, plant, and equipment	60	91
Purchase of equity or debt instruments of other entities	–2,320	–4,368
Proceeds from sales of equity or debt instruments of other entities	4,190	3,229
Net cash flows from investing activities	**667**	**–3,063**
Dividends paid	–2,865	–2,182
Dividends paid on non-controlling interests	–12	–54
Purchase of treasury shares	–1,500	0
Proceeds from changes in ownership interests in subsidiaries that do not result in the loss of control	33	2,828
Payments for taxes related to net share settlement of equity awards	–282	0
Proceeds from borrowings	158	1,680
Repayments of borrowings	–1,445	–1,952
Payments of lease liabilities	–424	–374
Transactions with non-controlling interests	0	–2
Net cash flows from financing activities	**–6,337**	**–56**
Effect of foreign currency rates on cash and cash equivalents	**133**	**484**
Net decrease/increase in cash and cash equivalents	**108**	**3,587**
Cash and cash equivalents at the beginning of the period	**8,898**	**5,311**
Cash and cash equivalents at the end of the period	**9,006**	**8,898**

We do no longer show cash flows linked to the supply chain financing (SCF) transactions from Taulia in investing/financing cash flow separately. For more information see Note (L).

Due to rounding, numbers may not add up precisely.

Non-IFRS Numbers

(D) Basis of Non-IFRS Presentation

We disclose certain financial measures such as revenue (non-IFRS), expense (non-IFRS), and profit measures (non-IFRS) that are not prepared in accordance with IFRS and are therefore considered non-IFRS financial measures.

For a more detailed description of all of SAP's non-IFRS measures and their limitations as well as our constant currency and free cash flow figures, see *Explanation of Non-IFRS Measures* online.

(E) Reconciliation from Non-IFRS Numbers to IFRS Numbers

(E.1) Reconciliation from Non-IFRS Numbers to IFRS Numbers – Quarter

€ millions, unless otherwise stated	Q4 2022					Q4 2021			Δ in %		
	IFRS	**Adj.**	**Non-IFRS**	**Currency Impact**	**Non-IFRS Constant Currency**	IFRS	Adj.	Non-IFRS	IFRS	Non-IFRS	Non-IFRS Constant Currency[1]
Revenue Numbers											
Cloud	3,392		3,392	–203	3,189	2,611		2,611	30	30	22
Software licenses	907		907	–20	886	1,458		1,458	–38	–38	–39
Software support	2,993		2,993	–99	2,894	2,920		2,920	3	3	–1
Software licenses and support	3,900		3,900	–120	3,780	4,379		4,379	–11	–11	–14
Cloud and software	**7,292**		**7,292**	**–323**	**6,969**	**6,990**		**6,990**	**4**	**4**	**0**
Services	**1,144**		**1,144**	**–56**	**1,088**	**991**		**991**	**15**	**15**	**10**
Total revenue	**8,436**		**8,436**	**–379**	**8,057**	**7,981**		**7,981**	**6**	**6**	**1**
Operating Expense Numbers											
Cost of cloud	–1,037	64	–973			–873	63	–810	19	20	
Cost of software licenses and support	–436	31	–405			–531	29	–502	–18	–19	
Cost of cloud and software	–1,473	95	–1,378			–1,405	92	–1,312	5	5	
Cost of services	–900	89	–811			–753	76	–677	19	20	
Total cost of revenue	**–2,372**	**184**	**–2,189**			**–2,157**	**168**	**–1,990**	**10**	**10**	
Gross profit	**6,064**	**184**	**6,248**			**5,823**	**168**	**5,991**	**4**	**4**	
Research and development	–1,621	193	–1,429			–1,412	128	–1,285	15	11	
Sales and marketing	–2,356	344	–2,012			–2,169	276	–1,892	9	6	
General and administration	–517	191	–326			–757	427	–331	–32	–1	
Restructuring	–27	27	0			–6	6	0	>100	NA	
Other operating income/expense, net	164	–65	99			–16	0	–16	<-100	<-100	
Total operating expenses	**–6,729**	**873**	**–5,856**	**311**	**–5,545**	**–6,518**	**1,005**	**–5,513**	**3**	**6**	**1**
Profit Numbers											
Operating profit (loss)	**1,707**	**873**	**2,581**	**–69**	**2,512**	**1,463**	**1,005**	**2,468**	**17**	**5**	**2**
Other non-operating income/expense, net	**–68**	**0**	**–68**			**–29**	**0**	**–29**	**>100**	**>100**	
Finance income	133	0	133			858	0	858	–84	–84	
Finance costs	–1,013	0	–1,013			–335	0	–335	>100	>100	
Financial income, net	**–880**	**0**	**–880**			**523**	**0**	**523**	**<-100**	**<-100**	
Profit (loss) before tax	**759**	**873**	**1,632**			**1,958**	**1,005**	**2,962**	**–61**	**–45**	
Income tax expense	–427	–178	–605			–517	–171	–688	–17	–12	
Profit (loss) after tax	**332**	**696**	**1,028**			**1,440**	**834**	**2,274**	**–77**	**–55**	
Attributable to owners of parent	547	622	1,168			1,454	733	2,187	–62	–47	
Attributable to non-controlling interests	–215	74	–141			–14	101	87	>100	<-100	
Key Ratios											
Operating margin (in %)	**20.2**		**30.6**		**31.2**	**18.3**		**30.9**	**1.9pp**	**–0.3pp**	**0.3pp**
Effective tax rate (in %)[2]	**56.3**		**37.0**			**26.4**		**23.2**	**29.8pp**	**13.8pp**	
Earnings per share, basic (in €)	**0.47**		**1.00**			**1.23**		**1.85**	**–62**	**–46**	

[1] Constant currency period-over-period changes are calculated by comparing the current year's non-IFRS constant currency numbers with the non-IFRS numbers of the previous year's respective period.

[2] The difference between our effective tax rate (IFRS) and effective tax rate (non-IFRS) in Q4 2022 and Q4 2021 mainly resulted from tax effects of share-based payment expenses and acquisition-related charges.

Due to rounding, numbers may not add up precisely.

(E.2) Reconciliation from Non-IFRS Numbers to IFRS Numbers – Year-to-Date

€ millions, unless otherwise stated	Q1–Q4 2022					Q1–Q4 2021			Δ in %		
	IFRS	**Adj.**	**Non-IFRS**	**Currency Impact**	**Non-IFRS Constant Currency**	IFRS	Adj.	Non-IFRS	IFRS	Non-IFRS	Non-IFRS Constant Currency[1]
Revenue Numbers											
Cloud	12,556		12,556	–874	11,682	9,418		9,418	33	33	24
Software licenses	2,056		2,056	–84	1,972	3,248		3,248	–37	–37	–39
Software support	11,909		11,909	–545	11,364	11,412		11,412	4	4	0
Software licenses and support	13,965		13,965	–629	13,336	14,660		14,660	–5	–5	–9
Cloud and software	**26,522**		**26,522**	**–1,503**	**25,019**	**24,078**		**24,078**	**10**	**10**	**4**
Services	**4,350**		**4,350**	**–259**	**4,091**	**3,764**		**3,764**	**16**	**16**	**9**
Total revenue	**30,871**		**30,871**	**–1,762**	**29,110**	**27,842**		**27,842**	**11**	**11**	**5**
Operating Expense Numbers											
Cost of cloud	–3,853	243	–3,610			–3,105	229	–2,876	24	26	
Cost of software licenses and support	–1,694	104	–1,591			–1,925	103	–1,822	–12	–13	
Cost of cloud and software	–5,547	347	–5,201			–5,030	332	–4,698	10	11	
Cost of services	–3,388	303	–3,085			–2,916	286	–2,630	16	17	
Total cost of revenue	**–8,936**	**650**	**–8,286**			**–7,946**	**617**	**–7,328**	**12**	**13**	
Gross profit	**21,936**	**650**	**22,585**			**19,897**	**617**	**20,514**	**10**	**10**	
Research and development	–6,165	635	–5,530			–5,190	524	–4,667	19	19	
Sales and marketing	–8,943	1,194	–7,749			–7,505	1,025	–6,479	19	20	
General and administration	–2,072	809	–1,263			–2,431	1,250	–1,181	–15	7	
Restructuring	–138	138	0			–157	157	0	–12	NA	
Other operating income/expense, net	55	–65	–10			43	0	43	27	<-100	
Total operating expenses	**–26,199**	**3,360**	**–22,838**	**1,412**	**–21,427**	**–23,186**	**3,573**	**–19,613**	**13**	**16**	**9**
Profit Numbers											
Operating profit (loss)	**4,672**	**3,360**	**8,033**	**–350**	**7,683**	**4,656**	**3,573**	**8,230**	**0**	**–2**	**–7**
Other non-operating income/expense, net	**–195**	**0**	**–195**			**17**	**0**	**17**	**<-100**	**<-100**	
Finance income	820	0	820			3,123	0	3,123	–74	–74	
Finance costs	–2,205	0	–2,205			–949	0	–949	>100	>100	
Financial income, net	**–1,385**	**0**	**–1,385**			**2,174**	**0**	**2,174**	**<-100**	**<-100**	
Profit (loss) before tax	**3,092**	**3,360**	**6,452**			**6,847**	**3,573**	**10,421**	**–55**	**–38**	
Income tax expense	–1,378	–525	–1,903			–1,471	–613	–2,084	–6	–9	
Profit (loss) after tax	**1,714**	**2,835**	**4,549**			**5,376**	**2,960**	**8,337**	**–68**	**–45**	
Attributable to owners of parent	2,290	2,488	4,778			5,256	2,687	7,943	–56	–40	
Attributable to non-controlling interests	–576	348	–229			121	273	394	<-100	<-100	
Key Ratios											
Operating margin (in %)	**15.1**		**26.0**		**26.4**	**16.7**		**29.6**	**–1.6pp**	**–3.5pp**	**–3.2pp**
Effective tax rate (in %)[2]	**44.6**		**29.5**			**21.5**		**20.0**	**23.1pp**	**9.5pp**	
Earnings per share, basic (in €)	**1.96**		**4.08**			**4.46**		**6.73**	**–56**	**–39**	

[1] 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.

[2] The difference between our effective tax rate (IFRS) and effective tax rate (non-IFRS) in 2022 and 2021 mainly resulted from tax effects of share-based payment expenses, acquisition-related charges and restructuring expenses.

Due to rounding, numbers may not add up precisely.

(F) Non-IFRS Adjustments – Actuals and Estimates

€ millions	Estimated Amounts for Full Year 2023	**Q1–Q4 2022**	**Q4 2022**	Q1–Q4 2021	Q4 2021
Operating profit (loss) (IFRS)		**4,672**	**1,707**	**4,656**	**1,463**
Adjustment for acquisition-related charges	580–660	610	107	622	166
Adjustment for share-based payment expenses	2,550–2,850	2,612	739	2,794	833
Adjustment for restructuring	250–300	138	27	157	6
Operating expense adjustments		**3,360**	**873**	**3,573**	**1,005**
Operating profit (loss) (non-IFRS)		**8,033**	**2,581**	**8,230**	**2,468**

Due to rounding, numbers may not add up precisely.

(G) Non-IFRS Adjustments by Functional Areas

€ millions	**Q4 2022**					Q4 2021				
	IFRS	**Acquisition-Related**	**SBP[1]**	**Restruc-turing**	**Non-IFRS**	IFRS	Acquisition-Related	SBP[1]	Restruc-turing	Non-IFRS
Cost of cloud	–1,037	44	20	0	–973	–873	47	16	0	–810
Cost of software licenses and support	–436	10	20	0	–405	–531	9	20	0	–502
Cost of services	–900	5	83	0	–811	–753	5	71	0	–677
Research and development	–1,621	3	190	0	–1,429	–1,412	4	123	0	–1,285
Sales and marketing	–2,356	107	237	0	–2,012	–2,169	98	178	0	–1,892
General and administration	–517	2	189	0	–326	–757	2	424	0	–331
Restructuring	–27	0	0	27	0	–6	0	0	6	0
Other operating income/expense, net	164	–65	0	0	99	–16	0	0	0	–16
Total operating expenses	**–6,729**	**107**	**739**	**27**	**–5,856**	**–6,518**	**165**	**833**	**6**	**–5,513**

€ millions	**Q1–Q4 2022**					Q1–Q4 2021				
	IFRS	**Acquisition-Related**	**SBP[1]**	**Restruc-turing**	**Non-IFRS**	IFRS	Acquisition-Related	SBP[1]	Restruc-turing	Non-IFRS
Cost of cloud	–3,853	175	68	0	–3,610	–3,105	169	59	0	–2,876
Cost of software licenses and support	–1,694	34	70	0	–1,591	–1,925	33	70	0	–1,822
Cost of services	–3,388	22	281	0	–3,085	–2,916	20	266	0	–2,630
Research and development	–6,165	11	624	0	–5,530	–5,190	10	513	0	–4,667
Sales and marketing	–8,943	423	772	0	–7,749	–7,505	370	655	0	–6,479
General and administration	–2,072	11	798	0	–1,263	–2,431	20	1,230	0	–1,181
Restructuring	–138	0	0	138	0	–157	0	0	157	0
Other operating income/expense, net	55	–65	0	0	–10	43	0	0	0	43
Total operating expenses	**–26,199**	**610**	**2,612**	**138**	**–22,838**	**–23,186**	**622**	**2,794**	**157**	**–19,613**

[1] Share-based Payments

Due to rounding, numbers may not add up precisely.

If not presented in a separate line item in our income statement, the restructuring expenses would break down as follows:

€ millions	**Q4 2022**	**Q1–Q4 2022**	Q4 2021	Q1–Q4 2021
Cost of cloud	0	20	–2	–127
Cost of software licenses and support	–5	–9	–2	–5
Cost of services	–9	–70	1	–13
Research and development	–10	–16	–3	–12
Sales and marketing	–2	–58	1	3
General and administration	–2	–4	–1	–2
Restructuring expenses	**–27**	**–138**	**–6**	**–157**

Due to rounding, numbers may not add up precisely.

Disaggregations

(H) Segment Reporting

(H.1) Segment Policies and Segment Changes

SAP has two reportable segments: the Applications, Technology & Services segment and the Qualtrics segment.

For a more detailed description of SAP's segment reporting, see *Note (C.1)* "Results of Segments" of our Consolidated Half-Year Financial Statements 2022.

(H.2) Segment Reporting – Quarter

Applications, Technology & Services[1]

€ millions, unless otherwise stated (non-IFRS)	Q4 2022		Q4 2021	Δ in %	Δ in %
	Actual Currency	**Constant Currency**	Actual Currency	Actual Currency	Constant Currency
Cloud – SaaS[2]	2,137	2,017	1,635	31	23
Cloud – PaaS[3]	423	403	282	50	43
Cloud – IaaS[4]	205	197	243	–16	–19
Cloud	2,765	2,616	2,161	28	21
Software licenses	907	886	1,458	–38	–39
Software support	2,992	2,892	2,920	2	–1
Software licenses and support	3,898	3,779	4,377	–11	–14
Cloud and software	6,664	6,395	6,538	2	–2
Services	1,077	1,027	933	15	10
Total segment revenue	**7,741**	**7,422**	**7,471**	**4**	**–1**
Cost of cloud	–922	–861	–772	19	12
Cost of software licenses and support	–406	–388	–505	–20	–23
Cost of cloud and software	–1,329	–1,249	–1,277	4	–2
Cost of services	–750	–716	–648	16	10
Total cost of revenue	**–2,079**	**–1,965**	**–1,925**	**8**	**2**
Cloud gross profit – SaaS[2]	1,450	1,361	1,104	31	23
Cloud gross profit – PaaS[3]	336	323	220	53	47
Cloud gross profit – IaaS[4]	57	71	65	–11	11
Cloud gross profit	**1,843**	**1,755**	**1,389**	**33**	**26**
Segment gross profit	**5,663**	**5,457**	**5,545**	**2**	**–2**
Other segment expenses	–2,929	–2,796	–2,864	2	–2
Segment profit (loss)	**2,734**	**2,661**	**2,681**	**2**	**–1**
SAP S/4 HANA					
SAP S/4HANA Cloud revenue	660	624	329	>100	90
SAP S/4HANA Current cloud backlog	3,171	3,103	1,707	86	82
Margins					
Cloud gross margin – SaaS[2] (in %)	67.8	67.5	67.5	0.3pp	–0.0pp
Cloud gross margin – PaaS[3] (in %)	79.5	80.2	77.9	1.6pp	2.3pp
Cloud gross margin – IaaS[4] (in %)	27.9	36.3	26.6	1.3pp	9.7pp
Cloud gross margin (in %)	66.6	67.1	64.3	2.4pp	2.8pp
Segment gross margin (in %)	73.1	73.5	74.2	–1.1pp	–0.7pp
Segment margin (in %)	35.3	35.9	35.9	–0.6pp	–0.0pp

Due to rounding, numbers may not add up precisely.

[1] Segment information for comparative prior periods were restated to conform with the new segment composition.

[2] Software as a service

[3] Platform as a service

[4] Infrastructure as a service

Qualtrics

€ millions, unless otherwise stated (non-IFRS)	Q4 2022		Q4 2021	Δ in %	Δ in %
	Actual Currency	**Constant Currency**	Actual Currency	Actual Currency	Constant Currency
Cloud – SaaS[1]	328	294	235	40	25
Cloud and software	328	294	235	40	25
Services	60	54	49	22	9
Total segment revenue	**389**	**348**	**284**	**37**	**22**
Cost of cloud	–38	–34	–23	62	47
Cost of cloud and software	–38	–34	–23	62	47
Cost of services	–49	–45	–39	25	14
Total cost of revenue	–87	–78	–62	**39**	**26**
Cloud gross profit – SaaS[1]	**291**	**260**	**212**	**37**	**23**
Segment gross profit	**302**	**270**	**222**	**36**	**21**
Other segment expenses	–268	–232	–218	23	7
Segment profit (loss)	**34**	**38**	**5**	**>100**	**>100**
Margins					
Cloud gross margin – SaaS[1] (in %)	88.6	88.5	90.2	–1.6pp	–1.7pp
Segment gross margin (in %)	77.7	77.5	78.1	–0.4pp	–0.6pp
Segment margin (in %)	8.7	10.8	1.6	7.1pp	9.3pp

Due to rounding, numbers may not add up precisely.

[1] Software as a service

Reconciliation of Cloud Revenues and Margins – Quarter

€ millions, unless otherwise stated (Non-IFRS)	Q4 2022			Q4 2021	Δ in %	
	Actual currency	**Currency impact**	**Constant currency**	Actual currency	Actual currency	Constant currency[4]
Cloud revenue – SaaS[1]	2,735	–174	2,561	2,070	32	24
Cloud revenue – PaaS[2]	452	–21	431	299	51	44
Cloud revenue – IaaS[3]	205	–8	197	243	–16	–19
Cloud revenue	**3,392**	**–203**	**3,189**	**2,611**	**30**	**22**
Cloud gross margin – SaaS[1] (in %)	73.1		72.8	72.6	0.5pp	0.2pp
Cloud gross margin – PaaS[2] (in %)	80.3		81.0	78.6	1.7pp	2.4pp
Cloud gross margin – IaaS[3] (in %)	28.0		36.3	26.6	1.3pp	9.7pp
Cloud gross margin (in %)	**71.3**		**71.6**	**69.0**	**2.3pp**	**2.7pp**

[1] Software as a service

[2] Platform as a service

[3] Infrastructure as a service

[4] Constant currency period-over-period changes are calculated by comparing the current year's non-IFRS constant currency numbers with the non-IFRS numbers of the previous year's respective period.

As of Q1 2022, the allocation of cloud revenues and -expenses to cloud service models has been aligned to internal reporting structures. Presented 2021 comparable periods have been updated accordingly.

Due to rounding, numbers may not add up precisely.

(H.3) Segment Reporting – Year-to-Date

Applications, Technology & Services[1]

€ millions, unless otherwise stated (non-IFRS)	Q1–Q4 2022		Q1–Q4 2021	Δ in %	Δ in %
	Actual Currency	**Constant Currency**	Actual Currency	Actual Currency	Constant Currency
Cloud – SaaS[2]	7,848	7,318	5,918	33	24
Cloud – PaaS[3]	1,487	1,403	992	50	41
Cloud – IaaS[4]	905	853	924	–2	–8
Cloud	10,239	9,574	7,835	31	22
Software licenses	2,053	1,969	3,244	–37	–39
Software support	11,906	11,361	11,410	4	0
Software licenses and support	13,959	13,330	14,654	–5	–9
Cloud and software	24,199	22,905	22,488	8	2
Services	4,099	3,867	3,565	15	8
Total segment revenue	**28,298**	**26,772**	**26,054**	**9**	**3**
Cost of cloud	–3,434	–3,153	–2,754	25	14
Cost of software licenses and support	–1,623	–1,540	–1,736	–7	–11
Cost of cloud and software	–5,057	–4,693	–4,490	13	5
Cost of services	–2,848	–2,701	–2,449	16	10
Total cost of revenue	**–7,905**	**–7,394**	**–6,939**	**14**	**7**
Cloud gross profit – SaaS[2]	5,385	5,022	3,996	35	26
Cloud gross profit – PaaS[3]	1,169	1,121	787	48	42
Cloud gross profit – IaaS[4]	251	278	297	–15	–6
Cloud gross profit	**6,805**	**6,421**	**5,080**	**34**	**26**
Segment gross profit	**20,393**	**19,378**	19,114	**7**	**1**
Other segment expenses	–11,581	–10,917	–9,830	18	11
Segment profit (loss)	**8,812**	**8,461**	**9,284**	**–5**	**–9**
SAP S/4 HANA					
SAP S/4HANA Cloud revenue	2,082	1,955	1,090	91	79
SAP S/4HANA Current cloud backlog	3,171	3,103	1,707	86	82
Margins					
Cloud gross margin – SaaS[2] (in %)	68.6	68.6	67.5	1.1pp	1.1pp
Cloud gross margin – PaaS[3] (in %)	78.6	79.9	79.3	–0.7pp	0.5pp
Cloud gross margin – IaaS[4] (in %)	27.8	32.6	32.1	–4.3pp	0.5pp
Cloud gross margin (in %)	66.5	67.1	64.8	1.6pp	2.2pp
Segment gross margin (in %)	72.1	72.4	73.4	–1.3pp	–1.0pp
Segment margin (in %)	31.1	31.6	35.6	–4.5pp	–4.0pp

Due to rounding, numbers may not add up precisely.

[1] Segment information for comparative prior periods were restated to conform with the new segment composition.

[2] Software as a service

[3] Platform as a service

[4] Infrastructure as a service

Qualtrics

€ millions, unless otherwise stated (non-IFRS)	Q1–Q4 2022 Actual Currency	Q1–Q4 2022 Constant Currency	Q1–Q4 2021 Actual Currency	Δ in % Actual Currency	Δ in % Constant Currency
Cloud – SaaS[1]	1,198	1,071	757	58	41
Cloud and software	1,198	1,071	757	58	41
Services	225	200	173	30	16
Total segment revenue	**1,423**	**1,271**	**930**	**53**	**37**
Cost of cloud	–133	–120	–65	>100	86
Cost of cloud and software	–133	–120	–65	>100	86
Cost of services	–182	–164	–125	45	31
Total cost of revenue	**–315**	**–284**	**–190**	**66**	**50**
Cloud gross profit – SaaS[1]	**1,065**	**951**	**693**	**54**	**37**
Segment gross profit	**1,108**	**986**	**740**	**50**	**33**
Other segment expenses	–1,013	–882	–696	46	27
Segment profit (loss)	**95**	**104**	**44**	**>100**	**>100**
Margins					
Cloud gross margin – SaaS[1] (in %)	88.9	88.8	91.5	–2.6pp	–2.7pp
Segment gross margin (in %)	77.9	77.6	79.6	–1.7pp	–1.9pp
Segment margin (in %)	6.7	8.2	4.8	1.9pp	3.4pp

Due to rounding, numbers may not add up precisely.

[1] Software as a service

Reconciliation of Cloud Revenues and Margins – Year-to-Date

€ millions, unless otherwise stated (Non-IFRS)	Q1 - Q4 2022			Q1 - Q4 2021	Δ in %	
	Actual currency	**Currency impact**	**Constant currency**	Actual currency	Actual currency	Constant currency[4]
Cloud revenue – SaaS[1]	10,066	–735	9,330	7,458	35	25
Cloud revenue – PaaS[2]	1,586	–87	1,499	1,035	53	45
Cloud revenue – IaaS[3]	905	–52	853	924	–2	–8
Cloud revenue	**12,556**	**–874**	**11,682**	**9,418**	**33**	**24**
Cloud gross margin – SaaS[1] (in %)	73.9		73.7	72.7	1.2pp	1.0pp
Cloud gross margin – PaaS[2] (in %)	79.4		80.6	79.7	–0.3pp	0.9pp
Cloud gross margin – IaaS[3] (in %)	27.8		32.6	32.1	–4.3pp	0.5pp
Cloud gross margin (in %)	**71.3**		**71.6**	**69.5**	**1.8pp**	**2.1pp**

[1] Software as a service

[2] Platform as a service

[3] Infrastructure as a service

[4] Constant currency period-over-period changes are calculated by comparing the current year's non-IFRS constant currency numbers with the non-IFRS numbers of the previous year's respective period.

Due to rounding, numbers may not add up precisely.

(I) Revenue by Region (IFRS and Non-IFRS)

(I.1) Revenue by Region (IFRS and Non-IFRS) – Quarter

€ millions	Q4 2022			Q4 2021	Δ in %	
	Actual currency	**Currency Impact**	**Constant Currency**	Actual currency	Actual currency	Constant Currency[1]
Cloud Revenue by Region						
EMEA	1,172	–26	1,146	910	29	26
Americas	1,803	–179	1,624	1,375	31	18
APJ	417	2	419	326	28	28
Cloud revenue	**3,392**	**–203**	**3,189**	**2,611**	**30**	**22**
Cloud and Software Revenue by Region						
EMEA	3,149	–37	3,112	3,240	–3	–4
Americas	3,106	–297	2,809	2,674	16	5
APJ	1,037	11	1,048	1,076	–4	–3
Cloud and software revenue	**7,292**	**–323**	**6,969**	**6,990**	**4**	**0**
Total Revenue by Region						
Germany	1,289	–3	1,286	1,298	–1	–1
Rest of EMEA	2,374	–43	2,330	2,392	–1	–3
Total EMEA	**3,663**	**–46**	**3,617**	**3,690**	**–1**	**–2**
United States	2,923	–300	2,623	2,480	18	6
Rest of Americas	679	–46	633	607	12	4
Total Americas	**3,602**	**–346**	**3,256**	**3,087**	**17**	**5**
Japan	315	33	347	349	–10	–1
Rest of APJ	857	–20	837	855	0	–2
Total APJ	**1,171**	**13**	**1,184**	**1,204**	**–3**	**–2**
Total revenue	**8,436**	**–379**	**8,057**	**7,981**	**6**	**1**

[1] Constant currency period-over-period changes are calculated by comparing the current year's non-IFRS constant currency numbers with the non-IFRS numbers of the previous year's respective period.

Due to rounding, numbers may not add up precisely.

(I.2) Revenue by Region (IFRS and Non-IFRS) – Year-to-Date

€ millions	Q1–Q4 2022			Q1–Q4 2021	Δ in %	
	Actual currency	**Currency Impact**	**Constant Currency**	Actual currency	Actual currency	Constant Currency[1]
Cloud Revenue by Region						
EMEA	4,293	–127	4,166	3,308	30	26
Americas	6,688	–708	5,980	4,894	37	22
APJ	1,575	–40	1,536	1,217	29	26
Cloud revenue	**12,556**	**–874**	**11,682**	**9,418**	**33**	**24**
Cloud and Software Revenue by Region						
EMEA	11,236	–212	11,024	10,931	3	1
Americas	11,334	–1,199	10,135	9,348	21	8
APJ	3,952	–92	3,860	3,798	4	2
Cloud and software revenue	**26,522**	**–1,503**	**25,019**	**24,078**	**10**	**4**
Total Revenue by Region						
Germany	4,504	–9	4,495	4,343	4	4
Rest of EMEA	8,576	–241	8,334	8,246	4	1
Total EMEA	**13,080**	**–251**	**12,829**	**12,589**	**4**	**2**
United States	10,812	–1,159	9,653	8,870	22	9
Rest of Americas	2,484	–248	2,236	2,099	18	7
Total Americas	**13,297**	**–1,407**	**11,889**	**10,969**	**21**	**8**
Japan	1,242	73	1,315	1,301	–5	1
Rest of APJ	3,253	–177	3,076	2,984	9	3
Total APJ	**4,495**	**–104**	**4,391**	**4,285**	**5**	**2**
Total revenue	**30,871**	**–1,762**	**29,110**	**27,842**	**11**	**5**

[1] 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.

Due to rounding, numbers may not add up precisely.

(J) Employees by Region and Functional Areas

Full-time equivalents	12/31/2022				12/31/2021			
	EMEA	**Americas**	**APJ**	**Total**	EMEA	Americas	APJ	Total
Cloud and software	5,672	4,617	5,247	15,536	5,947	4,586	5,113	15,646
Services	8,247	5,580	5,841	19,669	8,229	5,491	5,924	19,644
Research and development	16,606	6,416	11,100	34,122	15,347	6,326	10,571	32,244
Sales and marketing	12,207	12,511	5,831	30,548	11,136	11,598	5,481	28,215
General and administration	3,466	2,186	1,280	6,932	3,374	2,306	1,199	6,879
Infrastructure	2,800	1,440	914	5,154	2,609	1,353	824	4,786
SAP Group (12/31)	**48,999**	**32,749**	**30,213**	**111,961**	**46,641**	**31,660**	**29,113**	**107,415**
Thereof acquisitions[1]	188	214	8	410	462	407	45	914
SAP Group (twelve months' end average)	**48,408**	**32,668**	**29,939**	**111,015**	**45,359**	**30,651**	**28,354**	**104,364**

[1] Acquisitions closed between January 1 and December 31 of the respective year

Due to rounding, numbers may not add up precisely.

Other Disclosures

(K) Financial Income, Net

In the fourth quarter of 2022, finance income mainly consisted of gains from disposals and fair value adjustments of equity securities totaling €54 million (Q4/2021: €847 million) and €608 million in the full year 2022 (Q1-Q4/2021: €3,067 million), and interest income from loans and receivables, other financial assets (cash, cash equivalents, and current investments) as well as from derivatives amounting to €75 million in the fourth quarter of 2022 (Q4/2021: €14 million) and €202 million in the full year 2022 (Q1-Q4/2021: €64 million).

In the fourth quarter of 2022, finance costs were primarily impacted by losses from disposals and fair value adjustments of equity securities amounting to €862 million (Q4/2021: €255 million) and €1,802 million in the full year 2022 (Q1-Q4/2021: €654 million), and interest expense on financial liabilities including lease liabilities and negative effects from derivatives amounting to €111 million in the fourth quarter of 2022 (Q4/2021: €51 million) and €276 million in the full year 2022 (Q1-Q4/2021: €210 million).

In the third quarter of 2022, the Executive Board proposed, and the Supervisory Board consented to, the financing of a new Sapphire Ventures fund ("SAPPHIRE Ventures Fund VII"). SAP's total volume committed for SAPPHIRE Ventures Fund VII is US$1.25 billion.

(L) Business Combinations and Divestitures

Taulia Acquisition

On January 27, 2022, SAP announced its intent to acquire a majority stake of Taulia, a leading provider of cloud-based working capital management solutions. The acquisition closed on March 9, 2022, following satisfaction of customary closing conditions and regulatory approvals; the operating results as well as assets and liabilities are reflected in our consolidated financial statements starting on that date. The acquisition is expected to further expand SAP's business network capabilities and strengthen SAP's solutions for the CFO office. Consideration transferred amounted to €705 million.

In the fourth quarter of 2022, the contribution of Taulia to revenue was approximately €19 million, to operating profit approximately -€20 million (IFRS) and approximately -€7 million (Non-IFRS).

We have completed our accounting assessment relating to the supply chain financing (SCF) transactions offered by Taulia prior to December 31, 2022. We concluded we do not control the receivables/liabilities resulting from the SCF activities (that are siloed in so called compartments/series) in terms of IFRS 10 (due to the setup of the compartments/series and the contractual/founding agreements). Thus, we are no longer including the respective items into our balance sheet and do also no longer show cash flows linked to the SCF transactions in investing/financing cash flow.

SAP Litmos Divestiture

On August 17, 2022, SAP and Francisco Partners (FP) announced that FP signed a definitive agreement with SAP America, Inc. under which FP will acquire SAP Litmos from SAP. The transaction closed on December 1, 2022, following satisfaction of applicable regulatory and other approvals. The disposal gain of €175 million (IFRS) and €109 million (non-IFRS) is included in Other operating income/expense, net.

(M) Share Based Payments

Starting in 2022, most of the granted share units under the Move SAP plan will vest after a waiting period of six months and ratably thereafter for ten quarters. Under our previous policy, we serviced obligations arising from the plan with cash payments, but we have since decided to settle future share units predominantly in shares.

In the full year 2022, we granted 18.4 million (full year 2021: 12.2 million) share units. This includes 15.6 million (full year 2021: 0) share units which we intend to settle in shares. In the full year 2022 we delivered 3.3 million treasury shares (full year 2021: 0) to settle share units. The dilutive effect of outstanding equity-settled share units is reflected in the calculation of earnings per share, diluted.

Obligations from outstanding share units granted before 2022 under the Move SAP plan will continue to be settled in cash and the settlement methods of SAP's other plans remain unchanged.

Under the Own SAP plan, employees can purchase, on a monthly basis, SAP shares without any required holding period. As part of SAP's 50th anniversary celebration SAP's contribution was doubled from 40% to 80% from January to March 2022. The number of shares purchased by our employees under this plan was 9.0 million in the full year 2022 (full year 2021: 5.7 million).

(N) Qualtrics Goodwill

During the fourth quarter the stock price of Qualtrics International Inc. remained on a similar level compared to the third quarter. We closely monitor the impairment risks and potential triggering events for the Qualtrics segment. While we note the decline of the stock price in 2022 as one aspect in our holistic assessment, we did not evaluate it to be the sole indicator that could imply a triggering event.

Share price fluctuations will be closely monitored and assessed continuously in future quarters.

(O) Factors impacting our Cost of Cloud

Several factors positively contributed to an increased efficiency of our cloud delivery operations in 2022. This enabled us to implement a reorganization within our customer success organization, under which cloud delivery resources were re-allocated to sales roles focused on the implementation of our LACE (land-adopt-consume-expand) strategy. This reorganization reduced the 2022 cost of cloud and as a consequence increased sales and marketing expenses by approximately €40 million.

Starting January 1, 2023, all activities related to changes in the code of our cloud and on-premise solutions will be considered development-related activities. Some of those activities, specifically code corrections, were previously considered support-related activities. This change implies an update of our cost allocation policy, resulting in an increase of the cloud gross margin by 0.5 to 1.0 percentage points and an increase of the software license and support gross margin by approximately 2 percentage points. It also implies an increase of our R&D ratio, defined as R&D expenses divided by total revenue, by approximately 1 percentage point.

We believe this update aligns our accounting policy with market standards and increases comparability to our peers.

In 2023, this adjustment is expected to decrease cost of cloud by approximately €100 million and cost of support by approximately €300 million, while in consequence increasing our R&D expense by approximately €400 million.

Had we applied this accounting policy in 2022, our cost of cloud, cost of software licenses and support and R&D expense would have been as follows:

€ millions	IFRS					Non-IFRS				
	Q1	Q2	Q3	Q4	FY 2022	Q1	Q2	Q3	Q4	FY 2022
Cost of cloud	-879	-900	-970	-1,015	**-3,765**	-826	-837	-908	-951	**-3,522**
Cost of software licenses and support	-347	-339	-341	-358	**-1,385**	-333	-316	-319	-334	**-1,303**
Research and development expenses	-1,518	-1,649	-1,675	-1,721	**-6,563**	-1,413	-1,461	-1,511	-1,521	**-5,906**

Due to rounding, numbers may not add up precisely.