Notes to the Consolidated Financial Statements

General

[1] BASIS OF PRESENTATION

Software AG's Consolidated Financial Statements are prepared in accordance with the International Accounting Standards Board (IASB), International Financial Reporting Standards (IFRS) as applicable in the European Union (EU), and in accordance with the additional provisions required under German commercial law as set forth in section 315e(1) of the German Commercial Code (HGB). The IFRS and interpretations applicable as of December 31, 2022, were observed.

Software AG is a registered stock corporation under German law with registered offices in Darmstadt (Uhlandstraße 12, 64297 Darmstadt, Germany). It is listed in the commercial register of the Darmstadt District Court under number HRB 1562. It is the principal parent company of a Group that is globally active in the fields of software development, licensing and maintenance, as well as IT services.

Software AG's Management Board prepared the Consolidated Financial Statements on March 8, 2023. The Audit Committee of Software AG intends to discuss the Consolidated Financial Statements in its meeting scheduled for March 22, 2023; they should be approved by the Supervisory Board on the same date.

Unless otherwise stated, the Consolidated Financial Statements are expressed in thousands of euros; the functional currency of Software AG is the euro. The figures presented in the report were rounded according to customary business practice. In some cases, rounding could mean that values in this report do not add up to the exact sum given or percentages do not equal the values presented.

The separate financial statements of the companies of the consolidated Group were prepared on the date of the Consolidated Financial Statements.

The mandatory statements on the German Corporate Governance Code pursuant to section 161 of the German Stock Corporation Act (AktG) have been submitted and made available to shareholders on the corporate website.

[2] ACCOUNTING POLICIES

USE OF ESTIMATES

In the preparation of the Consolidated Financial Statements, estimates and assumptions are made for certain items that have an impact on the recognition and measurement of recognized assets, liabilities, income, expenses, and contingent liabilities. These estimates and assumptions are based on historical data and are reviewed on an ongoing basis. Actual amounts may differ from the estimates made. The primary areas of application for estimates and assumptions are revenue recognition, accounting of business combinations, subsequent measurement of goodwill and other intangible assets, accounting of share-based remuneration, assessment of legal risks, valuation of pension obligations, valuation of trade receivables, and accounting of income and deferred tax.

Society, politics, and business are currently facing complex macroeconomic challenges such as the rise in energy prices, the shortage of energy in general, the ongoing high rate of inflation, interest rate hikes, depreciation of the euro, geopolitical tensions, and the war in Ukraine. This is causing widespread uncertainty with regard to global economic development. Software AG is continuously addressing these challenges and accounted for them in the Consolidated Financial Statements, e.g., in determining the recoverability of goodwill and measuring provisions and financial instruments.

No significant adjustments to the carrying amounts of recognized assets and liabilities were made in 2022 in connection with the war in Ukraine. Risks associated with the geopolitical situation were given particular consideration through an asset and liability analysis as well as the recognition of impairments. Software AG does not have research locations in Ukraine or in Russia. Possible further sanctions as well as the exchange rates of the respective local currencies may negatively impact sales and service activities. The associated risks are monitored continuously.

PRINCIPLES OF CONSOLIDATION

The separate financial statements of the entities included in the Consolidated Financial Statements were prepared in accordance with uniform accounting policies pursuant to IFRS as of the date of the Consolidated Financial Statements (December 31, 2022). The initial consolidation method applied to business combinations was based on the relevant founding date in the case of companies founded by Software AG and the date of acquisition in the case of acquired companies.

Revenue, income and expenses, and receivables and payables arising between consolidated entities have been eliminated. Intra-Group earnings are eliminated where they have not arisen from services to third parties. Group equity and net income attributable to minority interests are reported separately from equity and net income attributable to the shareholders of the parent company.

BUSINESS COMBINATIONS

All business combinations are recognized according to the purchase method. For every transaction, Software AG decides whether it recognizes the non-controlling interest in the acquired company at fair value or based on the corresponding share of identifiable net assets.

CURRENCY TRANSLATION

Financial statements of foreign subsidiaries are translated in accordance with the functional currency concept using the modified closing rate as per IAS 21. Since the subsidiaries operate independently from an organizational, financial, and business standpoint, the respective local currency is usually identical with the functional currency.

Income and expenses are translated at the relevant monthly average rate, assets and liabilities are translated at the closing rate on the balance sheet date, and the respective equity of the subsidiaries is translated at historical rates into euros.

Currency translation differences arising from equity consolidation are offset against equity and reported in a separate column in the Consolidated Statement of Changes in Equity.

In the schedule of changes in property, plant, and equipment, the balances at the beginning and the end of the fiscal year are translated at the applicable closing rates, and other items are translated at average rates. Any differences arising from exchange rate fluctuations are reported as currency translation differences as a separate line item under cost and accumulated depreciation.

In the separate financial statements of the consolidated entities, foreign currency receivables and payables are translated at the closing rate. Exchange rate gains and losses not yet realized as of the balance sheet date are included in profit or loss for the period, except for translation differences arising from non-current, intra-Group monetary items that are part of a net investment in a foreign company. These differences are recognized directly in equity under other reserves.

Software AG considers Venezuela, Argentina, and Turkey as hyperinflationary economies as defined by IAS 29. This had no material impact on the Consolidated Financial Statements.

The exchange rates used for the translation of the most important currencies changed as follows compared to the previous year:

Closing Rate

€1	Dec. 31, 2022	Dec. 31, 2021	Change as %
US dollar	1.0666	1.1326	5.8
Brazilian real	5.6386	6.3101	10.6
Pound sterling	0.8869	0.8403	-5.5
Australian dollar	1.5693	1.5615	-0.5
Israeli shekel	3.7554	3.5159	-6.8
South African rand	18.0986	18.0625	-0.2
Canadian dollar	1.4440	1.4393	-0.3

Average Rate

€1	Dec. 31, 2022	Dec. 31, 2021	Change as %
US dollar	1.0539	1.1835	11.0
Brazilian real	5.4433	6.3812	14.7
Pound sterling	0.8526	0.8600	0.9
Australian dollar	1.5174	1.5747	3.6
Israeli shekel	3.5360	3.8242	7.5
South African rand	17.2094	17.4800	1.5
Canadian dollar	1.3703	1.4835	7.6

TOTAL REVENUE

The following accounting policies for recognition of revenue (in accordance with IFRS 15) apply:

CATEGORIES OF SALES REVENUE

Software AG sales revenue consists primarily of revenue from granting term or perpetual software licenses, revenue from Software as a Service (SaaS) offerings, maintenance revenue, and revenue from services. These categories of sales revenue also reflect the impact of economic factors on type, amount, date, and uncertainty of revenue and cash flows.

Conversion from perpetual to term software licenses (subscription resets) is possible under certain conditions. These conditions include the irrevocable surrender of perpetual software licenses, the acquisition of new software licenses, and complete transparency of the software license agreement's price structure. Consequently, upon effectiveness of this agreement, the perpetual rights of use are terminated and the associated maintenance agreement ends; a contract granting term-based rights of use together with the associated maintenance services (subscription) begins. The license and maintenance shares are separated in accordance with the approach described in Division of Transaction Price; and the license and maintenance revenues are recognized as described in Recognition of Sales Revenue.

IDENTIFICATION OF THE CONTRACT

A contract is an agreement between two or more parties that establishes enforceable rights and obligations and determines that enforceability is a question of law. Software AG enters written agreements only. Agreements must be signed by both parties within a reporting period to be able to recognize revenue in that period. Revenue resulting from an agreement signed at a later point in time is recognized in the period in which the agreement was signed.

Revenue from an agreement which grants the customer the right to terminate with no resulting materially disadvantageous payments, is only recognized in the period that is not subject to the termination right.

With respect to business with resellers, a contract exists only if the existence of an agreement between the reseller and an end user (end-user agreement) can be verified and all other criteria for revenue recognition are met.

IDENTIFICATION OF PERFORMANCE OBLIGATIONS

Software AG's contracts with customers often include various products and services. The products and services described in the last section, Categories of Sales Revenue, are usually to be treated as separate contractual performance obligations. The relevant portion of the contractual price is recognized separately. The determination as to whether a product or a service is treated as a separate contractual performance obligation nevertheless requires judgment to be exercised.

When customers purchase products or services, Software AG sometimes offers them options for buying additional products or services. Software AG exercises its own judgment when determining whether such options give the customer a substantive right that it would not have without signing this agreement. In making this determination, the Company considers whether the options entitle the customer to a discount that is greater than the discount provided with the relevant products or services sold with the option.

DETERMINATION OF TRANSACTION PRICE

Software AG also exercises judgment when determining the consideration it expects to receive in exchange for the transfer of products or services to a customer. This includes estimations as to whether and to what extent the customer is entitled to subsequent concessions or payments and whether the customer will pay the contractually agreed consideration as expected. In this exercise of judgment, primarily previous experiences with a specific or a comparable customer are considered. These estimates are reviewed every balance sheet date. Software AG's contracts generally do not contain variable considerations. There may, however, be individual cases when retrospective adjustments are made to the transaction price, which must be recognized as revenue corrections on the date they were made.

Software AG recognizes financing elements when the period of time between the transfer of purchased products or services to the customer and payment of these products or services by the customer is at least one year.

DIVISION OF TRANSACTION PRICE

The transaction price is generally divided between the individual contractual performance obligations based on the individual sales prices.

Reliable individual sales prices result when comparable services were sold to other customers at comparable prices, in particular when it comes to maintenance services.

Perpetual software licenses are often sold in combination with maintenance and service contracts. In this case, when an agreement involves multiple elements, revenue recognition is based on the individually identifiable performance obligations of the transaction. Because it is impossible to calculate reliable individual sale prices for software licenses, revenue is divided between the different revenue types using the residual method. Under the residual method, all determinable individual sale prices are deducted from the total transaction value, and the residual amount is distributed among the software licenses using list prices.

Term software licenses are often sold in combination with maintenance services (subscriptions). The Company exercises its own judgment in dividing the transaction price between performance obligations. Valuation of the maintenance portion is based on the valuation of maintenance services sold together with perpetual software licenses. The average term of these subscription agreements is currently three years. If term software licenses are sold in combination with services, the transaction price to be allocated to the term software licenses is determined according to the residual method, i.e. the price of the individual services is deducted from the total contract value.

RECOGNITION OF SALES REVENUE

Software AG accounts for revenue from SaaS based on time elapsed during the period in which the relevant services are rendered.

Software AG recognizes revenue for these on-premises licenses as of the date on which the customer receives access to and thus control over the software. When deciding whether software offerings grant customers the right to use Software AG's intellectual property and not the right to access its intellectual property, the usefulness of its software for customers—without subsequent updates—is considered.

Maintenance revenue is recognized proportionately over the term of the maintenance contract period.

Revenue resulting from services invoiced on the basis of hours performed is recognized according to services rendered by a Software AG entity. Revenues and expenses from fixed-price service contracts are recognized in accordance with the percentage-of-completion (PoC) method if Software AG's service generates an asset that does not provide Software AG with any alternative options for use and Software AG is legally entitled to payment for services already rendered. Should Software AG's service from a fixed-price contract generate or improve an asset and should the customer have control over the asset, the PoC method is also used for revenue recognition. The percentage of completion of a contract is calculated on the basis of the percentage of total estimated contract costs incurred for work performed as of the balance sheet date. Some of the costs for making this calculation are estimated using the expected number of consulting hours/consulting days.

Software AG's contracts generally do not contain withdrawal, reimbursement, or other similar obligations.

INCREMENTAL COSTS WHEN ACQUIRING NEW ORDERS

The assets that Software AG capitalizes as costs associated with acquiring a new customer order consist primarily of sales commissions. The assets are amortized over the expected contract term using the straight-line method. The amortization period is three years. The amortization of capitalized costs for the acquisition of new orders is included in sales, marketing, and distribution expenses.

Software AG recognizes incremental costs for acquiring new orders as expenses as of the date on which they are incurred when the amortization period is not assumed to be longer than one year.

COST OF SALES

The cost of sales comprises primarily personnel expenses, amortization of acquired intangible assets, and costs for services from third-party hosting providers.

RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses are recognized in the income statement as incurred.

New products are not technologically realizable until shortly prior to being ready for market launch. In the phase leading up to technological feasibility, research and development processes are closely linked. Therefore, the capitalization criteria for internally generated intangible assets are not considered to be met and expenses are recognized as research and development expenses when incurred.

SALES, MARKETING, AND DISTRIBUTION EXPENSES

Sales, marketing, and distribution expenses include costs for personnel, materials, write-downs allocated to the sales cost center, and marketing and advertising costs.

GENERAL AND ADMINISTRATIVE EXPENSES

General and administrative expenses include costs for personnel, materials, and write-downs allocated to the administration cost center.

GOVERNMENT GRANTS

Government grants are not recognized until there is reasonable assurance that the conditions attached to them will be complied with and that the grant will be received by Software AG. This is normally the case upon receipt of payment. Government grants are reported under other income.

If loans from the government are granted at an interest rate below the market rate, the interest-rate advantage is valued as the difference between the original carrying amount of the loan, calculated in accordance with IFRS 9, and the payments received. The interest-rate advantage is reported under other income, as soon as all conditions for receiving government grants have been met.

BORROWING COSTS

Borrowing costs that are directly attributable to the acquisition, construction, or production of a qualifying asset are capitalized as part of the cost of the asset. Other borrowing costs are recognized as an expense for the period in which they were incurred. No borrowing costs were capitalized in fiscal 2022 or 2021.

SHARE-BASED COMPENSATION

In accordance with IFRS 2, share-based payment transactions are generally divided into cash-settled and equity-settled transactions. Both types of payment transactions are measured at their fair value as of the grant date. The value is then recognized over the vesting period as remuneration expenses. Rights granted under cash-settled share-based payment transactions are remeasured at fair value on each reporting date until settlement. Fair values of the respective awards are calculated based on an option price model that factors in model-influencing option price parameters.

NON-DERIVATIVE FINANCIAL ASSETS

Software AG recognizes non-derivative financial assets as of the date it acquires the contractual right to receive cash or other financial assets from another entity. Standard purchases and sales are measured at fair value as of the value date.

Subsequent measurement is carried out based on the following categories of financial assets:

a) amortized cost (AC)
b) fair value through profit or loss (FVPL)
c) fair value through other comprehensive income (FVOCI)

Software AG classified its balance of equity securities at fair value through other comprehensive income. Software AG generally uses the option that allows it to classify each new equity security individually as fair value through other comprehensive income or fair value through profit or loss.

TRADE RECEIVABLES AND CONTRACT ASSETS

A contract asset is to be recognized if revenue has been recognized as a result of the fulfillment of a contractual performance obligation before the customer has made a payment or before the conditions for invoicing and thus for recognizing a receivable are present.

Trade receivables are classified based on the business model (hold-to-collect versus hold-to-sell). Receivables which are not intended for sale are measured at amortized cost. In general, receivables categorized as hold to collect and sell are recognized at fair value through other comprehensive income. However, if the deviations are immaterial, receivables categorized as hold to collect and sell can be also measured at amortized cost.

Software AG applies a simplified impairment model based on an impairment matrix. This impairment matrix is based primarily on historical data on credit losses and current data on receivables overdue.

Furthermore, outstanding receivables are monitored on an ongoing basis at local and central levels to determine if the relevant receivables show any objective indications of jeopardized creditworthiness. If, using this approach, Software AG arrives at the assumption that realization of a receivable is improbable, the receivables above the values in the impairment matrix are written down in part or in whole.

DERIVATIVE FINANCIAL INSTRUMENTS

If the derivative financial instruments are financial assets or financial liabilities in accordance with IAS 32, they are recognized at fair value. Instruments for which hedge accounting is not applied are classified as fair value through profit or loss. Changes in the fair value of the instruments are recognized directly in profit or loss.

If the criteria for hedge accounting in accordance with IFRS 9 are met, the derivative financial instrument is designated as a hedging instrument and accounted for in accordance with the hedge accounting provisions of IFRS 9.

Accordingly, in the case of cash flow hedges, the effective portion of changes in the fair value of derivatives is recognized directly in equity. The ineffective portion is recognized directly in profit or loss. Cumulative amounts previously recognized in equity are reclassified to the income statement for the fiscal years in which the hedged item affects profit or loss.

The Company did not recognize any fair value hedges.

DERECOGNITION OF FINANCIAL ASSETS

A financial asset (including trade receivables) is derecognized if any of the following criteria is met:

- The contractual rights to receive cash flows from the financial asset have expired.
- Software AG has transferred its contractual rights to receive cash flows from the financial asset to a third party or has assumed a contractual obligation to pay the cash flows immediately to a third party in connection with a "pass-through arrangement." Here, essentially all opportunities and risks related to ownership of the financial asset or the power of control over the asset must be transferred.

If Software AG transfers its contractual rights to receiving cash flows from the asset or enters a pass-through arrangement, Software AG evaluates if and to what extent it retains the opportunities and risks related to ownership. As part of the transfer or sale of trade receivables, the assessment of the related opportunities and risks primarily focuses on the credit risk associated with the receivables. If Software AG does not fully transfer or retain the opportunities and risks associated with ownership of this asset, Software AG continues to recognize the transferred asset according to the scope of its continuing involvement. In this case, Software AG also recognizes an associated liability. The transferred asset and the associated liability are recognized in such a way that accounts for the rights and obligations retained by Software AG. There were no agreements that led to Software AG's continuing involvement as of December 31, 2022.

NON-DERIVATIVE FINANCIAL LIABILITIES

In accordance with IFRS 9, Software AG classifies non-derivative financial liabilities at amortized cost or at fair value through profit or loss.

Subsequent measurement of financial liabilities classified at amortized cost is carried out using the effective interest method.

Financial liabilities are derecognized when the contractual obligation has been settled, canceled, or has expired.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash on hand, bank balances, and term deposits with maturities of up to three months as well as short-term, highly liquid securities classified as current assets that are readily convertible to known amounts of cash and are only subject to negligible risk of changes in value.

INTANGIBLE ASSETS

Intangible assets for which a useful life can be established are measured at cost less any accumulated amortization and impairment losses. The amortization period and method of amortization for key intangible assets are as follows:

	Amortization period in years	Method of amortization
Acquired software	5 to 12,5	straight line
Acquired customer base	5 to 17	straight line
Acquired brand name	10	straight line

Intangible assets with an indefinite useful life are measured at cost less any accumulated impairment losses. Intangible assets with an indefinite useful life are tested for impairment at least once per year. Or, as soon as there is any indication that goodwill might be impaired, an impairment test is carried out.

GOODWILL

Goodwill resulting from a business combination is recognized as an asset as of the acquisition date. Goodwill is not amortized. Instead, it is tested for impairment at least once per year (as of December 31) and written down to its recoverable amount in case of impairment. Or, as soon as there is any indication that goodwill might be impaired, an impairment test is carried out. Any impairment losses are reported directly in the income statement and cannot be recovered in the following period.

PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment are carried at cost less any accumulated depreciation. When items of property, plant, and equipment are sold or scrapped, the corresponding cost and any accumulated depreciation are derecognized, and any gains or losses from disposal are recognized in the consolidated income statement.

The cost of items of property, plant, and equipment consists of the purchase price, including any import duties and non-refundable purchase taxes, and any directly attributable costs required to prepare the asset for operation in its intended use. Any subsequent expenditure, such as service or maintenance charges arising once the asset has been put into operation, is recognized as an expense in the period in which it is incurred. Subsequent expenditures relating to an item of property, plant, and equipment are only capitalized if the expenditure improves the condition of the asset beyond its originally assessed standard of performance.

Items of property, plant, and equipment are generally depreciated using the straight-line method in accordance with their useful economic lives.

	in years
Buildings	25 to 50
Improvements to buildings/leasehold	5 to 15
Operating and office equipment	3 to 13
Computer hardware and accessories	1 to 7

Right-of-use assets are written down either over the term of useful economic life or the term of the lease—whichever is shorter. The terms of useful economic life and methods of depreciation are reviewed on a regular basis to ensure that they are in accordance with the expected pattern of economic benefits of the asset in question.

Assets under construction are recognized at cost. Depreciation on these items begins only after they have been put into operation.

IMPAIRMENT OF INTANGIBLE ASSETS AND PROPERTY, PLANT, AND EQUIPMENT

As soon as there is any indication that an intangible asset with a finite useful life or an item of property, plant, and equipment might be impaired, an impairment test is carried out and, if an impairment loss is ascertained, the carrying amount of the asset is written down to its lower recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell or its value in use. The value in use is the present value of estimated future cash flows expected to arise from the continued use of the asset and from its disposal at the end of its useful life. Impairment losses are reversed provided the reasons for a previously scheduled impairment no longer exist. Impairment losses are reported under costs of the relevant functional area or under other expenses.

INVESTMENT PROPERTY

Property is recognized under investment property when it is for the purpose of generating rent income and/or value appreciation. Like property, plant, and equipment, investment property is measured in accordance with the cost model: at cost or cost of sales, less depreciation and, if relevant, the necessary impairments. The owned investment property is generally depreciated—like other property, plant, and equipment—on a straight-line basis over 25 to 50 years.

LEASES

Leases are agreements whereby the lessor transfers the right to use an identified asset to the lessee for a defined period of time and in exchange for payment of a fee.

Software AG as lessee recognizes right-of-use assets for leased objects and liabilities for the assumed payment obligations in the amount of the present value of future lease payments.

As of the beginning of use, Software AG recognizes all leases as right-of-use assets and lease liabilities in the balance sheet in the amount of the present value of the future lease payments.

Lease payments are all fixed payments less future incentive payments by the lessor.

The following additional types of payments are recognized:

- variable payments that are coupled to a rate or index
- expected payments from residual value guarantees
- payments to exercise, secure, buy, or terminate options
- contractual penalty payments for termination of a lease if the assumed lease term provides for the exercise of a termination option

The series of payments is discounted at an incremental borrowing rate appropriate to the lease, since the implicit interest rate of the lease is not usually known.

When determining lease length, consideration is given to any facts and circumstances that offer an economic incentive to exercising existing options. The assumed term thus includes periods covered by extension options if sufficient certainty exists that the option will be exercised. A change to the term is considered if the sufficient certainty of exercise or non-exercise of an existing option changes.

DEFERRED TAXES

Deferred tax assets and liabilities are recognized for temporary differences between the carrying amounts in the tax base and the carrying amounts in the Consolidated Balance Sheet. Deferred tax assets also include claims for tax reductions resulting from the anticipated use of tax loss carryforwards in subsequent years, the realization of which is deemed probable.

Deferred taxes are calculated on the basis of tax rates anticipated to apply in the relevant countries in accordance with the legal situation prevailing at the time of realization (reversal of tax deferrals).

Deferred tax assets and liabilities are not discounted. The carrying amounts of the recognized assets and liabilities are regularly examined and adjusted if necessary.

OTHER PROVISIONS

Other provisions are reported when the Company has a current legal or constructive obligation towards a third party due to a past event that is likely to result in a future outflow of resources and for which the amount of the obligation can be reliably estimated. Estimates are regularly reviewed and adjusted.

If the effect of discounting is significant, the provision is recognized in the amount of the present value of the expected future cash flows.

PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

The present value of pension obligations for defined benefit plans and the associated expenses are determined using actuarial principles in accordance with the projected unit credit method set out in IAS 19 (revised in 2011, IAS 19R). This approach takes into account anticipated future increases in pensions and salaries in addition to the pensions known as of the balance sheet date.

The pension provisions are reported at the full present value of the defined obligation, less the fair value of the reinsurance cover taken out for life insurance policies—provided they are pledged and thus protected from access by other creditors—or less the fair value of the plan assets accumulated to cover pension entitlements. Net assets to be recognized are reported separately as pension assets under non-financial assets. The interest from the interest cost on the claims is reported in net financial income/expenses. The result of the recalculated net obligation is recognized as other comprehensive income in the Statement of Comprehensive Income. It is comprised of actuarial gains and losses, the return on plan assets, and changes in the effects of the asset cap less amounts previously recognized as net interest.

Payments for defined contribution pension plans are recognized as expenses in profit or loss for the period provided the employee has met the stated performance target.

CONTRACT LIABILITIES

Contract liabilities consist of advance payments received and due from customers for services to be rendered in future periods, particularly in connection with maintenance and SaaS agreements. The reversal in profit or loss takes place in the period in which the service is rendered.

TREASURY SHARES

The amount paid for treasury shares, including directly attributable costs, is deducted from shareholders' equity. Treasury shares are reported as a separate item in the equity statement.

COMPOUND FINANCIAL INSTRUMENTS

Compound financial instruments relate to convertible bonds denominated in euros that can be converted to new no-par value registered Software AG shares by the holder at a fixed price. They are divided into a debt component (financial liability) and an equity component (capital reserves).

The debt component is measured when issued at the fair value of an otherwise comparable financial liability without conversion rights. Subsequent measurement is carried out using the effective interest method. The resulting interest expense is recognized in net financial income/expenses. When converted upon maturity, the debt component is reclassified to equity.

The value of the equity component is the difference between the fair value of the total compound financial instrument and the debt component. Subsequent measurement is not necessary.

Directly attributable transaction costs are divided proportionately between the two components. If they are attributable to the debt component, they are factored into the effective interest method. The portion attributable to the equity component is deducted from equity.

NEW ACCOUNTING RULES TO BE APPLIED STARTING IN THE FISCAL YEAR

Software AG applied the amendments to IFRS 3, IAS 16, and IAS 37 as well as the amendments from the IASB's Annual Improvement Project 2018—2022 for the first time as of January 1, 2022. None of these changes led to a significant impact on the Consolidated Financial Statements.

PUBLISHED BUT NOT YET APPLICABLE ACCOUNTING RULES

The IASB has published various standards, interpretations, and amendments to standards that are not yet required to be applied and with regard to which Software AG has not opted for early application to the Consolidated Financial Statements for the year ended December 31, 2022. However, Software AG does not expect these future changes to have a significant impact on its Consolidated Financial Statements.

[3] SCOPE OF CONSOLIDATION AND INVESTMENTS

CHANGES IN THE SCOPE OF CONSOLIDATION

The scope of consolidation changed in fiscal years 2022 and 2021 as follows:

	Germany	Foreign	Total
Dec. 31, 2020	**10**	**65**	**75**
Additions	0	0	0
Disposals (including mergers)	-1	-1	-2
Dec. 31, 2021	**9**	**64**	**73**
Additions	0	4	4
Disposals (including mergers)	-1	-4	-5
Dec. 31, 2022	**8**	**64**	**72**

The disposals in 2022 resulted from the merger of a company in the USA, the closure of three companies, and the sale of a shareholding in FACT Informationssysteme und Consulting AG, Neuss, Germany (FACT). The additions resulted from the purchase of three StreamSets companies (refer to Business Combinations) and one newly established company in Egypt.

The Consolidated Financial Statements include Software AG and all of the entities it controls. Control exists when Software AG can exercise power of control over the entity, is impacted by fluctuating returns on its share in the entity, and can influence the amount of the returns.

The following affiliated entities were part of the Group of Software AG (parent company) during the fiscal year:

a) Domestic entities	Ownership interest as %	Equity[1] Dec. 31, 2022 in € thousands	Earnings[1] 2022 in € thousands
SAG Deutschland GmbH, Darmstadt, Germany[2]	100	65,923	-2,034
Cumulocity GmbH, Düsseldorf, Germany[2]	100	9,940	92
FACT Unternehmensberatung GmbH, Darmstadt, Germany	100	3,752	12,968
SAG Consulting Services GmbH, Darmstadt, Germany[2]	100	1,846	499
SAG Cloud GmbH, Darmstadt, Germany	100	1,039	537
itCampus Software- und Systemhaus GmbH, Leipzig, Germany	100	971	143
SAG LVG mbh, Darmstadt, Germany[2]	100	959	0
FACT Informationssysteme und Consulting AG, Neuss, Germany (sold as of September 14, 2022)	55	0	0

[1] The figures specified are based on unconsolidated IFRS figures. Equity is translated into euros at the closing rate and earnings at the average exchange rate for the year.
[2] A profit transfer agreement exists for these companies; the earnings shown related to IFRS earnings after profit transfer.

b) Foreign entities	Ownership interest as %	Equity[1] Dec. 31, 2022 in € thousands	Earnings[1] 2022 in € thousands
Software AG USA, Inc., Reston, VA, USA	100	727,165	76,824
Software AG, Inc., Reston, VA, USA	100	426,640	107,589
Software AG (UK) Limited, Derby, United Kingdom	100	72,833	20,462
Software AG ESPAÑA, S.A. Unipersonal, Tres Cantos, Madrid, Spain	100	69,187	5,488
S.P.L. Software Ltd, OR-Yehuda, Israel	100	66,692	10,885
Software AG Australia Pty. Ltd., North Sydney, Australia	100	58,466	3,788
Software AG Government Solutions, Inc., Herndon, VA, USA	100	35,800	7,259
Software A.G. (Israel) Ltd., OR-Yehuda, Israel	100	30,016	4,383
Software AG France S.A.S., Paris La Défense Cedex, France	100	29,056	1,961
Software AG Bangalore Technologies Private Ltd., Devarabisanahalli Bangalore, India	100	25,567	6,591
Software AG (Canada) Inc., Kitchener, Ontario, Canada	100	22,945	10,074
Software AG South Africa (Pty) Ltd, Magaliessig Sandton, South Africa	100	18,010	4,020
Software AG Nederland B.V., Den Haag, Netherlands	100	14,641	54
Software AG Brasil Informática e Serviços Ltda, São Paulo, SP, Brazil	100	13,657	2,833
Software GmbH Österreich, Vienna, Austria	100	10,912	3,662
Software AG (Singapore) Pte LTD, Singapore	100	9,866	1,056
Software AG Distribution LLC, Reston, VA, USA	100	8,629	51,282
Software A.G. Argentina S.R.L., Buenos Aires, Argentina	100	8,411	884
Software AG Belgium S.A., Watermael-Boitsfort, Belgium	100	8,394	882
SAG Software Systems AG, Zurich, Switzerland	100	8,200	3,328
Software AG Denmark A/S, Hvidovre, Denmark	100	6,632	137
Software AG Polska Sp. z o.o., Warsaw, Poland	100	4,505	1,301
PT Software AG Indonesia Operations, Jakarta, Indonesia	100	3,910	1,401
Software AG (India) Sales Private Limited, Bangalore, Karnataka, India	100	3,682	-202
Software AG, S.A. de C.V. (Mexico), Distrito Federal, Mexico	100	3,658	1,123
Software AG Development Center Bulgaria EOOD, Sofia, Bulgaria	100	3,607	1,518
Software AG Chennai Development Center India Pvt. Ltd, Chennai, India	100	3,451	589
Software AG (Gulf) W.L.L., Manama, Bahrain	100	2,818	-1,740
Software AG Operations Malaysia Sdn Bhd., Selangor, Malaysia	100	2,617	100
Software AG International FZ-LLC, Dubai, United Arab Emirates	100	2,201	-2,591
SGML Technologies Limited, Derby, United Kingdom	100 inactive	1,984	0
Software AG for Information Technology LLC, Riad, Saudi Arabia (formerly: Alfabet Saudi Arabia LLC)	100	1,982	1,715
Software AG Finland Oy, Helsinki, Finland	100	1,969	177
Software AG Sweden AB, Kista, Sweden	100	1,863	403

[1] The figures specified are based on unconsolidated IFRS figures. Equity is translated into euros at the closing rate and earnings at the average exchange rate for the year.

b) Foreign entities	Ownership interest as %	Equity[1] Dec. 31, 2022 in € thousands	Earnings[1] 2022 in € thousands
Software AG Bilgi Sistemleri Ticaret A.S., Istanbul, Turkey	100	1,764	-233
Software A.G. (Portugal) Alta Tecnologia Informática, Ltd., Lisbon, Portugal	100	1,723	302
StreamSets Technologies Iberica, S.L.U., Barcelona, Spain (acquired on April 18, 2022)	100	1,721	727
Limited Liability Company Software AG (RUS), Moscow, Russia	100	1,640	-823
Software AG Korea, Ltd., Seoul, South Korea	100	1,613	130
Software AG De Puerto Rico, Inc., San Juan, Puerto Rico	100	1,578	250
SAG Software AG Luxembourg S.A., Luxembourg, Luxembourg	100	1,191	166
Software AG (Philippines), Inc., Makati City, Philippines	100	992	82
Software AG Development Centre Slovakia s.r.o., Košice, Slovakia	100	697	116
Software AG Italia S.p.A, Milan, Italy	100	565	-892
Operadora JackBe, S. de R.L. de C.V., Mexico City, Mexico	100	510	-2
SAG SALES CENTRE IRELAND LIMITED, Dublin, Ireland	100	504	29
Software AG Ltd. Japan, Minato-ku, Tokyo, Japan	100	445	-1,683
StreamSets UK Limited, Derby, England (acquired on April 18, 2022)	100	388	114
Software AG Kochi Pvt. Ltd., Bangalore, Karnataka, India	100	274	7
Terracotta Software India Pvt. Ltd., Bangalore, Karnataka, India	100 inactive	125	3
IDS Scheer Sistemas de Processamento de Dados, São Paulo, Brazil (in liquidation)	100	37	-2
Software AG (India) Private Limited, Bangalore, India	100	19	6
Software AG Sydney PTY LTD, North Sydney, Australia	100 inactive	0	0
TrendMiner Inc., Houston, Texas, USA (liquidated as of January 21, 2022)	100 inactive	0	0
Software AG Nordic A/S, Oslo, Norway (liquidated as of January 14, 2022)	100 inactive	0	0
PCB Systems Limited, Derby, United Kingdom	100 inactive	0	0
Software AG de Costa Rica, S.A., San José, Costa Rica (liquidated as of September 29, 2022)	100	0	0
A. Zancani & Asociados, C.A., Chacao Caracas, Venezuela	100 inactive	0	0
SAG Egypt for Information Technology, Cairo, Egypt (founded on December 25, 2022)	100	0	0
Software AG CLOUD APJ PTY LTD, North Sydney, Australia (liquidated as of December 18, 2022)	100	0	0
Software AG Cloud Americas Inc., Wilmington (New Castle), USA (merged with Software AG USA Inc. as of June 30, 2022)	100	0	0
Software AG Factoria S.A., Santiago de Chile, Chile	100	-3	0
Software AG Venezuela, C.A., Caracas, Venezuela	100	-3	-4
Software AG De Panamá, S.A., Corregimiento de Pueblo nuevo, Panama	100	-843	-25
Software AG (Hong Kong) Limited, Hong Kong, China	100	-4,973	-728
Software AG China Ltd., Shanghai, China	100	-9,696	-2,229
TrendMiner N.V., Hasselt, Belgium	100	-13,903	-6,366
Software AG Australia (Holdings) Pty. Ltd., North Sydney, Australia	100	-21,343	8,374
StreamSets, Inc., Wilmington, USA (acquired on April 18, 2022)	100	-39,741	-47,444

[1] The figures specified are based on unconsolidated IFRS figures. Equity is translated into euros at the closing rate and earnings at the average exchange rate for the year.

BUSINESS COMBINATIONS

Acquisition of StreamSets

On April 18, 2022, Software AG acquired 100 percent of the shares in StreamSets, Inc. (StreamSets), a provider of business-to-business software solutions for data integration, to expand the existing product portfolio especially in hybrid integration. StreamSets' operating results as well as assets and liabilities are reflected in Software AG's Consolidated Financial Statements beginning on that date.

The following table shows the purchase price allocation in connection with the acquisition of StreamSets as of the acquisition date:

in € thousands	2022
Consideration transferred in cash	**553,532**
Cash and cash equivalents	16,215
Intangible assets	163,675
Deferred tax receivables	24,536
Other identifiable assets[1]	6,959
Total identifiable assets	**211,385**
Contract liabilities	8,046
Deferred tax liabilities	45,936
Other identifiable liabilities	3,431
Total liabilities assumed	**57,413**
Net assets	**153,972**
= Goodwill	**399,560**

[1] Including acquired receivables at an estimated fair value of €3,827 thousand (consistent with gross contractual amounts).

Goodwill arising from the StreamSets acquisition is not deductible for tax purposes and consists largely of the acquired workforce's know-how and technical skills as well as the expected synergies, e.g. from the realization of cross-selling opportunities, the development and commercialization of combined software products, and economies of scale.

Software AG allocated goodwill arising from the acquisition of StreamSets to the Digital Business segment. For further information on Software AG's segments, please refer to Note [4].

Financial impact of the StreamSets acquisition on the Consolidated Financial Statements

The revenue and earnings contribution for StreamSets (including subsequent accounting of purchase price allocation effects and tax-related effects) recognized in the Consolidated Income Statement for the reporting period since the acquisition date are as follows:

in € thousands	2022 as reported	Of which StreamSets
Revenue	958,180	27,378
Net Income	19,247	-54,025

Had StreamSets been consolidated as of January 1, 2022, Software AG's estimated revenue for the reporting period would have been €964,378 thousand and estimated net income would have been €1,895 thousand. These amounts were calculated after applying Software AG's accounting policies and adjusting StreamSets' earnings to reflect significant effects from, for example:

- Additional write-downs that would have been charged assuming the fair value adjustment to intangible assets had been applied from January 1, 2022
- Cumulative effects of fair value adjustments on contract liabilities
- The borrowing costs on the funding levels and debt position of Software AG after the business combination
- Employee benefits
- Transaction costs incurred as part of the acquisition
- Related tax effects

These figures were prepared for comparative purposes only. The figures for revenue and net income are not necessarily indicative 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.

SALE OF AN AFFILIATED COMPANY

In connection with the sale of its 55 percent shareholding in FACT, an affiliated company, Software AG realized a gain on the disposal of €11,915 thousand in September 2022. The gain on the disposal is reported in the Consolidated Income Statement under other income. The sale led to the complete derecognition of the non-controlling interests previously reported in the balance sheet.

[4] SEGMENT REPORTING

NOTES ON SEGMENT REPORTING

Segmentation is in accordance with the internal control of the Group. Internal control focuses primarily on product revenue at constant currency for the two product segments. Margins and earnings are controlled largely at Group level. Software AG therefore reports on the following three segments:

- Digital Business (integration, business process management, and big data)
- Adabas & Natural (A&N: data management with the Adabas & Natural and CONNX product families)
- Professional Services (implementation of solutions in cooperation with customers and partners)

The segment contribution does not include the amortization expense associated with the purchase of intangible assets through acquisitions. This expense is therefore shown separately under reconciliation. This presentation corresponds with internal control and reporting lines (management approach). The majority of sales, marketing, and distribution expenses are classified based on revenue percentage. A focus on absolute earnings contributions therefore only makes sense in certain scenarios given the interdependency between the two product segments. Research and development expenses are assigned to the segments based on expense components directly attributable to the R&D department as well as the overhead coded to R&D. They have no direct impact on internal control.

The following table shows the segment data for the current and previous fiscal years:

Segment Report for Fiscal Years 2022 and 2021

	Digital Business			Adabas & Natural (A&N)		
in € thousands	2022 IFRS	2022 acc[1]	2021 IFRS	2022 IFRS	2022 acc[1]	2021 IFRS
Licenses from subscriptions	178,868	169,456	132,709	81,131	78,165	49,869
Maintenance from subscriptions	83,415	78,972	52,168	19,470	18,524	11,243
Perpetual maintenance	181,326	170,357	209,871	121,053	113,025	126,081
SaaS	75,844	71,629	44,136	0	0	2
Annual recurring revenue	**519,453**	**490,414**	**438,884**	**221,654**	**209,714**	**187,195**
Perpetual licenses	30,225	29,093	30,642	24,273	22,346	27,284
Product revenue	**549,678**	**519,507**	**469,526**	**245,927**	**232,060**	**214,479**
Services	0	0	0	0	0	0
Other	7	7	0	0	0	0
Revenue	**549,685**	**519,514**	**469,526**	**245,927**	**232,060**	**214,479**
Cost of sales	-77,772	-76,070	-62,500	-8,464	-8,074	-7,732
Gross profit	**471,913**	**443,444**	**407,026**	**237,463**	**223,986**	**206,747**
Sales, marketing, and distribution expenses	-284,259	-267,658	-231,129	-36,381	-34,199	-29,767
Segment contribution	**187,654**	**175,786**	**175,897**	**201,082**	**189,787**	**176,980**
Research and development expenses	-149,470	-143,373	-120,100	-31,917	-31,927	-31,080
Segment earnings	**38,184**	**32,413**	**55,797**	**169,165**	**157,860**	**145,900**
General and administrative expenses						
Other income						
Other expenses						
Other taxes						
Operating income						
Financing income						
Financing expenses						
Net financial income/expenses						
Earnings before income taxes						
Income taxes						
Net income						

[1] Items presented at constant currency are translated using monthly average rates from the previous year. Currency translation effects on balance sheet items related to intra-Group transactions are not taken into account in expenses.

Professional Services			Reconciliation		Total		
2022 IFRS	2022 acc¹	2021 IFRS	2022 IFRS	2021 IFRS	2022 IFRS	2022 acc¹	2021 IFRS
0	0	0	0	0	259,999	247,621	182,578
0	0	0	0	0	102,885	97,496	63,411
0	0	0	0	0	302,379	283,382	335,952
0	0	0	0	0	75,844	71,629	44,138
0	**0**	**0**	**0**	**0**	**741,107**	**700,128**	**626,079**
0	0	0	0	0	54,498	51,439	57,926
0	**0**	**0**	**0**	**0**	**795,605**	**751,567**	**684,005**
162,568	152,960	149,834	0	0	162,568	152,960	149,834
0	0	3	0	0	7	7	3
162,568	**152,960**	**149,837**	**0**	**0**	**958,180**	**904,534**	**833,842**
-127,853	-120,734	-108,612	-25,805	-9,983	-239,894		-188,827
34,715	**32,226**	**41,225**	**-25,805**	**-9,983**	**718,286**		**645,015**
-12,861	-12,106	-13,446	-8,475	-5,866	-341,976		-280,208
21,854	**20,120**	**27,779**	**-34,280**	**-15,849**	**376,310**		**364,807**
0	0	0	0	0	-181,387		-151,180
21,854	**20,120**	**27,779**	**-34,280**	**-15,849**	**194,923**		**213,627**
					-94,343		-82,807
					58,877		16,477
					-81,333		-25,224
					-2,483		-5,297
					75,641		**116,776**
					14,868		7,181
					-25,402		-6,164
					-10,534		**1,017**
					65,107		**117,793**
					-45,860		-33,449
					19,247		**84,344**

INFORMATION ON GEOGRAPHIC REGIONS

Revenue is distributed across geographic regions as follows (based on headquarters of the respective Group entity):

Geographic distribution of revenue

	2022			
in € thousands	**Germany**	**United States**	**Other countries**	**Software AG Group**
Licenses	53,817	92,018	168,662	314,497
Maintenance	48,005	146,352	210,906	405,264
SaaS	10,942	30,929	33,973	75,844
Services	27,912	38,968	95,689	162,568
Other	0	0	7	7
Total	**140,676**	**308,267**	**509,237**	**958,180**

	2021			
in € thousands	**Germany**	**United States**	**Other countries**	**Software AG Group**
Licenses	45,622	76,640	118,242	240,504
Maintenance	54,989	138,956	205,418	399,363
SaaS	8,627	12,817	22,694	44,138
Services	29,744	30,803	89,287	149,834
Other	0	3	0	3
Total	**138,982**	**259,219**	**435,641**	**833,842**

Countries included in "other countries" are presented separately once the revenue generated in the country in question reaches a significant level. Revenue generated in the USA was reported separately as it was greater than 10 percent of Group revenue. This revenue is generated in US dollars, so when comparing consecutive periods, exchange rate fluctuations should be considered.

NON-CURRENT ASSETS

Non-current assets include intangible assets, property, plant, and equipment, as well as financial investment property.

in € thousands	**2022**	**2021**
United States	1,120,094	563,722
Germany	400,537	416,002
Other countries	164,539	176,996
Software AG Group	**1,685,170**	**1,156,720**

Notes to the Consolidated Income Statement

[5] REVENUE

Revenue by segment and region is presented in the segment report in Note [4]. All revenue presented resulted solely from contracts with customers. Revenue in fiscal 2022 included €132,116 thousand (2021: €120,859 thousand) that was recognized as contract liabilities at the beginning of the period. Taking termination options into account, the transaction price allocated to the remaining performance obligations as of December 31, 2022, was €575,746 thousand (2021: €562,832 thousand).

Software AG anticipates recognition of the corresponding revenue over the following periods of time:

in € thousands	2023	2024	2025-2028
Anticipated revenue to be recognized	350,726	131,033	93,987

[6] OTHER INCOME

Other income includes the following items:

in € thousands	2022	2021
Foreign exchange gains	42,596	13,918
Gains on the disposal of the shareholding in FACT	11,915	0
Government grants in the form of low-interest-rate loans	2,300	1,809
Miscellaneous	2,066	750
	58,877	**16,477**

[7] OTHER EXPENSES

Other expenses consist of the following items:

in € thousands	2022	2021
Foreign exchange losses	37,183	13,523
Goodwill impairment losses	25,314	0
Expenses related to a new investor	0	5,832
Expenses arising from malware incident	0	4,418
Restructuring	6,200	0
Litigation	9,199	0
Miscellaneous	3,437	1,451
	81,333	**25,224**

For more information on expenses in connection with the legal risks and corresponding provisions, please refer to Notes [24] and [32]. For more information on goodwill impairment losses, please refer to Note [17]. Provisions for restructuring only include expenses directly attributable to restructuring measures. This relates primarily to expenses for severance payments to employees and compensation payments in connection with early retirement programs.

[8] NET FINANCIAL INCOME/EXPENSES

Financial income includes interest income on financial assets in the amount of €13,180 thousand (2021: €5,726 thousand). Financial expenses include interest expenses on financial liabilities in the amount of €18,684 thousand (2021: €4,319 thousand).

[9] INCOME TAXES

Software AG's income taxes can be broken down by origin as follows:

in € thousands	2022	2021
Current domestic taxes	-3,954	-2,850
Current foreign taxes	-34,655	-36,286
	-38,609	**-39,136**
Deferred domestic taxes	-12,644	8,195
Deferred foreign taxes	5,393	-2,508
	-7,251	**5,687**
	-45,860	**-33,449**

In Germany, a uniform corporate income tax of 15 percent applies. Based on the average municipal trade tax collection rate and a solidarity surcharge of 5.5 percent on corporate tax, the income tax rate for German entities was 31.8 percent (2021: 31.8 percent) for 2022. Tax rates abroad ranged between 10 and 34 percent (2021: between 10 and 37.5 percent).

Expenses from deferred taxes totaled €7,251 thousand and included €5,402 thousand (2021: tax expenses of €2,828 thousand) in tax income relating to temporary differences that arose.

The income tax expense of €45,860 thousand for 2022 (2021: €33,449 thousand) is €25,136 thousand higher than the expected income tax expense of €20,724 thousand (2021: €37,494 thousand) that resulted from applying the applicable domestic tax rate of 31.8 percent (2021: 31.8 percent) at Group level. The Group's effective income tax rate is 70.4 percent (2021: 28.4 percent).

The difference between the expected and actual tax expense can be attributed to the following:

in € thousands	2022	2021
Earnings before income taxes	**65,107**	**117,793**
Expected income tax (31.8 percent; 2021: 31.8 percent)	-20,724	-37,494
Difference vs. foreign tax rates and changes in tax rates	9,830	9,756
Nonperiodic income tax effects	-655	1,733
Tax increases/decreases due to tax-exempt income or nondeductible expenses	-4,678	1,471
Adjustment of tax loss carryforwards and changes in valuation adjustments to deferred tax assets	-24,467	-5,936
Nondeductible or applicable foreign and withholding taxes	-5,166	-2,982
Other adjustments	0	3
Reported income tax expenses	**-45,860**	**-33,449**

Nonperiodic tax effects amounted to -€655 thousand (2021: €1,733 thousand) and included nonperiodic deferred income tax income of €315 thousand (2021: €860 thousand in income tax expenses).

Resulting from the change in income tax rates, a total negative effect of €241 thousand (2021: €1,776 thousand in positive effects) was included in difference vs. foreign tax rates and changes in tax rates in 2022. This is primarily due to Germany and the USA. Further adjustments to this item resulted from the difference between local tax rates applicable to Group entities (see above) and the Group tax rate of 31.8 percent (2021: 31.8 percent).

The item tax increases/decreases due to tax-exempt income or nondeductible expenses mainly includes the effects of the non-tax-deductible impairment of goodwill in the Professional Services segment (see Note [17]) and the tax-exempt income on the disposal of the shareholding in FACT in 2022 (see Note [3]).

A portion of Group deferred tax assets on loss carryforwards was not recognized in 2022 because the conditions for capitalization were no longer considered to be met. These effects are reported in adjustment of tax loss carryforwards and changes in valuation adjustments to deferred tax assets.

Expenses from deferred taxes decreased by €4,299 thousand (2021: €608 thousand) and the current tax expense by €0 thousand (2021: €461 thousand) in 2022 as a result of the reversal of loss carryforwards.

[10] OTHER TAXES

Other taxes of €2,483 thousand (2021: €5,297 thousand) decreased year-on-year by €2,814 thousand and include property taxes, vehicle taxes, and other indirect taxes.

[11] PERSONNEL EXPENSES

Personnel expenses in the fiscal years 2022 and 2021 were as follows:

in € thousands	2022	2021
Wages and salaries	514,540	447,917
Social benefits	67,611	59,951
Pension expenses	20,662	13,337
	602,813	**521,205**

In fiscal 2022, the average number of employees (part-time employees are taken into account on a pro rata basis only) by operational area was as follows:

	2022	2021
Support and Services	1,501	1,499
R&D	1,531	1,475
Sales and Marketing	1,117	1,043
Administration	759	701
	4,908	**4,718**

In absolute terms (part-time employees are counted in full), the Group employed 5,172 (2021: 5,001) people as of December 31, 2022.

[12] EARNINGS PER SHARE

Earnings per share are calculated based on the net income attributable to shareholders and a weighted average of the number of shares outstanding. The average weighted number of shares outstanding in 2022 remained unchanged from the previous year at 73,979,889.

The convertible bonds issued in the fiscal year (see Note [27]) had no dilutive effect in 2022. They are therefore not to be taken into account in calculating basic earnings per share. No other potential shares exist.

in € thousands	31.12.2022	31.12.2021
Net income	19,247	84,344
Less earnings attributable to non-controlling interests	-263	-482
Net income attributable to shareholders of Software AG	18,984	83,862
Weighted average number of shares outstanding (basic)	73,979,889	73,979,889
Weighted average number of shares outstanding (diluted)	73,979,889	73,979,889
Earnings per share in € (basic)	0.26	1.13
Earnings per share in € (diluted)	0.26	1.13

Notes to the Consolidated Balance Sheet

[13] OTHER FINANCIAL ASSETS

Other financial assets as of December 31 were as follows:

	Dec. 31, 2022			Dec. 31, 2021		
in € thousands	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Debt securities	0	0	0	17,645	0	17,645
Equity securities	0	370	370	0	4,724	4,724
Securities	2,234	911	3,145	2,477	1,092	3,569
Loans and other financial receivables	271	7,893	8,164	3,308	11,328	14,636
Derivatives	46	650	695	661	3,972	4,633
Total	**2,551**	**9,823**	**12,374**	**24,092**	**21,115**	**45,208**

For more information on the valuation of financial assets, please refer to Note [29].

[14] TRADE RECEIVABLES, CONTRACT ASSETS, AND OTHER RECEIVABLES

Trade receivables, contract assets, and other receivables as of December 31 were as follows:

	Dec. 31, 2022			Dec. 31, 2021		
in € thousands	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Trade receivables	160,780	10,273	171,053	132,205	7,842	140,047
Not yet settled or invoiced services (contract assets)	90,357	125,038	215,395	65,818	120,241	186,059
Other receivables	662	537	1,199	443	649	1,092
Total	**251,799**	**135,848**	**387,647**	**198,466**	**128,732**	**327,198**

Contract assets represent payments due from customers for underlying services that have been rendered by Software AG but, due to contractual provisions, will be invoiced later. They are reclassified to trade receivables when the invoice is issued.

Gross receivables and allowances for expected credit losses were as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Trade receivables, contract assets before allowances	389,196	327,736
Allowances for expected credit losses	2,748	1,630
Carrying amount	**386,448**	**326,106**

Write-downs of trade receivables and contract assets totaled €578 thousand in fiscal 2022.

The following trade receivables were not yet due or past due as of the balance sheet date:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Carrying amount	171,054	140,047
of which neither impaired nor past due as of the balance sheet date	129,337	117,791
of which past due in the following time periods as of the balance sheet date		
1 to 3 months	33,237	16,466
4 to 6 months	4,433	3,680
7 to 12 months	4,047	2,110
> 12 months	0	0

[15] OTHER NON-FINANCIAL ASSETS

Other non-financial assets can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2022
Asset surplus from defined benefit plans	33,225	0
Capitalized advance payments in connection with support, license, and rental contracts	29,145	19,787
Capitalized costs from acquisition of new customer orders (sales commission)	28,243	16,995
Capitalized advance payment in connection with the issue of convertible bonds	0	6,800
Receivables from finance authorities	10,906	2,134
Other	3,280	2,884
	104,799	**48,600**

[16] INCOME TAX RECEIVABLES

Tax receivables in the amount of €52.253 thousand (2021: €41,254 thousand) consist primarily of receivables due to refundable withholding taxes and advance payments made in relation to income taxes.

[17] INTANGIBLE ASSETS AND GOODWILL

Changes in intangible assets and goodwill as of December 31, 2022

in € thousands	Goodwill	Intangible assets	Total
Cost			
Balance as of Jan. 1, 2022	**988,036**	**536,620**	**1,524,656**
Currency translation differences	20,563	17,070	37,633
Additions from acquisitions	399,560	163,675	563,235
Additions	0	1,912	1,912
Disposals	0	-1,604	-1,604
Balance as of Dec. 31, 2022	**1,408,159**	**717,673**	**2,125,832**
Accumulated amortization			
Balance as of Jan. 1, 2022	**-1,900**	**-449,154**	**-451,054**
Currency translation differences	883	-12,560	-11,677
Additions	-25,314	-35,495	-60,809
Disposals	0	1,238	1,238
Balance as of Dec. 31, 2022	**-26,331**	**-495,971**	**-522,302**
Residual carrying amount as of Jan. 1, 2022	986,136	87,466	1,073,602
Residual carrying amount as of Dec. 31, 2022	1,381,828	221,702	1,603,530

Changes in intangible assets and goodwill as of December 31, 2021

in € thousands	Goodwill	Intangible assets	Total
Cost			
Balance as of Jan. 1, 2021	**949,270**	**507,859**	**1,457,129**
Currency translation differences	38,766	26,543	65,309
Additions	0	2,286	2,286
Disposals	0	-68	-68
Balance as of Dec. 31, 2021	**988,036**	**536,620**	**1,524,656**
Accumulated amortization			
Balance as of Jan. 1, 2021	**-1,900**	**-408,577**	**-410,477**
Currency translation differences	0	-23,148	-23,148
Additions	0	-17,495	-17,495
Disposals	0	66	66
Balance as of Dec. 31, 2021	**-1,900**	**-449,154**	**-451,054**
Residual carrying amount as of Jan. 1, 2021	947,370	99,282	1,046,652
Residual carrying amount as of Dec. 31, 2021	986,136	87,466	1,073,602

Intangible assets mainly include software, customer bases, and brand names obtained in connection with acquisitions.

The following significant intangible assets with indefinite useful lives existed as of December 31, 2022:

in € thousands	Carrying amount as of Dec. 31, 2022	Carrying amount as of Dec. 31, 2021	Reason for assuming indefinite useful life
Brand names (ARIS) obtained through IDS Scheer AG acquisition	17,900	17,900	Use and future expansion of the brand names is planned for an indefinite period of time.
Brand name (webMethods) obtained through webMethods acquisition	23,440	22,074	Use and future expansion of the brand name is planned for an indefinite period of time.

Brand names are not subject to amortization. They were allocated in full to the Digital Business segment as of December 31, 2022. Any changes in the carrying amounts result from currency translation effects.

The carrying amounts of goodwill were allocated to the segments as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Adabas & Natural (A&N)	332,795	337,360
Digital Business	1,049,033	624,515
Professional Services	0	24,261
Goodwill	**1,381,828**	**986,136**

Software AG's strategic partnership with Persistent Systems, a middleware implementation partner in North America, was expanded in the third quarter of 2022. As part of this expansion, Software AG Professional Services specialists were transferred to Persistent Systems with the goal of establishing a center of excellence. The new go-to-market strategy provides for close collaboration between the two partners in the North American market with Persistent Systems servicing a portion of the Professional Services business in the role of subcontractor through the center of excellence. This partnership will enable Software AG to focus on especially complex consulting projects as well as the core business. Due to the expected impact on future earnings in the Professional Services segment, Software AG tested the goodwill allocated to the Professional Services segment for impairment as of September 30, 2022, and determined a fair value of €27,656 thousand. This resulted in an impairment loss of €25,314 thousand in the fiscal year. The impairment loss is attributable in full to the goodwill of the Professional Services business line. This impairment test was conducted using a weighted average cost of capital (WACC) after taxes of 8.0 percent (2021: 8.8 percent) and a sustainable growth rate of 1 percent (2021: 1 percent). Largely constant revenue (2021: 1.5 percent average annual revenue growth) and a target EBITA margin (last year of the detailed planning period) of 2.5 percent (2021: 4.25 percent) were assumed in the detailed planning period.

The increase in goodwill in the Digital Business segment resulted primarily from the corporate acquisition of StreamSets (see Note [3]).

The segments represent the smallest cash-generating units in the Group. They represent the smallest identifiable group of cash inflow-generating assets which are largely independent of inflows from other assets.

Goodwill as well as intangible assets with an indefinite useful life are tested for impairment at least once per year.

The test consists of a comparison of the carrying amount of the cash-generating unit to which the goodwill or the intangible asset is allocated with the recoverable amount. Testing for impairment involves regularly checking the recoverable amount with regard to fair value less costs to sell.

Fair value less costs to sell is calculated using discounted cash flows which are calculated based on the medium-term budget approved by management. The budget covers a period of five years (2021: five). Budget planning for 2023 was largely carried out as in previous years. Revenue by segment and costs directly attributable to the segments are based on the segment budget planning. The non directly attributable costs are coded to the segments.

Planning incorporates past experience, insights on current operating results, and management estimates of future developments which are aligned with the assumptions market stakeholders would apply. Revenue trends at country level, for instance, is one element of management estimates of future developments that is particularly prone to uncertainty. This approach is rated as level 3 of the valuation hierarchy in accordance with IFRS 13.

The forecasts take into account historical values and estimates of future developments. Costs to sell are assumed to amount to 2 percent (2021: 2 percent) of the relevant fair value.

The expected cash flow for the A&N segment was calculated as described above and discounted using a post-tax WACC of 8.5 percent (2021: 6.8 percent). The sustainable growth rate was assumed to be -5 percent (2021: 0 percent). A nearly constant revenue level is assumed for the period of detailed planning. A perpetual annuity of -5 percent (2021: 0 percent, but a 20 percent discount on the last detailed planning year) was used to determine sustainable cash flow. But even using an additional discount of 90 percent on the sustainable cash flow, the fair value less costs to sell would slightly exceed the carrying amount.

A WACC after taxes of 9.3 percent (2021: 8.5 percent) and a sustainable growth rate of 1 percent (2021: 1 percent) were used for the Digital Business segment. An average annual revenue growth rate of approximately 12 percent (2021: 20 percent) was assumed in the period of detailed planning. Furthermore, an EBITA margin of -7 percent was assumed in the 2023 budget and an increase in EBITA margin of about 28 percent by 2027. But even given a target EBITA margin of 20 percent in 2027 or, alternatively, a reduction in revenue growth by 50 percent, the fair value less costs to sell would slightly exceed the carrying amount. Nor would an increase in WACC after taxes of 2 percentage points result in the need for impairment.

[18] PROPERTY, PLANT, AND EQUIPMENT

Changes in property, plant, and equipment as of December 31, 2022

in € thousands	Land and buildings	Operating and office equipment	Total
Cost			
Balance as of Jan. 1, 2022	**127,677**	**54,621**	**182,298**
Currency translation differences	1,422	276	1,698
Additions from acquisitions	617	331	948
Additions	7,360	15,054	22,414
Disposals	-11,236	-13,652	-24,888
Balance as of Dec. 31, 2022	**125,840**	**56,630**	**182,470**
Accumulated depreciation			
Balance as of Jan. 1, 2022	**-70,541**	**-34,880**	**-105,421**
Currency translation differences	-1,102	-327	-1,429
Additions	-10,740	-11,066	-21,806
Disposals	10,826	11,365	22,191
Balance as of Dec. 31, 2022	**-71,557**	**-34,908**	**-106,465**
Residual carrying amount as of Jan. 1, 2022	57,136	19,741	76,877
Residual carrying amount as of Dec. 31, 2022	54,283	21,722	76,005

Changes in property, plant, and equipment as of December 31, 2021

in € thousands	Land and buildings	Operating and office equipment	Total
Cost			
Balance as of Jan. 1, 2021	**134,000**	**50,016**	**184,016**
Currency translation differences	2,849	2,189	5,038
Additions	6,610	10,861	17,471
Disposals	-15,782	-8,445	-24,227
Balance as of Dec. 31, 2021	**127,677**	**54,621**	**182,298**
Accumulated depreciation			
Balance as of Jan. 1, 2021	**-71,191**	**-30,476**	**-101,667**
Currency translation differences	-2,162	-1,694	-3,856
Additions	-11,233	10,761	-21,994
Disposals	14,045	8,051	22,096
Balance as of Dec. 31, 2021	**-70,541**	**-34,880**	**-105,421**
Residual carrying amount as of Jan. 1, 2021	62,809	19,540	82,349
Residual carrying amount as of Dec. 31, 2021	57,136	19,741	76,877

Most of the land and buildings are owned by the parent company and the Spanish subsidiary. The properties pertain mainly to the central administrative buildings of these entities.

Operating and office equipment mainly includes office furniture and IT equipment. The capital expenditure of €15,054 thousand (2021: €10,861 thousand) primarily relates to the initial purchase of computer equipment. Property, plant, and equipment totaling €76,005 thousand (2021: €76,877 thousand) includes right-of-use assets arising from leases in the amount of €19,116 thousand (2021: €19,184 thousand).

[19] INVESTMENT PROPERTY

Changes in investment property as of Dec. 31, 2022

in € thousands	Investment property
Cost	
Balance as of Jan. 1, 2022	**10,233**
Currency translation differences	0
Additions	0
Disposals	0
Balance as of Dec. 31, 2022	**10,233**
Accumulated depreciation	
Balance as of Jan. 1, 2022	**-3,992**
Currency translation differences	0
Additions	-606
Disposals	0
Balance as of Dec. 31, 2022	**-4,598**
Residual carrying amount as of Jan. 1, 2022	6,241
Residual carrying amount as of Dec. 31, 2022	5,635

Changes in investment property as of Dec. 31, 2021

in € thousands	Investment property
Cost	
Balance as of Jan. 1, 2021	**10,233**
Currency translation differences	0
Additions	0
Disposals	0
Balance as of Dec. 31, 2021	**10,233**
Accumulated depreciation	
Balance as of Jan. 1, 2021	**-3,316**
Currency translation differences	0
Additions	-676
Disposals	0
Balance as of Dec. 31, 2021	**-3,992**
Residual carrying amount as of Jan. 1, 2021	6,917
Residual carrying amount as of Dec. 31, 2021	6,241

Due to local market developments in the rent price index, an external appraiser was contracted to determine the fair value of a property in Spain. Based on the outcome of the appraisal, an impairment loss in the amount of €364 thousand was recognized for the property in 2022. There was no indication of diminished usability for the remaining properties, for which reason their fair value only depreciated as scheduled.

The total fair value of investment property was €12 million (2021: €14 million) as of the balance sheet date. Rental income of €1,486 thousand (2021: €1,600 thousand) was generated from leasing these properties in 2022. Expenses arose in connection with this income (not including depreciation) in the amount of €554 thousand (2021: €838 thousand).

[20] DEFERRED TAXES

Deferred taxes were composed of the following as of the balance sheet date (before offsetting):

	Deferred tax assets		Deferred tax liabilities	
in € thousands	**Dec. 31, 2022**	**Dec. 31, 2021**	**Dec. 31, 2022**	**Dec. 31, 2021**
Intangible assets	4,629	4,882	59,995	23,696
Property, plant, and equipment	1,487	872	5,699	7,539
Receivables and financial assets	4,929	4,603	25,365	20,130
Other non-financial assets	0	0	16,311	7,283
Other obligations	20,843	17,567	3,859	3,015
Provisions for pensions and similar obligations	4,250	10,497	0	0
Liabilities	2,407	2,975	2,664	985
Tax loss/interest/R&D carryforwards / tax credits	41,734	31,422	0	0
Total	**80,279**	**72,818**	**113,893**	**62,648**
Amount offset	-71,222	-56,251	-71,222	-56,251
Amount recognized in the balance sheet	9,057	16,567	42,671	6,397

Deferred tax assets on tax loss/interest/R&D carryforwards and tax credits rose year-on-year by €10,312 thousand. The change resulted primarily from the initial consolidation relating to the StreamSets acquisition.

As of December 31, 2022, unused tax loss/interest and R&D cost carryforwards existed in the Group in the amount of €135,796 thousand, of which €2,878 thousand in interest carryforwards, of which €7,931 thousand in R&D cost carryforwards (2021: €52,307 thousand, of which €2,878 thousand in interest carryforwards), for which no deferred tax assets were recognized. The increase is mainly due to the fact that capitalization conditions for deferred tax assets on losses carried forward were no longer considered to be met in 2022.

If the loss/interest and R&D cost carryforwards could have been utilized in full, additional deferred tax assets would theoretically have had to be recognized in the amount of €39,421 thousand (2021: €16,402 thousand).

Of the losses carried forward for which no deferred taxes were recognized, €9,652 thousand will expire in the period from 2023 to 2026, €3,399 thousand in the following years, and €111,904 thousand can be utilized indefinitely.

As of year-end, deferred tax assets were recognized in the Consolidated Financial Statements in the amount of €650 thousand (2021: €9,012 thousand), which were attributable to companies that suffered losses in the current or previous period. Recognition of deferred tax assets depends solely on recognition of future taxable earnings that exceed the earnings effects from the reversal of existing taxable temporary differences. It is assumed that a tax advantage will be recognized due to planned future positive taxable earnings.

As of the balance sheet date, taxable temporary differences associated with investments in subsidiaries existed in the amount of €36,451 thousand (2021: €28,211 thousand), for which no deferred tax liabilities had been recognized.

Accumulated deferred taxes were offset against equity and resulted in income of €1,397 thousand (2021: €1,397 thousand). The amounts resulted from recognition of new accounting rules in equity which were applied for the first time.

Accumulated current taxes that were offset against equity resulted in expenses of €2,581 thousand (2021: €2,581 thousand) in 2022. The amounts resulted from recognition of translation currency effects in equity from loans to foreign operations.

[21] FINANCIAL LIABILITIES

Financial liabilities can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Current financial liabilities		
Liabilities to banks	14,558	75,998
Other current financial liabilities	8,641	8,676
Derivatives	8,689	192
	31,888	**84,866**
Non-current financial liabilities		
Convertible bonds	311,248	0
Liabilities to banks	309,827	
Other non-current financial liabilities	13,379	14,661
Derivatives	763	404
	635,217	**223,767**

Financial liabilities changed as follows:

in € thousands		Liabilities to banks	Financial liabilities	Lease liabilities (IFRS 16)	Derivatives	Total
	Balance as of Dec. 31, 2021	**284,700**	**561**	**22,776**	**596**	**308,633**
	Proceeds					
	New non-current financial liabilities, net	120,000	310,475			430,475
Changes in cash and cash equivalents	**Payments**					
	Repayment of current and non-current financial liabilities, net	-78,480				-78,480
	MIP hedge premium	-1,355				-1,355
	Repayment of lease liabilities			-11,968		-11,968
Changes in noncash items	**Changes from subsequent measurement**					
	Additions lease liabilities			9,632		9,632
	MIP hedge premium				8,336	8,336
	Accrued interest on leases			716		716
	Accrued interest on convertible bonds		773			773
	Other changes from measurement	-480	-437	740	520[1]	343
	Balance as of Dec. 31, 2022	**324,385**	**311,372**	**21,896**	**9,452**	**667,105**
	Total change +/−	**-39,685**	**-310,811**	**880**	**-8,856**	**-358,472**
			Thereof current financial liabilities			31,888
			Thereof non-current financial liabilities			635,217

[1] Changes in cash and cash equivalents are factored into the measurement.

For further information on convertible bonds issued in the fiscal year, please refer to Note [27].

in € thousands		Liabilities to banks	Financial liabilities	Lease liabilities (IFRS 16)	Derivatives	Total
	Balance as of Dec. 31, 2020	**230,621**	**1,153**	**27,152**	**1,008**	**259,934**
	Proceeds					
	New non-current financial liabilities, net	60,000				60,000
Changes in cash and cash equivalents	**Payments**					
	Repayment of current and non-current financial liabilities, net	-7,499				-7,499
	MIP hedge premium	-1,104				-1,104
	Capital increase ADAMOS		-936			-936
	Guarantees in connection with Sunshine		-90			-90
	Lease liabilities			-12,974		-12,974
Changes in noncash items	**Financial purchase of assets**					
	Capital increase ADAMOS		436			436
	Additions lease liabilities			7,274		7,274
	Financial purchase of derivatives					
	MIP hedge premium	2,097				2,097
	Measurement					
	Interest adjustment for government loans	539				539
	Accrued interest on leases			885		885
	Other adjustments	46	-2	439	-412[1]	71
	Balance as of Dec. 31, 2021	**284,700**	**561**	**22,776**	**596**	**308,633**
	Total change +/–	**-54,079**	**592**	**4,376**	**412**	**-48,699**
		Thereof current financial liabilities				84,866
		Thereof non-current financial liabilities				223,767

[1] Changes in cash and cash equivalents are factored into the measurement.

Liabilities to banks and other financial liabilities had the following maturities as of the reporting date:

in € thousands	Up to 1 year	>1 year
Loans with variable interest rates	0	100,000
Loans with fixed interest rates	14,558	521,075

The fair values of the liabilities to banks with variable interest rates are equal to their carrying amounts. The fair values of the liabilities with fixed interest rates amounted to €519,355 thousand (2021: €109,502 thousand). The fair values were calculated by discounting the future cash flows using current market rates.

[22] TRADE PAYABLES AND OTHER LIABILITIES

Trade payables and other liabilities can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Payables to suppliers	46,955	42,151
Advance payments received on orders	9,354	11,356
Other liabilities	1,171	253
	57,480	**53,760**

[23] OTHER NON-FINANCIAL LIABILITIES

Other non-financial liabilities can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Liabilities due to employees	106,775	105,238
Tax liabilities	20,148	21,394
Liabilities for social security	6,086	6,158
Remaining other current liabilities	5,894	6,662
	138,903	**139,452**

[24] OTHER PROVISIONS

Other provisions changed as follows:

in € thousands	Other personnel-related provisions	Miscellaneous other provisions	Total other provisions
Balance as of Jan. 1, 2022	**37,060**	**18,988**	**56,048**
Currency translation differences	33	-196	-163
Additions	11,040	11,839	22,879
Utilization	-12,689	-762	-13,451
Reversal	-71	-209	-280
Balance as of Dec. 31, 2022	**35,373**	**29,660**	**65,033**
of which with a remaining term of more than 1 year			0
Balance as of Jan. 1, 2021	**33,150**	**16,752**	**49,902**
Currency translation differences	70	42	112
Additions	12,334	3,159	15,493
Utilization	-8,423	-726	-9,149
Reversal	-71	-238	-309
Balance as of Dec. 31, 2021	**37,060**	**18,988**	**56,048**
of which with a remaining term of more than 1 year	12,096	28	12,124

MISCELLANEOUS OTHER PROVISIONS

Miscellaneous other provisions can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Litigation	22,105	13,189
Provisions arising from the malware attack	3,150	3,150
Anticipated losses related to Professional Services projects	3,029	1,158
Other provisions	1,376	1,491
	29,660	**18,988**

For further information on litigation, please refer to Note [32].

[25] INCOME TAX LIABILITIES

in € thousands	2022	2021
Balance as of Jan. 1	**36,609**	**35,428**
Currency translation differences	-646	1,085
Additions	9,756	14,038
Utilization	-12,639	-7,132
Reversal	-1,496	-6,810
Balance as of Dec. 31	**31,584**	**36,609**
of which with a remaining term of more than 1 year	911	1,629

[26] PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

Defined benefit plans

	Defined benefit obligation (DBO)		Fair value of plan assets		Effect of asset caps		Net defined benefit balance	
in € thousands	2022	2021	2022	2021	2022	2021	2022	2021
Germany	34,626	50,960	27,060	25,439	0	0	7,566	25,522
United Kingdom	55,335	103,614	88,561	99,687	0	0	-33,226	3,927
Switzerland	8,115	8,785	6,800	5,967	0	0	1,315	2,818
Other insignificant pension plans and similar plans							2,869	2,775
Defined benefit plans with net debt							**11,750**	**35,042**
Defined benefit plans with asset surplus							**-33,226**	**0**

Pension benefits in Germany consist of fixed commitments to a select group of people. They are partially covered by life reinsurance policies. There are no minimum funding requirements or laws in Germany.

Pension benefits in the United Kingdom relate to commitments made by Software AG (UK) Limited. They comprise post-employment benefits for employees as well as benefits payable to their surviving dependents on the employees' death during their active service period. Due to the changed interest environment, an interest rate of 5.00 percent (2021: 1.75 percent) was used in the valuation of benefits. Due to the significant rise in interest rates, plan assets exceed the present value of the performance obligations resulting in an asset surplus, which is reported under non-financial assets (see Note [13]).

The commitments in Switzerland result from legal requirements of a Swiss federal law on occupational retirement, survivor, and disability pension plans. The law stipulates that every employer must grant entitled employees benefits after termination of their employment.

The defined benefit commitments result in risks to the Company due to possible fluctuations in obligations from defined benefit plans and fluctuations in plan assets. Fluctuations in defined benefit obligations result primarily from changes to financial assumptions such as discount interest rates and changed demographic assumptions (changing life expectancies). Due to the changed interest environment, pension obligations decreased significantly in the fiscal year; and an actuarial gain from changes in financial assumptions was recognized in comprehensive income in the amount of €65,817 thousand.

Possible changes in expected long-term wage and salary increases have no significant impact on the obligations due to the structure of the commitments. The fair value of plan assets and the fluctuation thereof depends mainly on the situation of the capital markets. Software AG seeks to account for this by controlling its asset investments.

	Defined benefit obligation (DBO)		Fair value of plan assets		Net defined benefit balance	
in € thousands	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Balance as of Jan. 1	**163,360**	**169,795**	**-131,093**	**-117,447**	**32,267**	**52,348**
Current service cost	3,818	4,032			3,818	4,032
Net interest income/expenses	2,480	2,010	-2,128	-1,536	352	475
	6,298	**6,042**	**-2,128**	**-1,536**	**4,171**	**4,506**
Income/expenses resulting from adjustments						
Return on plan assets less income recognized as net interest	0	0	9,636	-8,241	9,636	-8,241
Expectation adjustment	3,648	-1,748	0	0	3,648	-1,748
Net actuarial gains/losses from changes to demographic assumptions	-258	-712	0	0	-258	-712
Net actuarial gains/losses from changes to financial assumptions	-65,817	-6,487	0	0	-65,817	-6,487
	-62,427	**-8,948**	**9,636**	**-8,241**	**-52,791**	**-17,189**
Employer contributions	4,263	974	-6,491	-6,907	-2,228	-5,932
Employee contributions	189	230	-189	-428	0	-198
Plan-related payments	-3,069	-1,719	3,069	1,719	0	0
Settlement payments	0	-7,959	0	7,959	0	0
	1,383	**-8,474**	**-3,611**	**2,344**	**-2,228**	**-6,130**
Currency-related changes	-10,540	4,945	4,777	-6,213	-5,763	-1,269
Balance as of Dec. 31	**98,074**	**163,360**	**-122,419**	**-131,093**	**-24,344**	**32,267**

The net defined benefit balance includes defined benefit plans with an asset surplus. Non-financial assets were therefore reported in the amount of €33,226 thousand as of December 31, 2022. The significant assumptions used for calculating the present value of the defined benefit obligations (DBO) are as follows:

as %	2022	2021
Discount rate		
Germany	4.25	1.25
United Kingdom	5.00	1.75
Switzerland	2.25	0.25
Salary trend		
Germany	2.00	2.00
United Kingdom	4.50	4.75
Switzerland	1.50	1.50
Pension trend		
Germany	2.25	1.75
United Kingdom	2.50	3.00
Switzerland	0.00	0.00

A change in the above assumptions by a half of a percentage point would have the following impact on the respective DBOs:

	Change in DBO		
in € thousands	Germany	United Kingdom	Switzerland
Discount rate (-0.5%)	2,492	2,405	692
Discount rate (+0.5%)	-2,233	-2,263	-610
Salary trend (-0.5%)	87	203	77
Salary trend (+0.5%)	-83	-200	-73
Pension trend (-0,5%)	-2,037	-1,330	n/a[1]
Pension trend (+0.5%)	2,239	1,271	397

[1] Pension trend was assumed at 0 percent for Switzerland (see above).

Sensitivities were calculated by varying the respective parameter with otherwise constant assumptions.

The plan assets can be broken down as follows:

	Fair value	
in € thousands	2022	2021
Equities	46,576	69,090
Life insurance policies	33,859	31,406
Cash and cash equivalents	10,019	17,330
Fixed-interest securities	31,965	13,267
	122,420	**131,093**

There was a market price quote in an active market for every component of the plan assets except for the life insurance policies.

Contributions from the Software AG Group to defined benefit plans for fiscal year 2023 are expected to amount to €7,694 thousand (2021: €8,277 thousand).

Expected benefit payments during the next ten years are expected to be as follows:

in € thousands	Expected benefit payments
2023	5,230
2024	4,463
2025	4,129
2026	4,183
2027	4,205
2028-2032	20,320

DEFINED CONTRIBUTION PLANS

There is a minor volume of defined contribution pension commitments. Defined contributions are paid to external insurance companies or funds. Furthermore, Software AG makes contributions to the state and/or public pension fund primarily in Germany. Defined contribution pension commitments accounted for expenses of €25,932 thousand (2021: €18,029 thousand) in 2022.

[27] EQUITY

SUBSCRIBED CAPITAL

As of December 31, 2022, Software AG's subscribed capital totaled €74,000 thousand (2021: €74,000 thousand). Software AG’s share capital is divided into 74,000,000 (2021: 74,000,000) no-par value registered shares, each worth €1. Each share entitles its holder to one vote.

CONDITIONAL CAPITAL

Pursuant to the resolution of the Annual Shareholders’ Meeting on May 12, 2021, the Management Board is authorized, subject to the consent of the Supervisory Board, to issue bearer and/or registered warrant and/or convertible bonds or combinations of these instruments (bonds) up to a total value of €750,000,000 with or without a specified maturity date and to grant bond owners or holders the right to convert the bonds to new no-par value registered shares in the Company representing up to a proportional amount of the share capital of €14,800,000, which are secured by the corresponding conditional capital in section 5(3) of the Articles of Association. This authorization may be exercised until May 11, 2026.

Pursuant to a resolution from December 13, 2021, and with the consent of the Supervisory Board on the same date, the Management Board utilized its authorization to issue convertible bonds, excluding subscription rights, to Silver Lake with a nominal value of €344.3 million. These bonds entitle the holders to convert them to a maximum of 7.4 million Software AG shares. (For further information, please refer to the following description of the accounting effects of the convertible bonds in the current fiscal year.)

AUTHORIZED CAPITAL

As of December 31, 2022, the Management Board was authorized, subject to the consent of the Supervisory Board, to increase the Company's share capital on one or more occasions on or before May 11, 2026, by up to a total of €14,800 thousand by issuing new no-par value registered shares in return for cash contributions and/or contributions in kind (authorized capital). In doing so, the number of shares must increase in proportion to the share capital.

The Management Board did not make use of this authorization in fiscal year 2022.

ACQUISITION OF TREASURY SHARES

At the beginning of the reporting period, Software AG held 20,111 treasury shares representing €20,111 or 0.03 percent of the share capital.

The balance of treasury shares remained unchanged year-on-year as of December 31, 2022. There were no transactions in fiscal 2021 or 2020.

Pursuant to the Annual Shareholders' Meeting resolution from May 12, 2021, Software AG is authorized until May 11, 2026, to purchase Software AG shares totaling a maximum of 10 percent of the share capital at the time of the resolution. The shares purchased, together with other treasury shares that the Company has already purchased and still holds or that are attributable to it in accordance with sections 71d and 71e of AktG, may not account for more than 10 percent of the respective share capital at any time.

CONVERTIBLE BONDS

Software AG issued subordinated unsecured convertible bonds with a total nominal value of €344,300 thousand on February 15, 2022. The convertible bonds have a coupon rate of 2 percent p.a., an initial conversion price of €46.54, and a five-year term to maturity (February 2027). The initial conversion price would change if Software AG were to approve and disburse dividends above the reference dividend price of €0.76 before the convertible bonds reached maturity.

In accordance with the policies on compound financial instruments, the convertible bonds were measured at fair value and, less proportional transaction costs, divided into a debt component (non-current financial liability) and an equity component (capital reserves).

The following table shows the division of proceeds arising from the issue of the convertible bonds between the debt and equity components:

in € thousands		Debt	Equity
Gross proceeds	344,300	310,475	33,825
Transaction costs	6,800	6,132	668
Net proceeds	337,500	304,343	33,157

Subsequent measurement of the debt component was carried out using the effective interest method and the carrying amount equaled €311,248 thousand as of December 31, 2022.

EQUITY MANAGEMENT

The Software AG Group has an obligation to achieve long-term profitable growth. Since software companies typically have a low level of capital expenditure for property, plant, and equipment, equity is not a focus of corporate management.

DIVIDEND

Pursuant to the proposal of the Management Board and the Supervisory Board, the Annual Shareholders' Meeting resolved on May 17, 2022, to appropriate €56,225 thousand (2021: €56,225 thousand) for a dividend payout from the net retained profits of €65,452 thousand (2021: €113,764 thousand) reported by Software AG, the controlling Group company, in the 2021 fiscal year. This corresponded to a dividend of €0.76 (2021: €0.76) per share. A total amount of €9,227 thousand (2021: €57,539 thousand) was carried forward.

Based on the number of shares outstanding as of March 8, 2023, the Management Board will propose to the Annual Shareholders' Meeting to distribute the net retained profits of €48,760 thousand reported by Software AG in fiscal 2022, as follows: to appropriate €3,699 thousand for dividends and to carry forward €45,061 thousand. This corresponds to a dividend of €0.05 per share.

OTHER RESERVES

Other reserves changed as follows, taking into account tax effects:

	2022			2021		
in € thousands	**Pre-tax amount**	**Tax effects**	**Net amount**	**Pre-tax amount**	**Tax effects**	**Net amount**
Currency translation differences from foreign operations	30,750	0	30,750	83,647	0	83,647
Net actuarial gain/loss on pension obligations	55,884	-14,439	41,445	15,381	-1,496	13,885
Net gain/loss on remeasuring financial assets	-719	66	-653	355	87	442
Currency translation gain/loss from net investments in foreign operations	6,295	0	6,295	0	0	0
Gain/loss recognized in equity	**92,210**	**-14,373**	**77,837**	**99,383**	**-1,409**	**97,974**

Cash flow hedges had the following effects on the income statement and other comprehensive income:

in € thousands	Total gain/(loss) recognized in other comprehensive income from the hedges	Ineffective portion recognized in earnings	Items from the income statement	Costs recognized in other comprehensive income from hedges	Amount reclassified from other comprehensive income to the income statement	Items from the income statement
Fiscal year ending Dec. 31, 2022: expected payments relating to awards to members of the Management Board, managers and employees	894	0	n/a	0	-932	Functional costs
Fiscal year ending Dec. 31, 2021: expected payments relating to awards to members of the Management Board, managers and employees	-1,293	0	n/a	0	-1,338	Functional costs

Other Disclosures

[28] NOTES TO THE STATEMENT OF CASH FLOWS

Cash and cash equivalents include €0 thousand (2021: €4 thousand), which are held by the sales subsidiary in Venezuela. Due to current legal limitations relating to foreign currency transactions in Venezuela, Software AG has only limited access to these funds.

Cash and cash equivalents in the amount of €12,748 thousand were recognized in connection with the sale of the FACT shareholding described under Note [3]. After deducting FACT's cash and cash equivalents as of the sale date in the amount of €1,972 thousand, cash flow from the sale of an affiliated company as presented in the statement of cash flows amounted to €10,776 thousand.

Net payments for acquisitions in 2022 amounted to €537,317 thousand (2021: €0 thousand) and consisted of €553,532 thousand (2021: €0 thousand) in consideration paid and €16,215 thousand (2021: €0 thousand) in cash and cash equivalents received.

Dividends paid reported in the statement of cash flows include dividend payments of €474 thousand (2021: €404 thousand) to minority shareholders of subsidiaries.

The change in cash flow from financing activities mainly results from inflows from the issue of convertible bonds (see Note [27]).

Software AG has firmly committed credit lines of approximately €702,000 thousand of which approximately €374,000 thousand was unused as of December 31, 2022. It also has non-binding credit lines in the amount of approximately €120,00 thousand, which were unused as of the balance sheet date. With cash and cash equivalents, Software AG thus had freely disposable liquidity of around €922,000 thousand as of December 31, 2022.

[29] ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The following table shows the carrying amounts of financial assets and liabilities as well as fair values in accordance with the levels of the fair-value hierarchy. The three levels are defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Valuation techniques whereby the lowest level input that is significant to fair value measurement as a whole is directly or indirectly observable in the market.

Level 3: Inputs for the asset or liability that are not based on observable market data.

December 31, 2022

in € thousands	Category	Carrying amount by measurement category		Fair value by level			
		At amortized cost	At fair value	Level 1	Level 2	Level 3	Total
Assets							
Cash and cash equivalents	AC	427,105					
Trade receivables, contract assets, and other receivables	AC	387,647					
Other financial assets							
Financial assets available for sale							
Debt securities	FVTPL		0		0		0
Shareholders' equity	FVOCI		370			370	370
Securities	FVOCI		3,145	3,145			3,145
Loans and other financial receivables	AC	8,164					
Derivative financial instruments							
Designated as hedging instrument							
Stock options	–		389		389		389
Forward equity contracts	–		0		0		0
Not designated as hedging instrument							
Forward currency contracts	FVTPL		33		33		33
Forward equity contracts	FVTPL		0		0		0
Stock options	FVTPL		273		273		273
Liabilities							
Trade and other payables	AC	57,480					
Financial liabilities							
Non-derivative financial liabilities							
Loans[1]	AC	635,633			584,021		584,021
Other non-derivative financial liabilities	AC	22,020			22,020		22,020
Derivative financial liabilities							
Designated as hedging instrument							
Forward equity contracts	–		3,752		3,752		3,752
Not designated as hedging instrument							
Forward currency contracts	FVTPL		40		40		40
Forward equity contracts	FVTPL		5,660		5,660		5,660

[1] Includes convertible bonds.

December 31, 2021

in € thousands	Category	Carrying amount by measurement category		Fair value by level			
		At amortized cost	At fair value	Level 1	Level 2	Level 3	Total
Assets							
Cash and cash equivalents	AC	585,844					
Trade receivables, contract assets, and other receivables	AC	327,198					
Other financial assets							
Financial assets available for sale							
Debt securities	FVTPL		17,645		17,645		17,645
Shareholders' equity	FVOCI		4,724			4,724	4,724
Securities	FVOCI		3,569	3,569			3,569
Loans and other financial receivables	AC	14,636					
Derivative financial instruments							
Designated as hedging instrument							
Stock options	–		2,437		2,437		2,437
Forward equity contracts	–		740		740		740
Not designated as hedging instrument							
Forward currency contracts	FVTPL		71		71		71
Forward equity contracts	FVTPL		437		437		437
Stock options	FVTPL		947		947		947
Liabilities							
Trade and other payables	AC	53,760					
Financial liabilities							
Non-derivative financial liabilities							
Loans	AC	284,700			284,202		284,202
Other non-derivative financial liabilities	AC	23,337			23,337		23,337
Derivative financial liabilities							
Designated as hedging instrument							
Forward equity contracts	–		590		590		590
Not designated as hedging instrument							
Forward currency contracts	FVTPL		6		6		6

No financial assets or liabilities were reclassified to different levels of the fair-value hierarchy during fiscal 2021 or 2022. All equity instruments were measured at fair value through other comprehensive income (FVOCI), to reflect a more long-term investment intension in earnings.

The following table illustrates how the fair values of financial assets and liabilities are determined:

Financial assets/ financial liabilities	Hierarchy level	Valuation technique and key inputs	Significant unobservable inputs	Correlation between unobservable inputs at fair value
Interest rate swaps	2	Discounted cash flow approach; future cash flows are estimated based on forward interest rates (observable interest rate curves as of balance sheet date) and fixed interest rates, discounted at an interest rate that accounts for the credit risk associated with the counter parties	n/a	n/a
Forward currency contracts	2	Discounted cash flow approach; future cash flows are estimated based on forward exchange rates (observable exchange rates as of balance sheet date) and fixed forward exchange rates, discounted at an interest rate that accounts for the credit risk associated with the counter parties	n/a	n/a
Stock options	2	Option pricing model, which accounts for influential option pricing factors (share price, exercise price of the option, share price volatility, dividends as dividend yield, interest rates, option's remaining term)	n/a	n/a
Forward equity contracts	2	The fair values are measured based on the intrinsic values of the forward equity contracts, which are calculated using the share prices from an active market	n/a	n/a
Securities	1	Prices quoted on active market	n/a	n/a
Shareholders' equity (currently non-listed securities only)	3	Comprehensive valuation approach based on multiple quantitative and qualitative factors such as current/ planned earnings, liquidity, recently undertaken/planned transactions	n/a	n/a

The fair values of cash and cash equivalents, time deposits, current receivables, trade payables, and other current financial liabilities correspond approximately with their carrying amounts, primarily due to the short terms of these instruments.

The Company uses various parameters to measure non-current receivables, mainly interest rates and the customers' individual credit ratings. Software AG calculates bad debt allowances to reflect expected defaults based on the measurement results. Accordingly, the carrying amounts of these receivables corresponded approximately with their fair values as of December 31, 2022, and December 31, 2021.

Software AG calculates the fair values of liabilities to banks and other financial liabilities as well as other non-current financial liabilities by discounting the estimated future cash flows using the interest rates applicable to similar financial liabilities with comparable maturities.

The net gain/loss from loans and receivables is only affected significantly by currency translation and interest effects. The net loss from derivatives without qualifying hedging relationships amounted to €4,656 thousand (2021: €311 thousand) in fiscal 2022. The net loss from derivatives designated as cash flow hedges was included in the income statement and amounted to €6,163 thousand (2021: gain of €2,046 thousand) in fiscal 2022.

Equity instruments were written down in the amount of €513 thousand (2021: €517 thousand), which was recognized in other comprehensive income in fiscal 2022.

OBJECTIVES AND METHODS OF RISK MANAGEMENT FOR FINANCIAL INSTRUMENTS

As a result of its international operating activities as well as its investing and financing activities, Software AG is exposed to various financial risks. Management continuously monitors these risks. Derivative financial instruments are used in accordance with internal guidelines in order to reduce risks arising from changes in interest rates, exchange rates, cash flows, or the value of cash investments. Derivatives are generally entered into to hedge existing balance sheet exposures and highly probable forecast transactions.

a) Interest rate risk

The Company is subject to interest rate fluctuations that affect both assets and equity and liabilities on the balance sheet.

On the assets side, income from investing available cash and cash equivalents and future interest income resulting from discounting non-current receivables and contract assets are particularly subject to interest rate risk. On the equity and liabilities side, interest expenses for current and non-current financial liabilities as well as pension provisions and other items related to long-term borrowings are especially exposed to interest rate risk.

The sensitivity analysis required by IFRS 7 relates to interest rate risk arising from monetary financial instruments bearing variable interest rates.

Based on the current structure of the interest-bearing financial instruments, a hypothetical increase in the market interest level of 100 basis points would improve financial income/expenses by €967 thousand (2021: €2,942 thousand).

b) Exchange rate risk

In order to hedge the risk of future fluctuations in exchange rates, the Company enters into currency forward contracts. Foreign currency receivables and liabilities are offset if possible, and only the remaining net exposure is hedged selectively. Estimated cash flows can also be hedged in accordance with internal guidelines.

Hedging transactions are measured at their fair value. The amounts are reported in the balance sheet under other financial assets or financial liabilities. Since hedging transactions are not normally designated as hedge accounting, changes in fair value are immediately recognized through profit or loss in the Consolidated Income Statement.

The sensitivity analysis required by IFRS 7 relates to exchange rate risk arising from monetary financial instruments that are denominated in a currency other than the functional currency in which they are measured. Exchange differences arising from the translation of financial statements into the Group currency (translation risk) and non-monetary items are not taken into account. Most significant monetary financial instruments are denominated in the functional currency. For Software AG, significant effects on earnings (earnings before income taxes) result only from the relationship of the euro to the US dollar. Hedging transactions are based on existing hedges or estimated cash flows and thus reduce any potential effects on earnings. In the case of designated cash flow hedges, exchange rate changes affect other reserves included in equity.

Based on the monetary financial instruments available as of the balance sheet date, a devaluation of the euro by 10 percent against the US dollar would have increased earnings by €1,061 thousand (2021: €1,695 thousand) and other reserves by €0 thousand (2021: €0 thousand). This amount only represents a theoretical risk for Software AG as these instruments are hedges of balance sheet transactions, rather than open trading positions.

c) Market risk

In line with Group policy, assets are controlled in terms of maturity, interest type, and rating such that the Company does not expect any significant fluctuations in value.

d) Credit risk

Software AG is exposed to default risk in its operating business and in connection with certain financial transactions if contracting parties fail to meet their obligations. Major cash investments as well as derivative financial instruments are entered into with banks with credit ratings of at least investment grade and whose credit default swap (CDS) rates are monitored continuously. The theoretical maximum default risk exposure is indicated by the carrying amounts. The guidelines defined by management ensure that the credit risk from financial instruments is spread across various banks.

Receivables are monitored as part of operations on an ongoing basis. The need for impairment is evaluated on every balance sheet date using an impairment matrix for determining expected credit loss. As of December 31, 2022, there was no indication of the existence of any risk beyond that taken into account through bad debt allowances. There is no concentration of credit risks with respect to single customers as a result of the size of the customer base or due to the distribution of the revenues across various sectors and countries. The theoretical maximum exposure to credit risk is reflected in the carrying amounts of the receivables, without taking any collateral into account.

e) Liquidity risk

A liquidity risk arises from the possibility that Group entities may not be able to satisfy their existing financial liabilities, for example, arising from loan agreements, lease agreements or trade accounts payable.

The risk is limited by active working capital management and Group-wide liquidity control and is, if necessary, balanced by available cash and bilateral lines of credit.

Under credit agreements having a total volume of €326.7 million (2021: €110.0 million), Software AG is required to limit net debt within the Group to a maximum of 3.5-times EBITDA and not fall below an interest coverage ratio of 4.0. Further unused credit lines are also available to Software AG with a volume of €300.0 million (2021: €320.0 million); if Software AG draws on them, it is required to meet financial KPIs. As of year-end 2022, the Company's net debt in relation to EBITDA was significantly lower than this limit and the interest coverage ratio was significantly higher.

The table below shows the contractually fixed payments arising from financial liabilities. Liabilities in foreign currency are calculated at the exchange rate as of December 31, 2022.

2022

in € thousands	Up to 1 year	> 1 to 5 years	> 5 years	Total
Trade payables and other financial liabilities (this item)	48,085	40	0	48,125
Financial non-derivative liabilities	14,587	521,361	99,810	635,758
Lease liabilities	8,613	12,723	559	21,895
Derivative financial liabilities	8,689	763	0	9,452

2021

in € thousands	Up to 1 year	> 1 to 5 years	> 5 years	Total
Trade payables and other financial liabilities (this item)	42,318	87	0	42,405
Financial non-derivative liabilities	76,463	160,798	48,000	285,261
Lease liabilities	8,212	13,657	907	22,776
Derivative financial liabilities	192	404	0	596

USE AND MEASUREMENT OF DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments are used only to hedge existing or estimated currency risk, interest rate risk, or other market risk.

The fair values of forward currency contracts are determined on the basis of forward foreign exchange rate which are included in a discounted cash flow model.

The fair values of stock options and equity forward contracts used to hedge the performance phantom share (PPS) plan as well as the Management Incentive Plans (MIP) are based on market prices, which reflect the current market situation and are equivalent to the replacement costs as of the balance sheet date.

The derivative financial instruments serve to hedge cash flow risks arising from share-based remuneration plans.

Forward currency contracts and currency option transactions are entered into for the purpose of hedging foreign exchange risks related to future cash flows.

In order to hedge the risks arising from changes in value of the PPS plan and the MIPs, the Company has entered into hedging instruments on Software AG stock with banks.

The financial instruments for hedging currency and interest rate risk have maximum terms to maturity of 0.4 years. Hedging transactions on the PPS plan and MIPs have remaining maximum terms of 2.4 years.

CASH INVESTMENT POLICY

Software AG takes a conservative approach with regard to its cash investments. The Company invests primarily in short-term time deposits and short-term fixed-income securities with a credit rating of at least "investment grade." Software AG has introduced a process in order to monitor the creditworthiness of the banks with which it maintains relationships whereby performance of the relevant credit default swaps (CDS) and external ratings are monitored continuously and investment decisions are adapted accordingly.

[30] DISCLOSURES ON LEASES AS LESSEE

Software AG rents and leases office buildings and, to a minor extent, vehicles and hardware. Software AG also rents IT equipment with contract terms that are typically between one and three years. These lease agreements are either short-term or for an underlying object of low value. Software AG opted for the simplified option granted by IFRS 16 and does not recognize right-of-use assets or lease liabilities for these agreements.

Right-of-use assets associated with rented office buildings, vehicles, and hardware are presented under property, plant, and equipment (see Note [18]) and changed as follows:

2022

in € thousands	Land and buildings	Operating and office equipment	Total
Balance as of Jan. 1, 2022	**14,942**	**4,242**	**19,184**
Depreciation in the fiscal year	-7,027	-2,553	-9,580
Additions	5,864	2,307	8,171
Disposals	-375	-52	-427
Currency translation differences	1,573	195	1,768
Balance as of Dec. 31, 2022	**14,977**	**4,139**	**19,116**

2021

in € thousands	Land and buildings	Operating and office equipment	Total
Balance as of Jan. 1, 2021	**19,624**	**4,397**	**24,021**
Depreciation in the fiscal year	-8,219	-2,674	-10,893
Additions	6,144	2,474	8,618
Disposals	-1,669	-24	-1,693
Currency translation differences	-938	69	-869
Balance as of Dec. 31, 2021	**14,942**	**4,242**	**19,184**

Lease liabilities associated with rented office buildings, vehicles, and hardware are presented as financial liabilities and changed as follows:

2022

in € thousands	Lease liabilities
Balance as of Jan. 1, 2022	**22,776**
Changes in the fiscal year	-880
Balance as of Dec. 31, 2022	**21,896**
thereof current	8,613
thereof non-current	13,283

2021

in € thousands	Lease liabilities
Balance as of Jan. 1, 2021	**27,152**
Changes in the fiscal year	-4,376
Balance as of Dec. 31, 2021	**22,776**
thereof current	8,212
thereof non-current	14,564

The following amounts for leases were recognized in the income statement in accordance with IFRS 16:

in € thousands	2022	2021
Expenses from leases included in operating income		
Depreciation in the fiscal year	9,580	10,893
Expenses for short-term leases and leases for assets of low value	4,304	1,710
Expenses from leases included in net financial income/expenses		
Interest expenses for lease liabilities	716	885

AS LESSOR

Software AG leases out parts of its own office buildings or those rented, but only to a very minor extent.

[31] SEASONAL INFLUENCES

Based on historical data, the revenue and earnings distribution from 2022 is not fully representative. The distribution of revenue and earnings is regularly affected by large individual deals and is thus difficult to predict. Revenue and earnings before income taxes were distributed over fiscal year 2022 as follows:

in € thousands	Q1 2022	Q2 2022	Q3 2022	Q4 2022	2022
License revenue	55,511	67,381	56,361	135,244	314,497
as % of annual license revenue	18	21	18	43	100
Total revenue	206,032	226,906	221,412	303,830	958,180
as % of annual revenue	22	24	23	32	100
Earnings before income taxes	25,513	28,719	-10,505	21,380	65,107
as % of annual earnings	39	44	-16	33	100

[32] LITIGATION AND CONTINGENT LIABILITIES

Appraisal proceedings were filed with the Regional Court of Saarbrücken in connection with the control and profit transfer agreement with IDS Scheer AG; the petitioners seek an increase in their cash settlements and annual compensation payments. Software AG does not consider the objections raised to be valid. The Regional Court of Saarbrücken ruled on June 6, 2018, to reject the petitioners' filings. Multiple petitioners filed complaints against this decision within the appeal period. The Saarland Higher Regional Court obtained an expert opinion. The appraisal by the court-appointed expert arrived at slightly higher amounts than the initial valuation with regard to individual valuation parameters. It is not foreseeable when the proceedings will be concluded.

In connection with the merger of IDS Scheer AG and Software AG, additional appraisal proceedings were filed with the Regional Court of Saarbrücken in which the petitioners seek a legal review of the set exchange ratio and correction through cash compensation. Software AG does not consider the objections raised to be valid. In its decision of March 15, 2013, the Regional Court of Saarbrücken ruled in favor of the exchange ratio in accordance with the stock market value ratio and an additional cash payment in the amount of €7.22 plus interest for each share held by outside shareholders of IDS Scheer AG. This results in a maximum arithmetical risk of subsequent payments of approximately €7.6 million plus interest. Software AG appealed the decision. The Saarland Higher Regional Court appointed an expert. The court-ordered expert presented a main report in the third quarter of 2017 and a supplementary report in the second quarter of 2021. According to the appraisal by the court-appointed expert, the IDS Scheer AG stock exchange price was not meaningful and application of the stock market value ratio thus not appropriate. In the opinion of the expert, when applying the earnings value ratio, the earnings values used in the initial valuation are to be corrected. Consequently, the expert considers a profit margin of 25 percent for the period of detailed planning and 20 percent for the perpetual annuity to be appropriate for the valuation of Software AG. Using these values would result in an additional cash payment of €7.33 per share held by outside shareholders of IDS Scheer AG, in total €7.7 million plus interest. Because Software AG does not consider the court-ordered expert's appraisal of Software AG's profit margin to be accurate, a private appraisal was prepared and submitted in the fourth quarter of 2021. In an order dated December 20, 2022, the Saarland Higher Regional Court announced that it expected to follow the decision of the Regional Court of Saarbrücken to measure the exchange ratio based on the stock market value ratio. The Saarland Higher Regional Court does not find the court-ordered expert's appraisal according to which the IDS Scheer AG share price is not meaningful and thus application of the stock market value ratio is not an option, convincing. The status of the proceedings is thus effectively the same as after the Regional Court's decision of March 15, 2013. Software AG again took a position on the latest notices issued by the Saarland Higher Regional Court. A decision by the Saarland Higher Regional Court is expected soon. Provisions are set up based on the estimated probable actual resource outflow.

The Spanish cartel authority (Comisión Nacional de los Mercados y la Competencia, CNMC) searched the offices of Software AG España, S.A. Unipersonal (Software AG Spain) on October 28 and 29, 2015, on the suspicion of an inadmissible anti-competitive agreement. On April 25, 2016, the CNMC published on its website that it was initiating antitrust proceedings against 11 companies, including Software AG Spain. CNMC extended the case to three additional companies on October 19, 2017. CNMC accuses Software AG Spain of inadmissible price fixing and cover tenders. Following a hearing on June 12, 2018, the CNMC ruled on July 31, 2018, to impose a penalty on 11 companies, including Software AG Spain. The penalty for Software AG Spain was €6 million, which was paid by court order on January 28, 2019. Software AG appealed the agency's decision and submitted its concluding argument on May 23, 2019. A decision is not expected until 2023 due to further COVID-19-related delays.

After a customer of Software AG in the USA, Shelby County, Tennessee, requested exemption from possible claims filed against the county and/or its employees by Software AG in 2017 and 2018, Software AG Cloud Americas, Inc. was added as a defendant in a class-action lawsuit in the US District Court for the Western District of Tennessee ("Tennessee District Court") on January 18, 2019. The backdrop to this are various lawsuits against a customer of Software AG, Shelby County, Tennessee. Although the class-action suit has been pending since 2016, it has not yet been admitted by the courts and is still in the early discovery phase. Mediation between all parties took place in December 2020. The parties subsequently elaborated the terms of a settlement which was finalized as of June 30, 2021. The settlement was confirmed on December 9, 2021, by Judge Mays of the Tennessee District Court. Due to the court approval, the share of the settlement to be paid by Software AG is limited to 5.5 percent and will be covered in full by insurance. The final settlement was still pending as of December 31, 2022.

Sanction-related supply stoppages and shortages in the Russian business had a negative impact on existing customer relationships and led to risks of legal action under local law; all of these could be averted as of December 31, 2022, by way of sanction-compliant settlements. No new customers were signed due to local risks.

The risk evaluation for other litigation and legal risks was updated; and provisions were set up based on a new calculation of the probable actual resource outflow.

Provisions for litigation totaled €22,105 thousand (2021: €13,189 thousand) as of December 31, 2022.

In addition, contingent liabilities in the amount of €45,501 thousand existed (2021: €37,028 thousand). A resource outflow as of the balance sheet date was not probable enough to set up provisions. These relate to individual lawsuits and €35,841 thousand (2021: €28,664 thousand) for tax-related risks.

[33] SHARE-BASED REMUNERATION

Software AG has various share-based remuneration plans for members of the Management Board, managers, and other Group employees. These plans include the option of cash settlement.

Share-based remuneration resulted in total expenses of €11,654 thousand (2021: €9,870 thousand) in fiscal 2022.

LONG-TERM INCENTIVE PLAN 2022 (MANAGEMENT BOARD)

Rights under Long Term Incentive Plan 2022 (LIP 2022) were allocated to members of the Management Board in December 2022 with an effective date as of July 1, 2022.

The rights have a term of four years. LIP 2022 consists of two equally weighted components or virtual stock options: value right 1 (VR 1) and value right 2 (VR2). Shares under the first component are weighted with a performance factor dependent upon their performance relative to the MDAX, i.e. worse performance can result in a reduction to 0, and outperformance of more than 20 percent can result in a factor of 2. The target amount is equal to the share price on the grant date multiplied by the relative outperformance of Software AG shares and the performance factor. The amount of the disbursement for the VR 2 component is coupled to value growth of Software AG's share during the term and to a target achievement factor resulting from the average target achievement of revenue, profit margin, and annual recurring revenue (ARR) targets in 2025; it is also capped at twice the allocation.

	VR (1)	VR (2)
Term (disbursement date)	July 2026	July 2026
Allocation in 2022	**84,159**	**187,984**
expired in 2022	0	0
Outstanding as of Dec. 31, 2022	**84,159**	**187,984**
of which vested	0	0
Fair value as of Dec. 31, 2022 (in €)	3.95	1.81

A total expense of €15 thousand was incurred under this plan in fiscal 2022. Provisions totaled €15 thousand as of December 31, 2022.

LONG-TERM INCENTIVE PLAN 2022 (EMPLOYEES)

Rights under Long Term Incentive Plan 2022 (LTI 2022) were allocated to employees in July 2022.

The plan only consists of retention stock appreciation rights (RSARs) which were issued in three tranches with varying terms. The disbursement amount for RSARs is based solely on the Software AG share price during a reference period at the end of the relevant term and is capped at three-times the allocation with respect to the entire plan.

	RSARs	RSARs	RSARs
Term (disbursement date)	July 2023	July 2024	July 2025
Allocation in 2022	**139,600**	**139,600**	**139,600**
expired in 2022	-3,700	-3,700	-3,700
Outstanding as of Dec. 31, 2022	**135,900**	**135,900**	**135,900**
of which vested	0	0	0
Fair value as of Dec. 31, 2022 (in €)	23.34	23.34	23.34

A total expense of €2,749 thousand was incurred under this plan in fiscal 2022. Provisions totaled €2,749 thousand as of December 31, 2022.

LONG-TERM INCENTIVE PLAN 2021 (MANAGEMENT BOARD)

Rights under Long Term Incentive Plan 2021 (LIP 2021) were allocated to members of the Management Board in May 2021.

The rights have a term of four years. LIP 2021 consists of two equally weighted components or virtual stock options: value right 1 (VR 1) and value right 2 (VR2). Shares under the first component are weighted with a performance factor dependent upon their performance relative to the MDAX, i.e., worse performance can result in a reduction to 0, and outperformance of more than 20 percent can result in a factor of 2. The target amount is equal to the share price on the grant date multiplied by the relative outperformance of Software AG shares and the performance factor. The amount of the VR 2 component is coupled to value growth of Software AG's share during the term and to a target achievement factor resulting from the average target achievement of revenue, profit margin, and ARR targets in 2024; it is also capped at twice the allocation.

	VR (1)	VR (2)
Term (disbursement date)	May 2025	May 2025
Outstanding as of Dec. 31, 2021	**130,890**	**264,085**
expired in 2022	-32,091	-64,747
Outstanding as of Dec. 31, 2022	**98,799**	**199,338**
of which vested	0	0
Fair value at Dec. 31, 2022 (in €)	3.82	1.24

A total expense of €827 thousand was incurred under this plan in fiscal 2022. This figure is the balance of income of €180 thousand in original commitments plus expenses of €1,007 thousand from hedging the commitments. They are recognized as cash flow hedges for VR 1 and as freestanding derivatives for VR 2. Provisions totaled €254 thousand as of December 31, 2022.

MANAGEMENT INCENTIVE PLAN 2021

Rights under Management Incentive Plan 2021 (MIP 2021) were allocated to employees in July 2021.

The plan consists solely of RSARs which were issued in three tranches with varying terms. The disbursement amount for the RSARs is based solely on the Software AG share price during a reference period at the end of the relevant term and is capped at three-times the allocation with respect to the entire plan.

	RSARs	RSARs	RSARs
Term (disbursement date)	July 2022	July 2023	July 2024
Outstanding as of Dec. 31, 2021	**74,395**	**74,395**	**74,395**
expired in 2022	-7,609	-10,256	-10,256
disbursed in 2022	-66,786	0	0
Outstanding as of Dec. 31, 2022	**0**	**64,139**	**64,139**
of which vested	N/A	0	0
Fair value as of Dec. 31, 2022 (in €)	N/A	23.78	23.78

A total expense of €3,228 thousand was incurred under this plan in fiscal 2022. This figure is the balance of expenses of €1,950 thousand in original commitments plus €1,278 thousand in expenses from hedging the commitments as cash flow hedges. Provisions totaled €1,754 thousand as of December 31, 2022.

MANAGEMENT INCENTIVE PLAN 2020

Rights under Management Incentive Plan 2020 (MIP 2020) were allocated to Management Board members and employees in June 2020. The plan differentiates between three types of stock appreciation rights (SARs): two types of performance shares, PSARs (1) and PSARs (2), and RSARs.

The number of PSARs (1) relevant to disbursement is based on the number of rights allocated times a factor which is the result of the performance of Software AG's share price relative to the MDAX price index. The resulting factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points. Dividend payments are not taken into account when calculating the factor. The disbursement amount for PSARs (1) is determined based on reference prices at the beginning and end of the three-year term and is capped at three-times the allocation.

The number of allocated PSARs (2) and RSARs does not change over the course of the term. The disbursement amount for both components depends on the Software AG share price. For PSARs (2), the difference between the reference price at the beginning and end of the three-year term is applied, and disbursement is capped at three-times the allocation. The disbursement for RSARs is based solely on the Software AG reference share price the end of the three-year term and is also capped at three-times the allocation.

A total expense of €2,865 thousand was incurred under this plan in fiscal 2022. This figure is the balance of income of €358 thousand in original commitments plus €3,223 thousand in expenses from hedging the commitments as cash flow hedges. Provisions totaled €3,569 thousand as of December 31, 2022.

	PSARs (1)	PSARs (2)	RSARs
Term (disbursement date)	June 2023	June 2023	June 2023
Outstanding as of Dec. 31, 2021	152,183	190,226	204,746
expired in 2022	-14,893	-18,617	-22,918
Outstanding as of Dec. 31, 2022	137,290	171,609	181,828
of which vested	0	0	0
Fair value as of Dec. 31, 2022 (in €)	0.23	0.14	23.30

MANAGEMENT INCENTIVE PLAN 2019

Rights under the Management Incentive Plan 2019 (MIP 2019) were allocated to members of the Management Board and employees in May and June 2019. The plan differentiates between PSARs and RSARs.

The number of PSARs (1) relevant to disbursement is based on the number of rights allocated times a factor which is the result of the performance of Software AG's share price relative to the the Nasdaq-100 price index. The resulting factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points. Dividend payments are not taken into account when calculating the factor. The disbursement amount for PSARs (1) is determined based on reference prices at the beginning and end of the four-year term and is capped at three-times the allocation.

The number of RSARs allocated to the Management Board in a four-year term and to employees in four tranches with varying terms does not change during the term. The disbursement amount for RSARs is based solely on the Software AG share price during a reference period at the end of the relevant term and is capped at three-times the allocation with respect to the sum of the four RSAR tranches.

Disbursement of the first and second tranches of employee RSARs occurred in previous years. Disbursement of the third tranche of employee RSARs occurred in April 2022 based on a reference price of €31.61.

A total expense of €215 thousand was incurred under this plan in fiscal 2022. This figure is the balance of income of €1,118 thousand in original commitments plus €1,333 thousand in expenses from hedging the commitments as cash flow hedges. Provisions totaled €1,871 thousand as of December 31, 2022.

	PSARs	RSARs	RSARs
Term (disbursement date)	March 2023	March 2022	March 2023
Outstanding as of Dec. 31, 2021	106,099	47,212	85,423
expired in 2022	-10,366	-508	-7,473
disbursed in 2022	0	-46,704	0
Outstanding as of Dec. 31, 2022	95,733	0	77,950
of which vested	95,733	n/a	77,950
Fair value as of Dec. 31, 2022 (in €)	0.01	n/a	23.99

PERFORMANCE PHANTOM SHARE PLAN

A portion of the variable Management Board remuneration is paid out as a medium-term component on the basis of a PPS plan. As in the previous year, the portion accruing for fiscal year 2023 was converted into PPS on the basis of the average Software AG share price less 10 percent as of February 2023. At the end of the four-year term, the resulting number of shares is settled in cash based on the average Software AG share price in February at the end of the term.

Additionally, there are PPS for which the number of shares is divided into three equal tranches with terms of one, two, and three years. These PPS become due at the end of the respective term and are likewise multiplied by the the average Software AG share price in the February at the end of the term. When PPS become due for the first time after the described vesting period, beneficiaries can reinvest them for up to six years and four months after leaving the Company to continue participating in its success. All PPS that have not yet been disbursed as of January 15 of the seventh year after having left the Company become due for disbursement no later than the trading day following the release of the preliminary first-quarter figures. At this point, or if exercised previously, the number of PPS is multiplied by the average Software AG share price on the sixth to tenth trading days. The decision regarding the possibility to exercise each quarter must be disclosed to the Company between the date of publication of the financial results and the following fifth trading day. Beneficiaries receive an amount per PPS equal to the dividends paid to Software AG shareholders prior to the disbursement date for these PPS.

The disbursement amount is capped at twice the allocation for all PPS.

A total expense of €1,755 thousand (2021: €2,362 thousand) was incurred under this plan in fiscal 2022. This figure is the balance of income of €4,565 thousand (2021: expenses of €3,339 thousand) in original commitments plus an expense of €6,320 thousand (2021: income of €977 thousand) from hedging transactions with banks for the commitments.

Provisions for the rights outstanding under the PPS plan amounted to €15,661 thousand (2021: €18,918 thousand) as of December 31, 2022.

The intrinsic value of the exercisable rights under the PPS plan as of December 31, 2022, amounted to €10,821 thousand (2021: €13,614 thousand) as of December 31, 2022.

[34] CORPORATE BODIES

MEMBERS OF THE SUPERVISORY BOARD:

Christian Yannick Lucas MBA, Harvard Business School Shareholder representative Chair since February 3, 2022	Managing Director and Co-Head EMEA, Silver Lake
Other supervisory board and similar seats:	• *Member of the advisory board of Global Blue Group Holding AG, Eysins, Switzerland* • *Member of the advisory board of Claudius France SAS, Lyon, France* • *Chair of the advisory board of Mistral Midco SAS, Paris, France* • *Member of the advisory board of Mirakl SAS, Paris, France* • *Chair of the advisory board of Tangerine Holdco SpA, Luxembourg (since October 7, 2022)*
Karl-Heinz Streibich Graduate in communications engineering Shareholder representative Chair until January 31, 2022	Honorary chair of the board of acatech—German Academy of Science and Engineering, Berlin, Germany
Other supervisory board seats:	• *Member of the supervisory board of Deutsche Telekom AG, Bonn, Germany* • *Member of the supervisory board of Siemens Healthineers AG, Erlangen, Germany* • *Member of the supervisory board of Münchener Rück AG, Munich, Germany*
Oliver Collmann Graduate in business administration Shareholder representative since April 4, 2022	Partner and CEO of AVEGA Fund Services S.a.r.l., Luxembourg
Other supervisory board seats:	*none*
Ralf Dieter Graduate in economics Shareholder representative until January 31, 2022	Entrepreneur
Other supervisory board seats:	• *Member of the supervisory board of Körber AG, Hamburg, Germany*

Madlen Ehrlich Graduate in international business Employee representative Deputy chair	Senior Director, Bid Operations and Sales Programs Software AG, Berlin, Germany
Other supervisory board seats:	*none*
Bettina Schraudolf Graduate in business information systems Employee representative	Chair of the Works Council Software AG, Darmstadt, Germany
Other supervisory board seats:	*none*
Ursula Soritsch-Renier Graduate in philosophy with a minor in computer science Shareholder representative	Group Chief Digital and Information Officer Saint Gobain, La Défense, France
Other supervisory board seats:	*none*
James Moon Whitehurst MBA, Harvard Business School Bachelor's degree in economics and computer science Shareholder representative since January 1, 2023	Consultant for Silver Lake
Other supervisory board and similar seats:	• *Non-executive director of the board of directors of United Airlines, Inc.* • *Non-executive director of the board of directors of Amplitude, Inc.* • *Non-executive director of the board of directors of Tanium Inc.* • *Member of the international advisory board of Banco Santander S.A.*
Markus Ziener Graduate in economics B.A. in business administration Shareholder representative until May 17, 2022	Managing Director, Asset and Financial Management, Software AG Foundation, Darmstadt, Germany
Other supervisory board and similar seats:	• *Member of the supervisory board of GLS Bank eG, Bochum, Germany* • *Member of the advisory board of Aceite de Oliva Valderrama S.L., Madrid, Spain*

MEMBERS OF THE MANAGEMENT BOARD:

Sanjay Brahmawar MBA in finance and marketing and bachelor's degree in civil engineering	Chief Executive Officer
Other supervisory board and similar seats:	• *Member of the foundation board of trustees of the Frankfurt School of Finance & Management, Frankfurt am Main, Germany* • *Member of the advisory board of ADAMOS GmbH, Darmstadt, Germany* • *Member of the supervisory board of HERE Global B.V., Eindhoven, Netherlands (since January 1, 2023)*
Daniela Bünger International business studies Chartered Global Management Accountant (CGMA)	Chief Financial Officer (since January 1, 2023)
Other supervisory board and similar seats:	*none*
Dr. Elke Frank Degree in law	Chief Human Resources Officer (until October 31, 2022)
Other supervisory board and similar seats:	• *Member of the supervisory board, chair of the Remuneration Committee of Scout24 AG, Munich, Germany* • *Member of the board of trustees of Fraunhofer IAO, Stuttgart, Germany*
Dr. Matthias Heiden Graduate in business administration	Chief Financial Officer (until December 31, 2022)
Other supervisory board and similar seats:	• *Member of the executive board and presidency of the German-Swedish Chamber of Commerce (DSHK), Stockholm, Sweden* • *Member of the advisory board of IKB Deutsche Industriebank AG, Düsseldorf, Germany*
Joshua Husk MBA in global management and bachelor's degree in business management	Chief Revenue Officer (since August 1, 2022)
Other supervisory board and similar seats:	*none*
Dr. Benno Quade PhD in law	Chief Operating Officer (since August 1, 2022)
Other supervisory board and similar seats:	*none*
Dr. Stefan Sigg Graduate in mathematics	Chief Product Officer
Other supervisory board and similar seats:	• *Member of the supervisory board of Deutsches Forschungszentrum für Künstliche Intelligenz GmbH (DFKI), Kaiserslautern, Germany* • *Member of the supervisory board of Fischer Information Technology AG, Radolfzell, Germany* • *Member of the board of trustees of Fraunhofer Institute for Secure Information Technology SIT, Darmstadt, Germany*

REMUNERATION OF THE MANAGEMENT BOARD PURSUANT TO SECTION 314(1), NO. 6 OF HGB

Total remuneration for the Management Board, including newly issued stock options, in fiscal 2022 was €11,576 thousand (2021: €12,826 thousand). This includes awards under the LIP 2022 stock option plan (2021: LIP 2021) in the amount of €2,188 thousand (2021: €3,000 thousand). Management Board remuneration further includes consideration for granted PPS totaling €1,128 thousand (2021: €1,935 thousand). Total remuneration under the PPS plan was €1,244 thousand (2021: €2,006 thousand) in fiscal 2022.

Remuneration for former Management Board members amounted to €1,404 thousand (2021: €1,426 thousand). Pension provisions, offset against plan assets for this group of people, totaled €4,212 thousand (2021: €16,375 thousand). Pension obligations for former Management Board members amounted to €23,431 thousand (2021: €35,299 thousand).

Software AG did not grant any advances or loans to Management Board members in fiscal 2022 or in fiscal 2021. Nor did it enter any contingent liabilities for these individuals.

Detailed disclosures on remuneration paid to Management Board members are presented in the Remuneration Report.

REMUNERATION OF THE SUPERVISORY BOARD PURSUANT TO SECTION 314(1), NO. 6 OF HGB

Total remuneration for the Supervisory Board amounted to €360 thousand (2021: €620 thousand) in fiscal 2022.

Software AG did not grant any advances or loans to Supervisory Board members in fiscal 2022 or in fiscal 2021. Nor did it enter any contingent liabilities for these individuals.

Detailed disclosures on remuneration paid to Supervisory Board members are presented in the Remuneration Report.

[35] RELATED PARTY TRANSACTIONS

A related party as defined by IAS 24 Related Party Disclosures is any legal or natural person able to exercise control over Software AG or its subsidiaries or is subject to control or significant influence by Software AG or its subsidiaries. In particular, this includes legal or natural persons holding a share in Software AG through which they have significant influence over Software AG (Software AG Foundation, Darmstadt, Germany; shareholding unchanged in 2022), and the members of Software AG's corporate bodies, whose remuneration is specified in Note [34] as well as in the Remuneration Report.

On December 13, 2021, Software AG entered into a framework agreement for a strategic partnership with certain affiliates of Silver Lake Partners VI Cayman, L.P. and Silver Lake Alpine II, L.P. (Hereinafter, these entities together with their affiliates are referred to as "Silver Lake.") In January 2022, the Darmstadt District Court appointed Christian Yannick Lucas, Managing Director at Silver Lake and co-head of the firm's activities in Europe, as member of the Supervisory Board, which went into effect on February 3, 2022. On May 17, 2022, the Annual Shareholders' Meeting confirmed Lucas as member of the Supervisory Board.

As stipulated in the agreement with Silver Lake, Software AG issued subordinated unsecured convertible bonds to Silver Lake with a total nominal value of €344,300 million in the fiscal year. For further information, please refer to Note [27].

Under the agreement with Silver Lake, Software AG reimbursed Silver Lake for €1.5 million in transaction costs incurred in connection with the issuance of the convertible bonds. Additionally, Silver Lake provides certain management advisory services to Software AG at no cost for Software AG other than the reimbursement of out-of-pocket expenses. Silver Lake invoiced for expenses in the amount of €16 thousand in fiscal 2022.

DISCLOSURES ON REMUNERATION PAID TO RELATED PARTIES PURSUANT TO IAS 24

Parties related to Software AG also include the members of the Management Board and the Supervisory Board.

Remuneration paid to the Management Board can be broken down as follows:

in € thousands	2022	2021
Short-term benefits	5,837	5,762
Termination of service benefits	1,000	0
Post-service benefits	1,308	1,491
Share-based remuneration	-933	2,413
	7,212	**9,395**

Net pension assets with respect to Management Board members amounted to €2,086 thousand (2021: €699 thousand). Gross pension obligations with respect to Management Board members amounted to €2,186 thousand (2021: €3,577 thousand). The decrease in pension obligations resulted mainly from the increase in the discount rate from 0.75 percent in 2021 to 4.20 percent in 2022.

Furthermore, obligations from share-based compensation plans, including bonuses converted to PPS at year-end, for members of the Management Board amounted to €6,770 thousand (2021: €7,559 thousand).

Obligations from short-term variable remuneration components for members of the Management Board amounted to €1,738 thousand (2021: €2,554 thousand).

Remuneration to the members of the Supervisory Board in fiscal year 2022 totaled €360 thousand (2021: €620 thousand). This remuneration included a fixed short-term component and compensation for committee work. Furthermore, former Supervisory Board chair (until January 31, 2022) Karl-Heinz Streibich was compensated in connection with his former role as CEO with €274 thousand (2021: €274 thousand) in share-based remuneration and €378 thousand (2021: €359 thousand) in post-service benefits.

The total remuneration for members of the Management Board and Supervisory Board amounted to €8,224 thousand (2021: €10,648 thousand).

Remuneration of the Management and Supervisory Boards is outlined in detail in the Remuneration Report. The Remuneration Report presents the structure and amount of the individual components. The Remuneration Report is a separate report pursuant to section 162 of AktG.

No other business transactions took place between Software AG and the members of the Management Board or the Supervisory Board in fiscal year 2022.

[36] AUDITOR FEES

On May 17, 2022, the shareholders of Software AG elected Deloitte GmbH Wirtschaftsprüfungsgesellschaft (Deloitte) as auditor of the Consolidated Financial Statements for the 2022 fiscal year. General and administrative expenses include total fees to Deloitte in the amount of €963 thousand. Of this amount, €810 thousand relate to financial statement audit services, €50 thousand to other attestation services, and €103 thousand to miscellaneous services. Other attestation services relate to audits of the Combined Non-Financial Statement and the Remuneration Report, miscellaneous services primarily to services in connection with quarterly financial reporting.

[37] EVENTS AFTER THE BALANCE SHEET DATE

There were no events that occurred between December 31, 2022, and the date of release of these Consolidated Financial Statements that were of significance to the Consolidated Financial Statements.

[38] EXEMPTION FOR DOMESTIC GROUP COMPANIES PURSUANT TO SECTION 264(3) OF HGB

With the approval of the relevant shareholders' meetings, SAG Deutschland GmbH, Darmstadt, Germany, SAG Consulting Services GmbH, Darmstadt, Germany, Cumulocity GmbH, Düsseldorf, Germany, and SAG LVG mbH, Darmstadt, Germany, which are included in the Consolidated Financial Statements of Software AG, have been exempt from the duty to prepare and publish annual financial statements and a management report, and from the duty to have them audited, in compliance with provisions applicable to corporations in accordance with section 264(3) of HGB.

DATE AND AUTHORIZATION OF ISSUE

Software AG's Management Board approved the Consolidated Financial Statements on March 8, 2023.

Darmstadt, March 8, 2023
Software AG

S. Brahmawar D. Bünger

J. Husk Dr. B. Quade

Dr. S. Sigg