IFRS CONSOLIDATED FINANCIAL STATEMENTS OF APOLLO 5 GMBH

for the period 1 January to 31 December 2019

	Page
Consolidated Statement of Comprehensive Income	2
Consolidated Balance Sheet	3
Consolidated Cash Flow Statement	4
Consolidated Statement of Changes in Equity	5
Notes to the consolidated Financial Statements	6 - 54

For technical calculation reasons, rounding differences of one unit (KEUR, % etc.) may occur in the tables.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

KEUR	Note	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Revenues	5.1	725.647	721.940
Changes in inventories of finished goods and work in progress		-3.243	-8.589
Other operating income	5.2	10.056	45.439
Cost of materials	5.3	-284.861	-292.541
Employee benefit expenses	5.4	-265.687	-250.181
Impairment loss/gain	5.5	107	692
Other operating expenses	5.6	-94.723	-101.101
Earnings before interest, tax, depreciation and amortisation (EBITDA)		**87.296**	**115.659**
Depreciation and amortisation expense	6.1, 6.2, 6.3	-72.754	-76.247
Earnings before interest and taxes (EBIT)		**14.542**	**39.413**
Financial income	5.7	4.855	15.034
Financial expenses	5.8	-72.477	-81.942
Earnings before income taxes (EBT)		**-53.080**	**-27.495**
Income taxes	5.9	497	5.996
NET LOSS OF THE YEAR		**-52.583**	**-21.499**
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurements, net of tax	6.12	-9.347	1.097
		-9.347	1.097
Items that may be subsequently reclassified to profit or loss			
Currency translation differences	6.11	1.762	2.275
		1.762	2.275
Other comprehensive income, net of tax		**-7.585**	**3.372**
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD		**-60.168**	**-18.127**

CONSOLIDATED BALANCE SHEET

ASSETS

KEUR	Note	Dec. 31, 2019	Dec. 31, 2018
Intangible Assets	6.1	344.180	371.899
Property, plant and equipment	6.2	219.406	262.787
Right-of-use assets	6.3	51.995	-
Other non-current financial assets	6.4	1.209	1.612
Other non-current assets	6.5	1.988	3.299
Deferred tax assets	5.9	45.993	30.154
Non-current assets		**664.771**	**669.750**
Inventories	6.6	49.172	56.294
Trade receivables	6.7	39.062	42.253
Contract assets	5.1	51.182	40.274
Income tax claims	5.9	1.536	191
Other current financial assets	6.8	9.307	9.137
Other current assets	6.9	25.301	19.947
Cash and cash equivalents	6.10	51.705	49.571
Current assets		**227.265**	**217.667**
Total assets		**892.037**	**887.417**

EQUITY & LIABILITIES

KEUR	Note	Dec. 31, 2019	Dec. 31, 2018
Share capital	6.11	25	25
Capital reserves	6.11	129.410	129.410
Loss carried forward	6.11	-532.615	-483.713
Other components of equity	6.11	-11.112	-3.497
Equity		**-414.292**	**-357.775**
Provision for pensions and similar obligations	6.12	68.405	56.622
Other non-current provisions	6.13	3.469	12.927
Non-current financial liabilities	6.13	497.409	963.039
Other non-current liabilities	6.14	12.105	10.421
Deferred tax liabilities	5.9	63.322	60.537
Non-current liabilities		**644.710**	**1.103.545**
Trade payables		60.869	53.746
Income tax liabilities	5.9	21.439	14.601
Current provisions	6.13	13.720	9.324
Current financial liabilities	6.14	535.211	34.748
Other current liabilities	6.15	30.379	29.228
Current liabilities		**661.619**	**141.647**
Total equity and liabilities		**892.037**	**887.417**

CONSOLIDATED CASH FLOW STATEMENT

KEUR	Note	2019	2018
Net loss of the year		-52.583	-21.499
Depreciation and amortisation / reversals	6.1, 6.2, 6.3	72.754	76.247
Income tax expenses / income	5.9	-497	-5.996
Financial result	5.7, 5.8	67.622	66.908
Changes in trade accounts receivable	6.7	3.191	-6.239
Changes in contract assets	5.1	-10.907	-40.274
Change in inventories	6.6	7.121	48.057
Changes in trade accounts payables		7.123	-16.407
Changes in provisions and accruals	6.13	6.722	-6.643
Changes in other assets	6.8, 6.9	-3.777	105
Changes in other liabilities	6.15	-2.807	20.855
Other non cash effective income/expenses	5.7, 5.8	-3.612	-2.920
Income from sale of subsidiaries		-	-27.038
Income/expense from sale of property, plant and equipment and intangible assets	5.2, 5.6	169	1.661
Taxes paid/received		-4.711	-5.073
Cashflow from operating activities		**85.807**	**81.743**
Purchase of intangible assets	6.1	-3.388	-1.523
Purchase of property, plant and equipment	6.2	-23.738	-34.214
Proceeds from the sale of property, plant and equipment and intangible assets	5.2, 5.5	542	4.418
Payments from the issuance of loans		-	-
Interest and dividend received	5.7	440	3.936
Sale of consolidated companies (net of cash and cash equivalent acquired)		-	36.463
Cash flow from investing activities		**-26.145**	**9.079**
Proceeds from borrowings	6.14	1.093	6.980
Proceeds from capital increases	6.11	-	6.500
Repayment of loans	6.14	-5.387	-34.000
Payments for leasing liabilities (2018: finance lease liabilities)	5.8, 6.14	-9.369	-6.811
Interest paid	5.8	-44.431	-47.983
Cash flow from financing activities		**-58.094**	**-75.313**
Change in cash and cash equivalents		**1.568**	**15.509**
Cash and cash equivalents at the beginning of the period		49.571	33.268
Change in cash and cash equivalents	6.10	1.568	15.509
Effect of foreign exchange rates on cash and cash equivalents		567	794
Cash and cash equivalents at the end of the period		**51.705**	**49.571**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

KEUR	Note	Share capital	Capital reserves	Accumulated loss	Currency translation differences	Remeasure-ments	Total
Balance at January 1, 2018		**25**	**122.910**	**-462.214**	**-3.474**	**-3.395**	**-346.148**
Loss carried forward	6.11	-	-	-	-	-	-
Net loss	6.11	-	-	-21.499	-	-	-21.499
Other comprehensive income	6.11	-	-	-	2.275	1.097	3.372
Total comprehensive income for the period	6.11	***-***	***-***	***-21.499***	***2.275***	***1.097***	***-18.127***
Capital contribution shareholders	6.11	-	6.500	-	-	-	6.500
Transaction with shareholders	6.11	-	-	-	-	-	-
Other changes	6.11	-	-	-	-1	-	-1
Balance at Dec. 31, 2018		**25**	**129.410**	**-483.713**	**-1.199**	**-2.298**	**-357.775**
Adjustment on initial application of IFRS 16, net of tax	6.11					-30	-30
Adjusted balance at Jan. 01, 2019		**25**	**129.410**	**-483.713**	**-1.199**	**-2.328**	**-357.805**
Loss carried forward*	6.11	-	-	3.682	-	-	3.682
Net loss	6.11	-	-	-52.583	-	-	-52.583
Other comprehensive income	6.11	-	-	-	1.762	-9.347	-7.585
Total comprehensive income for the period	6.11	***-***	***-***	***-48.901***	***1.762***	***-9.347***	***-56.486***
Capital contribution shareholders	6.11						-
Transaction with shareholders	6.11	-	-	-	-	-	-
Other changes	6.11	-	-	-	-	-	-
Balance as of Dec. 31, 2019		**25**	**129.410**	**-532.615**	**563**	**-11.675**	**-414.292**

* Correction of non-essential effects

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Information about the company

The consolidated financial statements of the Company as of December 31, 2019, include Apollo 5 GmbH and its subsidiaries (collectively referred to as "AENOVA or the "Group"). Apollo 5 GmbH ("the Company") is a limited liability company under German law with its registered office at Berger Strasse 8 - 10, 82319 Starnberg, Germany. Apollo 5 GmbH is registered in the Commercial Register of the Local Court of Munich under the number B HRB 199543.

The parent company of Apollo 5 GmbH is Apollo 8 GmbH, Starnberg, Germany. Apollo 8 GmbH is registered in the Commercial Register of the Munich Local Court under the number B HRB 200075. The main shareholder of Apollo 8 GmbH is Apollo 11 S.à r.l., Luxembourg. The ultimate controlling company is the fund BC European Capital IX, Guernsey, United Kingdom.

The AENOVA Group is one of the world's largest pharmaceutical contract manufacturers in terms of the development, production and marketing of pharmaceuticals and food supplements. AENOVA operates a total of 16 production sites in six countries. The group is represented in eight European countries, Asia and the USA.

2. Basis of preparation of the consolidated financial statements

The consolidated financial statements have been prepared in accordance with § 315e of the German Commercial Code (HGB) and all International Financial Reporting Standards (IFRS) as applicable in the European Union (EU) at the time the financial statements were prepared, as well as in accordance with the publications of the International Financial Reporting Interpretations Committee (IFRIC).

The consolidated financial statements have been prepared in accordance with the historical cost principle. This does not apply to financial assets and liabilities (including derivative financial instruments) and plan assets, which are measured at fair value through profit or loss.

The consolidated statement of comprehensive income has been prepared using the nature of expense method.

The consolidated financial statements are prepared in euros, which is the Group's functional currency. Unless otherwise stated, all figures are rounded up or down to the nearest thousand Euros (KEUR) in accordance with commercial rounding.

These consolidated financial statements were approved for publication by the management on April 9, 2020.

3. Accounting and valuation methods

The specific accounting policies were consistently applied by the companies included in the consolidated financial statements for all periods and balance sheet dates presented in these consolidated financial statements, as described below.

3.1. Principles of consolidation

All subsidiaries that are directly or indirectly controlled by Apollo 5 GmbH are included in the consolidated financial statements. The Company obtains control when it can exercise control over the investee, is exposed to fluctuating returns from its investment, and can influence the amount of returns due to its power of control.

If the company does not have a majority of the voting rights, it nevertheless controls the investee if its voting rights gives it the practical ability to govern unilaterally the significant activities of the investee . In assessing whether its voting rights are sufficient to control the investee, the investee considers all facts and circumstances, including the extent of its own voting rights relative to the extent of the voting rights of other holders of voting rights, potential voting rights of its own and others, rights under contractual arrangements, and other facts and circumstances indicating that the investee has or does not have the current ability to determine the significant activities at the time decisions are required to be made, taking into account voting patterns at previous general meetings.

Intercompany profits and losses, expenses and income as well as intercompany receivables and liabilities are eliminated in the course of preparing the consolidated financial statements.

In accordance with IFRS 3, business combinations are accounted for using the purchase method as of the date on which the combination takes economic effect. Under the purchase method, a buyer measures the identifiable assets and liabilities acquired at their fair value at the acquisition date. The difference between the purchase price and the identifiable net assets acquired is capitalized as goodwill. In the event of a company being acquired at a price below market value, profits are immediately recognized. Transaction costs in connection with business combinations are expensed as incurred.

3.2. Consolidated companies

The consolidated financial statements as of December 31, 2019 include Apollo 5 GmbH, and a total of 31 subsidiaries (2018: 32 subsidiaries).

As of 31 December 2019, the following companies are fully consolidated in the consolidated financial statements:

AENOVA Group companies	Shareholding in % Dec. 31, 2019	Shareholding in % Dec. 31, 2018
Apollo 5 GmbH Starnberg, Germany	Parent Company	Parent Company
Aenova Holding GmbH Starnberg, Germany	100%	100%
Dragenopharm Apotheker Püschl GmbH Tittmoning, Germany	100%	100%
Swiss Caps Holding (Luxembourg) S.à.r.l. Luxembourg, Luxembourg	100%	100%
Swiss Caps Holding AG Kirchberg, Switzerland	100%	100%
Swiss Caps Rechte und Lizenzen AG Kirchberg, Switzerland	100%	100%
Swiss Caps AG Kirchberg, Switzerland	100%	100%
Swiss Caps (UK) Ltd. Doncaster, United Kingdom	100%	100%
Aenova France SAS Paris, France	100%	100%
Swiss Caps GmbH Bad Aibling, Germany	100%	100%
Swiss Caps Holdings Inc. Miami, USA	100%	100%
Swiss Caps USA Inc. Miami, USA	100%	100%
Swiss Caps Romania S.R.L. Cornu, Romania	100%	100%
Temmler Pharma GmbH Marburg, Germany	100%	100%
Aenova Purchasing International GmbH Starnberg, Germany	100%	100%
Aenova IP GmbH Marburg, Germany	100%	100%
Temmler Ireland Ltd. Killorglin, Ireland	100%	100%
Temmler Property Ireland Ltd. Killorglin, Ireland	100%	100%
Temmler Italia S.r.l. Carugate, Italy	100%	100%
C.P.M ContractPharma GmbH & Co. KG Arzneimittelherstellung und Verpackung Feldkirchen, Germany (merger with C.P.M. ContractPharma GmbH)	0%	100%
C.P.M. ContractPharma GmbH (formerly CPM Verwaltungsgesellschaft mbH) Feldkirchen, Germany	100%	100%
SwissCo Services AG Sisseln, Switzerland	100%	100%
H & E Pharma SA Kirchberg, Switzerland	100%	100%
Haupt Pharma Amareg GmbH Regensburg, Germany	100%	100%
Haupt Pharma Berlin GmbH Berlin, Germany	100%	100%
Aenova Sales International GmbH Starnberg, Germany	100%	100%
Haupt Pharma Münster GmbH Münster Germany	100%	100%
Haupt Pharma Wülfing GmbH Gronau, Germany	89,8%	89,8%
Haupt Pharma Wolfratshausen GmbH Wolfratshausen, Germany	100%	100%
CleanLog GmbH Gronau, Germany	100%	100%
Haupt Pharma Latina S.r.l. Latina, Italy	100%	100%
Contract Packaging Resources Inc. Greensboro, USA	100%	100%
Aenova Asia-Pacific Ltd. Singapore	100%	100%

Minority interests in Haupt Pharma Wülfing GmbH are not disclosed for reasons of materiality.

For Aenova Holding GmbH, Aenova Sales International GmbH, Aenova IP GmbH, Dragenopharm Apotheker Püschl GmbH, Swiss Caps GmbH, Temmler Pharma GmbH, Haupt Pharma Amareg GmbH, Haupt Pharma Berlin GmbH, Haupt Pharma Münster GmbH, Haupt Pharma Wolfratshausen GmbH, Haupt Pharma Wülfing GmbH as well as C.P.M. ContractPharma GmbH the exemption regulations of § 264 3 HGB were used for the annual financial statements as of December 31, 2019.

For the purposes of Section 357 of the Irish Companies Act 2014, Aenova Holding GmbH has guaranteed the commitments and liabilities of Temmler Ireland Limited for the financial year ended 31 December 2019.

C.P.M. ContractPharma GmbH & Co KG has grown within the Group as a result of the purchase and transfer agreement and the agreement on the transfer of business assets dated June 30, 2019.

3.3. New accounting standards

3.3.1. Accounting standards applied for the first time

The following standards and interpretations adopted by the IASB and already approved by the EU were required to be applied for the first time in fiscal year 2019:

Standard	Title	First time adoption
IFRS 16	Leases	01.01.2019
IFRIC 23	Uncertainty over Income Tax Treatments	01.01.2019
Amendments to IFRS 9	Prepayment features with negative compensation and modifications of financial liabilities	01.01.2019
Amendments to IAS 28	Long-term interests in associates and joint ventures	01.01.2019
Annual improvements to IFRS	Cycle 2015 - 2017: Amendments to IFRS 3, IFRS 11, IAS 2 and IAS 23	01.01.2019
Amendments to IAS 19	Plan amendment, curtailment or settlement	01.01.2019

The main effects of the application of the new, amended and revised standards and interpretations in the 2019 financial year are presented in section 3.6.

3.3.2. Newly issued but not yet applied accounting standards

The following accounting pronouncements issued by the IASB and already approved by the EU are not yet mandatory and have not been applied prematurely by AENOVA. Unless otherwise stated, the effects on the company's consolidated financial statements are currently being examined:

Standard	Title	First time adoption
Individual standards	Changes in references to the updated framework in IFRS standards	01.01.2020
Amendments to IFRS 3	Definition of a business	01.01.2020
Amendments to IAS 1 and IAS 8	Definition of materiality	01.01.2020
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	-
Amendments to IAS 39, IFRS 9 and IFRS 7	Interest Benchmark reform	01.01.2020

Individual standards - Changes in references to the updated framework in IFRS standards

The IASB has published a revised version of the framework. As the individual standards and interpretations of the IFRS framework contain cross-references to the framework, the cross-references to the revised version of the framework are updated as part of the amendment process. However, not all cross-references are updated, as the IASB did not intend to make significant changes to existing standards.

The updates of the cross-references shall apply from 1 January 2020. The EU endorsement took place on 29 November 2019.

Amendments to IFRS 3 - Definition of a business operation

On 22 October 2018, the IASB published amendments to IFRS 3 concerning the definition of a business operation. The purpose of the amendment is to make it easier in future to distinguish whether a business or a group of assets has been acquired. The amendment adds text to the appendix, the application guidelines and examples that clarify the three elements of a business operation (input, substance process and output). The EU endorsement is expected in the first quarter of 2020.

Amendments to IAS 1 and IAS 8 - Definition of materiality

On 31 October 2018, the IASB issued amendments to the definition of materiality of financial statement information. The amendments relate to the standards IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. Together with additional application explanations, the amendments are intended to facilitate the assessment of materiality. The EU endorsement took place on November 29, 2019.

Amendments to IFRS 10 and IAS 28 - Sale or contribution of assets between an investor and an associate or joint venture

The amendments address a known inconsistency between the provisions of IFRS 10 and IAS 28 for the sale of assets to an associate or joint venture or the contribution of assets to an associate or joint venture.

Currently, according to IFRS 10, a parent company must recognise the full amount of the gain or loss on the disposal of a subsidiary in the income statement when control is lost. The currently applicable IAS 28.28 requires that the gain or loss on disposal in sales transactions between an investor and an investment accounted for using the equity method be recognized only to the extent of the other parties' interest in that entity.

In future, the entire profit or loss from a transaction is to be recognised only if the assets sold or contributed constitute a business operation within the meaning of IFRS 3. If, on the other hand, the assets do not constitute a business operation, only a pro rata recognition of profit or loss is permitted.

The IASB has postponed the date of first-time application of the amendments indefinitely.

Amendments to IAS 39, IFRS 9 and IFRS 7 - Interest Rate Benchmark Reform

With the amendments to IAS 39 and IFRS 9, the IASB is reacting to the existing uncertainty regarding the IBOR reform. The background is the deletion of the Interbank Offered Rates (IBOR) as a benchmark interest rate. This will have a particular impact on the accounting treatment of hedging relationships under IFRS. The prospective assessment of the effectiveness of hedging relationships, the adjustment of the "highly probable" criterion in relation to cash flow hedges and the IBOR risk component will be discussed. These amendments were published on 26 September 2019 and the EU endorsement was given on 15 January 2020.

The amendments are effective for reporting periods beginning on or after 1 January 2020. Early application of the amendments is permitted, but in the EU generally requires an endorsement.

AENOVA currently assumes that the newly issued but not yet applied amendments will not have any material impact on the consolidated financial statements.

3.4. Foreign Currency Translation

3.4.1. Foreign currency transactions

Transactions denominated in currencies other than the functional currency are recorded at the current exchange rate on the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated into the functional currency at the exchange rate prevailing at that date. Foreign exchange losses and gains on monetary assets or liabilities arise from the difference between amortized cost in the functional currency at the beginning of the period, adjusted for the effects of applying the effective interest method and payments during the period, and the amortized cost at the end of the period in foreign currency, translated at the closing rate at the end of the period.

Non-monetary assets and liabilities denominated in foreign currencies and measured at fair value are translated at the closing rate at the date when the fair value was determined. Exchange differences arising on translation are recognised in profit or loss, with the exception of differences on cash flow hedges, which are recognised directly in equity.

3.4.2. Group companies

The assets and liabilities of foreign operations, including goodwill and fair value adjustments resulting from business combinations, are translated into euros at the balance sheet date. Income and expenses of foreign operations are translated into euros at the respective transaction date.

Assets and liabilities of Group companies whose functional currency is not the euro are translated into euros using the exchange rate prevailing on the balance sheet date. The income statements of foreign currency companies in the Group are translated at the average exchange rate for the reporting period. All resulting foreign currency differences are recorded in a separate item within other components of equity.

3.5. Discretionary decisions and estimates

3.5.1. General information

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgments, assumptions and estimates that affect the amount and presentation of assets and liabilities, income and expenses and contingent liabilities. The actual results may differ from these estimates. The assumptions underlying the estimates are reviewed regularly. Changes in estimates are recognized in the period in which the change in assumptions occurs and in future periods affected.

The measurement decisions, assumptions and estimates mainly relate to the presentation of the accounting for business combinations, the assessment of the recoverability of intangible assets (in particular goodwill), the Group-wide determination of the useful lives of tangible assets, taxes, the recognition of deferred tax assets, the measurement and recognition of pension and other provisions, and the assessment of valuation allowances on inventories and trade receivables. The estimates and assumptions are based on the state of knowledge at the respective balance sheet date.

In the context of business combinations, estimates are made in measuring the fair values of acquired assets, liabilities and contingent liabilities. As a matter of principle, fair values are determined based on the forecast of future cash flows.

3.5.2. Impairment of non-financial assets

The Group tests all non-financial assets for impairment at each balance sheet date. Goodwill is tested for impairment annually and also at any time if there are indications of impairment.

Goodwill must be allocated to the respective cash-generating units ("CGU") or groups of CGUs for which a positive synergy effect is expected. This allocation is made at the lowest level at which goodwill is monitored for internal management purposes. The definition of CGUs or groups of units within the Group to which goodwill is allocated, as well as the allocation of goodwill acquired in business combinations to cash-generating units or groups of units, is subject to assumptions and estimates by management.

As the value in use of the tested CGUs or groups of CGUs exceeds the carrying amount of these CGUs or groups of CGUs including goodwill, no impairment of goodwill was recognised.

Please refer to section 6.1 Intangible assets for further details.

3.5.3. Economic useful lives of property, plant and equipment and intangible assets

The economic useful lives of non-current assets are based on estimates by management. The Group reviews the estimated useful lives of property, plant and equipment and intangible assets at the end of each financial year.

3.5.4. Transaction costs

Transaction costs arising from the Group's refinancing are expensed, with the exception of costs directly attributable to the raising of debt. These costs are amortized over the term of the loans using the effective interest rate method.

3.5.5. Taxes on income and earnings

The Company and its subsidiaries are subject to regular tax audits. Tax calculations and tax-relevant transactions are coordinated with the local tax authorities. As the result of these tax audits is uncertain, management estimates the amount of necessary provisions for both current and deferred taxes on income, taking into account external consultants and the state of discussions with the respective tax authorities.

3.5.6. Deferred tax assets

Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. In determining deferred tax assets, estimates must be made about future taxable income and the dates on which the deferred tax assets can be realized. Since future business developments are uncertain and are partly beyond the control of management, the assumptions to be made in connection with the calculation of deferred tax assets are subject to considerable uncertainty.

Deferred tax assets at AENOVA include loss carryforwards. They are recognized for all existing tax loss carryforwards to the extent that it is probable that future taxable income or deferred tax liabilities will be available so that the loss carryforwards can actually be utilised. The recoverability of deferred tax assets is assessed at each balance sheet date on the basis of planned taxable income in future financial years. For further details, see section 5.9 Income taxes.

3.5.7. Pensions and other employee benefits

The costs of defined benefit pension plans are based on actuarial valuations. Actuarial valuations involve estimates and assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the long-term nature of these plans, these estimates and assumptions are subject to certain uncertainties.

For further details, see section 6.12 Provisions for pensions and similar obligations.

3.5.8. Other accrued liabilities

Other provisions are recognised when an economic, legal or environmental obligation is likely to result in a outflow of resources embodying economic benefits in the future, in the amount of which it can be reliably estimated. The estimation of future costs is subject to various uncertainties, in particular legal uncertainties regarding applicable laws and regulations and uncertainties regarding the actual conditions in different countries and at different locations. Costs are estimated on the basis of past experience in comparable cases, expert opinions, current costs and new developments affecting costs. Any change in these estimates could have an impact on the future results of the Group.

3.5.9. Fair value of financial assets and liabilities

Trade receivables, other current financial assets, cash and cash equivalents, trade payables, current bank liabilities, current lease liabilities and other current liabilities generally have remaining terms to maturity of less than one year. The carrying amounts less valuation allowances correspond approximately to the fair values. The fair values of quoted securities correspond to the nominal values multiplied by the quoted price on the reporting date.

The fair value of non-current liabilities to banks and non-current liabilities to related parties is determined on the basis of discounted future interest and principal payments. The fair value of derivatives is calculated using recognized financial mathematical models.

The Group manages a number of equity-settled share-based payment plans for employees, whereby the company receives services from employees and issues equity instruments in return. The services of the employees for which options have been granted in exchange are expensed, the adjustment to the equity instruments is recognized in equity. The fair value of equity-settled share-based employee compensation packages is measured using a mathematical model based on a Monte Carlo simulation. The volatility underlying the model was derived from comparable listed companies ("peer group"). The risk-free interest rate corresponds to a German government bond with equivalent maturity.

3.6. Changes in significant accounting policies

As of January 1, 2019, the Group will apply IFRS 16 "Leases" for the first time. IFRS 16 replaced the standards and interpretations IAS 17, IFRIC 4, SIC-15 and SIC-27 with effect from 1 January 2019. AENOVA has applied the new standard to agreements that were previously classified using IAS 17 "Leases" and IFRIC 4 "Determining whether an arrangement contains a lease". Agreements that have not been identified as leases under IAS 17 or IFRIC 4 have not been reviewed to determine whether a lease exists under IFRS 16. Therefore, the definition of a lease under IFRS 16 was only applied to agreements entered into or amended on or after January 1, 2019. Due to the transition methods chosen by the Group in applying these standards, prior year figures are not adjusted in these financial statements. AENOVA applies the modified retrospective method at the time of first-time application.

As a lessee, the Group leases many assets, including real estate, production facilities and IT equipment. The Group has previously classified leases as operating leases or finance leases based on whether the lease transfers substantially all the risks and rewards incidental to ownership of the underlying asset. The IFRS 16 rules no longer differentiate between finance and operating lease agreements. Instead, the lessee must account for the economic right to the leased asset in the form of a right of use, which is amortised over the term of the lease. Correspondingly, a liability in the amount of the present value of the future lease payments is to be carried as a liability and continued using the effective interest method. The Group has decided not to separate the non-lease components and instead to account for lease and related non-lease components as a single lease component. On the date of the commitment or amendment to a contract containing a lease component, the Group allocates the contractual consideration based on the relative unit prices.

On transition, the Group measured the lease liabilities for operating leases classified under IAS 17 at the present value of the remaining lease payments. Discounting was based on the Group's incremental borrowing rate as at 1 January 2019. Instead of the minimum lease payments under non-cancellable operating leases as disclosed in the notes, non-current assets increase due to accounting for rights of use. Current and non-current financial liabilities also increase due to the recognition of the corresponding lease liabilities. The rights of use are measured at the amount of the lease liability and adjusted by the amount of lease payments made or deferred in advance. With regard to the statement of comprehensive income, the depreciation of the rights of use and the interest expenses for the lease liabilities are shown instead of the previous expenses for operating leases. The Group applies this approach to all leases.

For finance leases, the carrying amount of the right of use and the lease liability as of January 1, 2019 was recognized at the carrying amount of the leased asset and the lease liability immediately before that date in accordance with IAS 17.

As a lessor, on the other hand, the provisions of the new standard are similar to the previous provisions of IAS 17, and leases continue to be classified as either finance or operating leases. The Group subleases some of its real estate. In accordance with the new IFRS 16 regulations, the Group has not made any adjustments for leases in which it acts as lessor, except for subleases. In accordance with IAS 17, principal and subleases have been classified as operating leases. At the date of transition to IFRS 16, the rights of use under the main lease are reported under investment property and measured at fair value.

The Group continues to account for sale-and-leaseback transactions for some assets entered into in the past as sale-and-leaseback transactions. The Group recorded a right of use and a lease liability for the leaseback at 1 January 2019 for each asset, valued in the same way as other rights of use and lease liabilities.

In the cash flow statement, the operating cash flow improves due to lower payments, while the repayment portion of the lease payments and the interest expense are shown as part of the cash flow from financing activities. With the help of a newly implemented tool for mapping leases in accordance with IFRS 16, the contracts identified were recorded and measured for all significant Group companies. The initial measurement of the right to use the leased asset is based on the present value of the lease payments plus initial direct costs less incentives received. The right of use is depreciated over the term of the lease unless there is an option to purchase or title is transferred. In the latter case, the right of use is amortised on a straight-line basis until the end of the useful life of the underlying asset. The right of use is subject to an impairment test if there are indications of impairment. The Incremental Borrowing Rate is determined and used as the basis once a year on January 1, separately for each asset class. When deriving the interest rate, AENOVA assumed that the quality of the collateral was low and for this reason the interest rate was high in the financial year.

Lease payments usually consist of fixed and variable payments. If the lease includes an option to extend or purchase, which in the opinion of the Company is reasonably certain to be exercised, the cost of the option is included in the lease payments. AENOVA has exercised the options available in IFRS 16 regarding the treatment of leasing agreements with a term of no more than 12 months and leasing agreements for assets of minor value. Furthermore, the Group has decided not to separate the non-leasing components and instead to account for leasing and related non-leasing components as a single leasing component. IFRS 16 "Leases" will be applied retrospectively from January 1, 2019 by adjusting the cumulative effect of first-time application in the opening balance sheet. The difference resulting from the transition to IFRS 16 as of 1 January 2019 is recognised directly in other reserves (modified retrospective method). The weighted average interest rate is 7.38%. The effect of the first-time application is shown below:

TEUR	**Jan. 1, 2019**
Right-of-use assets	20.988
Reduction of rights of use	2.378
Deferred tax assets	16
Leasing liabilities	23.382
Revaluation reserve resulting from the first time adoption of IFRS 16	-30

TEUR	
Future minimum lease payments under Operating leases as of 31.12.2018	29.996
Current operating leases	-1.376
Other	2.237
Gross operating lease liabilities	**30.856**
Discounting of operating leases	7.369
Net operating lease liabilities as of 01.01.2019	**23.487**
Leasing liabilities from finance leases as of 31.12.2018	36.497
Adjustment effects from the first-time adoption of IFRS 16	-135
Leasing liabilities from finance leases as of 01.01.2019	**36.362**
Total leasing liabilities as of 01.01.2019	**59.849**

The AENOVA Group has also made use of IFRS 16.C10:

- AENOVA waived an impairment test and instead assessed whether individual leases were onerous contracts before the date of first-time application in accordance with IAS 37. At the time of first-time application, the rights of use attributable to such leases must be adjusted by the amount that was reported as a provision for onerous leases in the balance sheet immediately preceding the time of first-time application. In applying this option, an amount of KEUR 2,378 thousand was deducted from the rights of use as of January 1, 2019.
- AENOVA has recognized the transition operating leases, the term of which ends within 12 months after the date of first-time application, directly in the income statement.
- AENOVA did not take initial direct costs into account when measuring the right of use at the time of initial recognition.
- AENOVA has determined the term of the lease retroactively for agreements that provide for an extension or termination option.

Furthermore, a number of amendments to the standards came into force on 1 January 2019:

- IFRIC 23 - As of January 1, 2019, the Group has applied IFRIC 23 "Uncertainty in Income Tax Treatment". The interpretation contains clarifications on how to apply the recognition and measurement requirements set out in IAS 12 when there is uncertainty about the income tax treatment and covers current and deferred tax assets or liabilities. According to IFRIC 23, uncertain tax treatments may have to be considered separately or together with one or more other uncertain tax treatments. The method that is more suitable for predicting the resolution of the uncertainty must be selected. The assessment is based on the assumption that a tax authority will examine all amounts that it is authorized to examine and that it has all the relevant information to examine. If it is considered unlikely that the taxation authority will accept an uncertain tax treatment, either the most probable amount or the expected amount should be applied to each uncertain tax treatment to account for the effect of the uncertainty, depending on which method is more appropriate for predicting the resolution of the uncertainty. The application of this method had no effect on the consolidated financial statements.

- Amendments to IFRS 9 - Financial instruments, instruments with negative early repayment penalties: this amendment concerns a limited adjustment to the assessment criteria relevant for the classification of financial assets. Financial assets with a negative early repayment fee may, under certain conditions, be recognised at amortised cost or at fair value through equity in other comprehensive income instead of at fair value through profit or loss.
- Amendments to IAS 28 - Non-current Investments in Associates and Joint Ventures: this amendment clarifies that IFRS 9 applies to non-current investments in associates or joint ventures that are not accounted for using the equity method.
- Annual improvement to IFRS - cycle 2015 - 2017: this improvement amended four IFRS. IFRS 3 clarifies that an entity shall apply the principles for business combinations achieved in stages when it obtains control of an operation in which it previously held interests as part of a joint venture. The share previously held by the acquirer must be remeasured. IFRS 11 states that when a party obtains joint control of a business in which it previously held an interest as part of a joint activity, it does not remeasure the previously held interest. IAS 12 is amended to the effect that all income tax consequences of dividend payments must be considered in the same way as the income on which the dividends are based. Finally, IAS 23 stipulates that, when determining the financing cost rate, if an entity has borrowed funds in general for the purpose of obtaining qualifying assets, costs of borrowings specifically incurred in connection with the acquisition of qualifying assets until their completion are not to be taken into account.
- Changes in accordance with IAS 19 - plan amendments, curtailments and settlements: Under IAS 19, pension obligations must be measured on the basis of updated assumptions in the event of plan amendments, curtailments and settlements. The amendment clarifies that after such an event, the service cost and net interest for the remainder of the period must be recognized on the basis of updated assumptions.

However, all these changes do not have a material impact on the consolidated financial statements.

3.7. Revenue

Revenue is measured on the basis of the consideration specified in a contract with a customer. AENOVA recognizes revenue when it transfers control of a good or service to a customer.

In some contracts for the contract manufacturing of pharmaceuticals, the customer is obliged to accept the products before the goods are collected, so that for these contracts revenue is already recognized over a certain period of time. The stage of completion is determined on the basis of the cost-to-cost method. This is an input-based method.

For the provision of services, the progress of services is defined on the basis of defined service stages (milestones). This is therefore an output-oriented method.

The following table provides information on the nature and timing of the fulfilment of performance obligations under contracts with customers:

Dosage form	Criteria applied to determine when the benefit obligation is fulfilled	Revenue recognition in accordance with IFRS 15 (to be applied from 1 January 2018)
Pharmaceutical products • Solids • Semi-solids & liquids • Softgel capsules	Customers gain control of the pharmaceutical products when the drugs are shipped from the Group's warehouse. At this point, invoices are issued and sales are realized. In the event of collection of the pharmaceutical products by the customer, the customer shall only be granted the power of disposal over pharmaceutical products when the goods are made available for collection. The following criteria must all be met: • the product must be identified in itself as belonging to the customer • the product must be ready for physical transfer to the customer, and • the AENOVA Group may not use the product itself or resell it to another customer	Revenues for pharmaceutical products are recognized when the goods are shipped from the Group's warehouse. Revenue is recognized when the customer is notified that the goods are available for collection from stock.
Contract manufacturing of pharmaceutical products • Solids • Semi-solids & liquids • Softgel capsules	In the case of contract manufacturing of pharmaceuticals and services, the AENOVA Group believes that the customer controls all ongoing work during product manufacture or service provision. Under these contracts, pharmaceuticals are manufactured or performed according to customer specifications, and if a contract is terminated by the customer, the AENOVA Group is entitled to reimbursement of the costs incurred to date, including an appropriate margin. Invoices are issued in accordance with the contractual agreements. Amounts not invoiced are reported as contract assets. The advance payments received in this connection are shown accordingly as contract liabilities.	Revenues and the associated costs are recorded over a certain period of time, that is, before the goods or services are collected or accepted by the customer. The stage of completion is determined on the basis of the cost-to-cost method.
Provision of services	When providing services, the AENOVA Group believes that the customer controls all ongoing work during the provision of services. In these contracts the services are invoiced according to contractually agreed service stages (so-called "milestones") - after the customer has accepted the services. Advance payments received from customers in this connection are recognised accordingly as contract liabilities.	Revenues and the associated costs are recorded over a certain period of time. The determination of the stage of completion, according to which revenue is recognized, is based on contractually agreed stages of performance (so-called "milestones"), after acceptance by the customer. The progress of work is therefore an output-oriented method.

The average payment term of customers is 38 days.

3.8. Intangible assets

3.8.1. Acquired intangible assets

Acquired intangible assets are carried at cost or, if acquired in a business combination, at fair value. They are amortized on a straight-line basis over their useful economic life. Amortisation and impairment losses on intangible assets are recognised in the consolidated income statement under depreciation and amortisation. Subsequent expenditure is capitalized only if it increases the future economic benefits embodied in the asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and internally generated brand names, is recognised in profit or loss when incurred.

Intangible assets have the following useful lives:

	Useful life in years
Licences, patents, trademarks and other rights	4 - 30
Development costs	8
Software	4 - 5
Customer contracts and customer relationships	5 - 10
Other intangible assets	3 - 12

3.8.2. Research and development costs

Expenditure on research activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding is recognised as an expense in the period in which it is incurred.

Non-order-related development expenditure is capitalised if the following conditions are cumulatively met:

- the technical feasibility for the intangible asset is given;
- there is an intention to complete the intangible asset and to use or sell it;
- the entity has the ability to use or sell the asset;
- the intangible asset demonstrably results in future economic benefits;
- Sufficient resources are available to complete the intangible asset and to use or sell it;
- the expenditure incurred during development can be reliably estimated.

Amortisation begins when the development phase is completed and the asset is available for use. The amortization period corresponds to the period in which future economic benefits are expected. During the development phase, an impairment test is carried out annually.

3.8.3. Goodwill

Goodwill represents the excess of the cost of a business combination over the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities acquired. If this amount is negative ("badwill"), it is recognized immediately in profit or loss after reassessment. Goodwill is not amortized on a scheduled basis, but tested for impairment at least once a year. If the value is no longer recoverable, an impairment loss is recognized. Otherwise, the carrying amount remains unchanged compared with the previous year.

3.9. Property, plant and equipment

Property, plant and equipment are carried at cost less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the purchase of the asset. The cost of self-constructed property, plant and equipment includes the cost of materials and directly attributable personnel expenses as well as all other directly attributable costs necessary to bring the property, plant and equipment into working order and the costs of dismantling the property, plant and equipment.

If individual components of a fixed asset with a significant acquisition value have different useful lives in relation to the total value of the asset, these components are accounted for and depreciated separately (component approach).

Gains and losses on the sale of property, plant and equipment are determined by comparing the proceeds of the sale with the carrying amount and recognizing them in other operating income or other operating expenses.

The cost to replace a component of an asset is included in the carrying amount of the asset if it is probable that the future economic benefits embodied in the component will flow to the Group and can be measured reliably. The carrying amount of the replaced component is shown as a disposal.

Tangible assets are depreciated on a straight-line basis over their estimated useful lives. Depreciation and impairment losses are recognised in the consolidated income statement under depreciation and amortisation. Assets leased under finance leases are depreciated over the shorter of the term of the lease and their useful lives, unless it is reasonably certain that the company will acquire the leased asset at the end of the lease term. Land is not depreciated. Depreciation periods and methods as well as residual book values are reviewed at each balance sheet date. Subsequent expenditure is only capitalized if it is probable that the future economic benefits associated with the expenditure will flow to the Group.

The useful lives of property, plant and equipment are shown in the following table

	Useful life in years
Buildings	6 - 50
Plant and machinery	2 - 20
IT equipment	3 - 6
Office equipment and furniture	3 - 20
Other property, plant and equipment	0 - 6

3.10. Borrowing costs

Borrowing costs that are directly attributable to the purchase, design or construction of a qualifying asset are capitalized as part of the cost of that asset.

3.11. Impairment of intangible assets and property, plant and equipment

Property, plant and equipment as well as intangible assets with a limited useful life are depreciated over their economic useful life and tested for impairment if there are indications of a possible need for a value adjustment. Goodwill and intangible assets not yet ready for use are tested for impairment at least once a year. If the recoverable amount of an asset is lower than its carrying amount, an impairment loss is recognized immediately in profit or loss.

The recoverable amount is defined as the higher of fair value less cost to sell and value in use. To determine the value in use, the future expected cash flows are discounted to their present value by applying a pre-tax discount rate that reflects current market assessments of the time value of money and the risk associated with the asset. If the carrying amount exceeds the recoverable amount, the difference is recognised in profit or loss as an impairment loss. For the impairment test, all assets are compared at the lowest level for which separable cash flows can be determined and allocated. If the cash flow of an asset cannot be determined individually, the impairment test is performed on the basis of the CGU to which the asset is allocated. Goodwill is allocated to the CGUs in order to perform an annual impairment test. The allocation to the CGUs or groups of CGUs is based on the operating segments of the business combination from which the goodwill arose and from which they are expected to benefit.

Impairment losses determined upon measurement of a CGU first result in a reduction of the goodwill allocated to the CGU and only then in a pro rata impairment loss on the other assets of the CGU (group of CGUs).

There is no reversal of an impairment loss on goodwill following an impairment. With regard to other assets with impairments, a review is carried out on each balance sheet date to determine whether there are indications that the impairment has decreased or no longer exists. An impairment loss is reversed only if there has been a change in the estimates used to determine the recoverable amount. The reversal is limited to the amortised carrying amount that would have been determined had no impairment loss been recognised in the past.

3.12. Inventories

Inventories include raw materials and supplies, work in progress, finished goods and merchandise.

Inventories are measured at the lower of cost and net realizable value. The first-in, first-out (FIFO) method is used as the method of subsequent consumption. Acquisition costs include all costs incurred in bringing the inventories to their present location and condition. In addition to direct costs, production costs include appropriate portions of the necessary fixed and variable material and production overheads, insofar as they are incurred in connection with the production process.

The net selling price is the estimated selling price in the ordinary course of business less the estimated costs of completion and selling expenses.

3.13. Income taxes

Income tax expense or tax income represents the sum of actual and deferred tax expense or tax income. The current tax expense is calculated on the basis of the taxable income for the respective year. The taxable income differs from the profit before income tax as shown in the income statement because it excludes expenses and income that are taxable or tax-deductible in prior or subsequent years or never. The Group's liability for current tax expense is calculated on the basis of the tax rates applicable or legally fixed by the balance sheet date.

Deferred taxes are the expected tax charges and tax relief resulting from differences between the carrying amounts of assets and liabilities in the tax balance sheets of the individual companies compared with the carrying amounts in the consolidated financial statements under IFRS. Deferred taxes are not recognized for the following temporary differences: initial recognition of assets or liabilities in a transaction that is not a business combination and that will not result in a gain or loss under IFRS or for tax purposes; and differences arising from investments in subsidiaries to the extent that it is probable that they will not reverse in the foreseeable future. In addition, no deferred taxes are recognized on temporary differences when goodwill is initially recognized.

Deferred taxes are calculated using the tax rate expected to apply when the temporary differences are reversed, based on laws in force or enacted as of the balance sheet date. Deferred tax assets and deferred tax liabilities are offset if there is a legally enforceable right to offset current tax liabilities and tax assets and relate to taxes levied by the same taxation authority on the same taxable entity or on different taxable entities that intend to settle their tax liabilities and tax assets together or whose tax liabilities and tax assets are realized simultaneously.

Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be offset. Deferred tax assets are reviewed at each balance sheet date and reduced by the amount for which it appears unlikely that a corresponding tax credit can be used.

Changes in deferred taxes are recognised as tax income or expense in the income statement unless they relate to items recognised in other comprehensive income or directly in equity; in this case, deferred taxes are also recognised in other comprehensive income or directly in equity.

3.14. Financial instruments

Financial instruments include investments in equity and debt instruments, trade and other receivables, cash and cash equivalents, loans and credits, trade and other payables.

3.14.1. Recognition and measurement

Trade receivables are recognised from the date on which they arise. All other financial assets and liabilities are initially recognized on the trading day on which the Group becomes a contracting party in accordance with the contractual provisions of the financial instrument.

A financial asset (other than a trade receivable without a significant financing component) or a financial liability is measured at fair value upon initial recognition. In the case of an item that is not measured at FVTPL, the transaction costs that are directly attributable to its acquisition or issue are added to this. Trade receivables without a significant financing component are initially recognized at the transaction price.

3.14.2. Classification and subsequent measurement of financial assets

On initial recognition, a financial asset or liability is classified and measured as follows:

- at amortised cost (AC)
- FVOCI debt instruments (investments in debt instruments measured at fair value with changes in other comprehensive income)
- FVOCI equity instruments (equity instruments measured at fair value with changes in other comprehensive income)
- FVTPL (at fair value with changes in value in profit and loss)

Financial assets are not reclassified after initial recognition unless the AENOVA Group changes its business model for managing financial assets. In this case, all affected financial assets are reclassified on the first day of the reporting period following the change in the business model.

A financial asset is measured *at amortised cost* if both of the following conditions are met and the asset is not designated as FVTPL

- It is held as part of a business model whose objective is to hold financial assets in order to collect the contractual cash flows, and
- the contractual terms of the financial asset give rise to cash flows on specified dates that are solely payments of principal and interest on the principal outstanding.

A debt instrument is measured *at FVOCI* if both of the following conditions are met and it is not designated as FVTPL

- It is held as part of a business model whose objective is to hold financial assets in order to collect the contractual cash flows and to sell financial assets and
- its contractual terms and conditions result in cash flows at specified dates, representing exclusively principal and interest payments on the outstanding principal.

Upon initial recognition of an equity instrument that is not held for trading purposes, the AENOVA Group can irrevocably choose to show subsequent changes in the fair value of the investment in other comprehensive income. This choice is made individually for each investment.

All financial assets that are not measured at amortised cost or FVOCI are measured at FVTPL. This includes all derivative financial assets. Upon initial recognition, the AENOVA Group can irrevocably decide to designate financial assets that otherwise meet the conditions for measurement at amortized cost or FVOCI to FVTPL if this leads to the elimination or significant reduction of accounting anomalies that would otherwise occur.

Subsequent measurement AC: All changes are recognised in profit or loss

Subsequent valuation FVTPL: Net gains and losses, including any interest or dividend income, are recognised in profit or loss.

Subsequent measurement of debt instruments FVOCI: Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment losses are recognised in profit or loss. Other net gains or losses are recognised in other comprehensive income. On derecognition, the accumulated other comprehensive income is reclassified to profit or loss.

Subsequent measurement of equity instruments FVOCI: Dividends are recognised as income in profit or loss unless the dividend is clearly intended to cover part of the cost of the investment. Other net gains or losses are recognised in other comprehensive income and are never reclassified to profit or loss.

3.14.3. Assessment of the business model

AENOVA makes an assessment of the objectives of the business model as to whether the financial asset is held in order to collect the contractual cash flows in full.

Trade receivables held for sale are measured at fair value at the time of initial recognition, as these receivables are held to collect cash flows but are sold before final maturity.

3.14.4. Estimation of whether the contractual cash flows are exclusively interest and principal payments

For the purposes of this assessment, the principal amount is defined as the fair value of the financial asset on initial recognition. "Interest" is defined as compensation for the time value of money and for the default risk associated with the principal amount outstanding over a specified period of time, as well as for other fundamental credit risks.

In assessing whether the contractual cash flows are solely interest and principal payments on the principal amount, AENOVA takes into account the contractual agreements of the instrument. This includes an assessment of whether the financial asset contains a contractual agreement that could change the timing or amount of the contractual cash flows so that it no longer meets these conditions. In making this assessment, the Group considers

- certain events that would change the amount or timing of the cash flows,
- early repayment and renewal options and
- Conditions that restrict the Group's claim to cash flows from a specific asset.

3.14.5. Derecognition

AENOVA derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire or the rights to receive the cash flows are transferred in a transaction in which all material risks and opportunities associated with ownership of the financial asset are also transferred.

The Group derecognizes a financial liability when the contractual obligations are fulfilled, cancelled or expired.

3.14.6. Classification and subsequent measurement of financial liabilities

Financial liabilities are measured at fair value upon initial recognition. The related transaction costs of all financial liabilities not measured at fair value through profit or loss are recognized as a deduction from the carrying amount of the liability. Trade payables and other non-derivative financial liabilities are measured at amortized cost (FLAC) using the effective interest method. Financial liabilities are derecognised when they are extinguished, i.e. when they are discharged or cancelled or expire.

3.15. Financial income and expenses

Financial income includes interest income on invested capital, changes in the fair value of derivative financial instruments and foreign exchange gains. Interest income is recognized in the income statement when it is earned using the effective interest method.

Financial expenses include interest expenses on loans, the effect of interest on provisions, changes in the fair value of derivative financial instruments, impairment of financial assets and exchange losses. Borrowing costs are generally recognised in the income statement using the effective interest method.

3.16. Impairment of financial assets

New customers are first individually analyzed with regard to their creditworthiness before AENOVA offers its standardized delivery and payment conditions. This analysis includes external ratings, where available, as well as annual financial statements, information from credit agencies, industry information and, in some cases, banking information.

The Group limits its default risk on trade receivables by setting a maximum payment term. The carrying amounts of financial assets and contract assets correspond to the maximum default risk.

At each balance sheet date, the Group assesses whether there is objective evidence that financial assets measured at amortised cost or FVOCI are impaired in their credit quality. The credit rating of an asset is impaired if one or more events occur with an adverse effect on the expected future cash flows of the financial asset. Objective indications are the default or delay of a debtor or indications that a debtor is going into insolvency. In determining whether the default risk of a financial asset has increased significantly since initial recognition and in estimating expected credit losses, the Group considers appropriate and reliable information that is relevant and available without undue delay and expense. This includes both quantitative and qualitative information and analysis based on the Group's past experience and sound judgment, including forward-looking information.

The gross carrying amount of a financial asset is adjusted if the Group does not believe that all or part of the financial asset is realizable after a reasonable assessment. To this end, an individual assessment is made of the timing and amount of the adjustment, based on the expectation that the receivable will be collectible. From AENOVA's perspective, the default risk of a financial asset is increased if it is more than 30 days overdue. However, due to standard industry procedures, such as incoming quality controls, a payment that is more than 30 days overdue is not unusual. AENOVA only makes value adjustments in the amount in which it does not expect to receive payment.

For debt instruments valued at FVOCI, credit losses are measured as the present value of the defaults (i.e. the difference between the payments contractually owed to the Group and the payments that the Group expects to receive). The expected credit losses are discounted at the original effective interest rate of the corresponding debt instrument.

AENOVA considers a financial asset to be uncollectable if it is unlikely that the debtor will be able to pay its credit obligations to the Group in full.

The Group uses the simplified approach for general bad debt allowances on trade receivables, leasing receivables and contract assets. The simplified approach stipulates that the default credit risk is calculated on the basis of the amount of the expected credit loss over the entire term. Expected credit losses over the term are expected credit losses resulting from all possible default events during the expected term of the financial instrument.

An impairment loss in respect of a financial asset carried at amortised cost is calculated as the difference between its carrying amount and the present value of expected future cash flows discounted at the original effective interest rate.

The Group uses an allowance matrix to measure the expected credit losses on trade receivables and contract assets. The loss rates are calculated using the "roll rate" method, which is based on the probability that a receivable will progress through successive stages of payment default. Roll rates are calculated separately for defaults in different segments based on the general credit risk characteristics of the geographical location. Loss rates are calculated on the basis of actual losses incurred over the past three years. Where necessary, these rates have been multiplied by scaling factors to reflect the differences between the economic conditions at the time of historical data collection, current conditions and the Group's view of economic conditions over the expected life of the receivables.

Default risk is the risk of financial loss if a customer or the contracting party to a financial instrument fails to meet its contractual obligations. The default risk generally arises from the Group's trade receivables and contract assets.

The following table contains information on the estimated default risk and expected credit losses for trade receivables and contract assets as of 31 December 2019:

Dec. 31, 2019 **KEUR**	**Minimum loss rate**	**Maximum loss rate**	**Gross amount not adjusted individually**	**Expected credit losses**
Not overdue	0,23%	4,31%	74.240	-704
Overdue less than 30 days	0,88%	23,53%	14.947	-656
Overdue between 31 and 90 days	1,55%	67,65%	792	-185
Overdue more than 90 days	3,29%	100,00%	1.998	-189
Total			**91.977**	**-1.733**

Dec. 31, 2018 **KEUR**	**Minimum loss rate**	**Maximum loss rate**	**Gross amount not adjusted individually**	**Expected credit losses**
Not overdue	0,36%	16,60%	63.735	-1.049
Overdue less than 30 days	1,52%	24,97%	12.870	-914
Overdue between 31 and 90 days	2,33%	62,76%	3.118	-32
Overdue more than 90 days	0,00%	76,45%	5.207	-408
Total			**84.930**	**-2.403**

As far as possible, the Group applies the exception rule of IFRS 9 for other financial assets, as these investments have a low default risk. The default risk of cash and cash equivalents is very low due to the good ratings of the banks and credit institutions where the funds are held.

Impairment losses on trade receivables and debt instruments classified as FVOCI are recorded in a separate account. If there is reasonable certainty that payment will not be received, the amount assumed to be irrecoverable is booked directly against the financial asset.

All impairments are recognised in the income statement regardless of classification.

An impairment loss is derecognised if the reversal can be objectively justified by an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost, any reversal of impairment losses is recognised in profit or loss.

3.17. Provisions for pensions and other employee benefits

The Group maintains various pension plans. These plans are generally funded by payments to external entities (trustee administered funds, insurance companies, pension and welfare funds). The Group has both defined benefit and defined contribution plans.

A contribution plan is a pension plan under which the Group pays fixed amounts to an independent entity. The Group has no legal or constructive obligation to pay further amounts if the fund does not have sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

A benefit plan is a pension plan that is not a contribution plan. Under a defined benefit plan, the Group typically guarantees a certain amount of pension benefits that an employee will receive on retirement. Usually, this amount depends on various factors such as age, number of years of service and the employee's last salary received before retirement.

The pension provision is determined annually by independent experts using the projected unit credit method for each defined benefit pension plan separately. The Group's obligation is calculated on the basis of the amount of future benefits that employees have earned as a result of their work performed in the past or in previous periods.

The obligation is discounted to its present value, known as the gross pension liability, using interest rates derived from the yields on high-quality corporate bonds denominated in the currency in which the pension benefits are to be paid, with the remaining term of the bonds approximating the term of the obligation until payment. The projected unit credit method also takes into account long-term future developments, such as salary increases, pension adjustments or average life expectancy. The fair value of the related plan assets is deducted from the gross pension obligation. This results in the net liability to be recognized.

The Company determines net interest expense (income) by multiplying the net liability at the beginning of the period by the interest rate used to discount the gross defined benefit obligation at the beginning of the period, taking into account payments and contributions made during the year. Actuarial gains and losses resulting from experience-based adjustments and changes in actuarial assumptions and the difference between the actual return on plan assets and the typical return assumed at the beginning of the period are recognized in other components of equity in the period in which they occur. Past service cost is recognised immediately in profit or loss. If the present value of a defined benefit obligation changes as a result of a plan amendment or curtailment, the Company recognizes the resulting effects as past service cost in profit or loss for the period.

For contribution plans, the Group pays either contractually agreed or voluntary contributions to public or privately administered pension plans. The Group has no further payment obligations after these contributions have been paid. The amounts payable under contribution plans are expensed when the obligation to pay the amounts arises and reported as personnel expenses. Prepayments on contributions are capitalized to the extent that these prepayments will result in a refund or reduction of future payments.

3.18. Other accrued liabilities

See comments under 3.5 Measurement decisions and estimates.

3.19. Leases

With the first-time application of IFRS 16, lease liabilities are recognised for leases previously classified as operating leases under IAS 17. The Group has applied IFRS 16 with the modified retrospective approach and has therefore not restated the comparative information, but continues to present it in accordance with IAS 17 and IFRIC 4. Details of the accounting policies under IAS 17 and IFRIC 4 are presented separately.

Under IFRS 16, a lease is defined as an agreement or part of an agreement that defines the right to use an asset (underlying) for a specified period of time and stipulates a consideration for this. An agreement can be (or contain) a lease if a specific asset is "identified". The right to control an identified asset implies the following rights:

- Inflow of almost all economic benefits from the use of the identified asset
- Control over the use of the identified asset

Leases entered into on or after January 1, 2019, are recognized as rights of use and corresponding liabilities at the time when the leased asset is available for use by the Group.

IFRS 16 introduces a uniform accounting model according to which leases are to be recognised in the lessee's balance sheet. A lessee recognises a right of use asset, which represents its right to use the underlying asset, and a liability under the lease, which represents its obligation to make lease payments. Short-term leases and leases of minor value are recognised as expenses.

On initial recognition or when a contract is amended, the lessee recognises a lease liability and an asset arising from a right of use on the date on which the leased asset is made available. The Group has decided to account for lease and non-lease components as a single lease component. On the date of provision or amendment of a contract containing a lease component, the Group allocates the contractually agreed consideration on the basis of relative unit prices. The liability is initially measured at the present value of the future lease payments. For this purpose, lease payments include fixed non-cancellable payments for lease components, amounts from residual value guarantees that are expected to be paid, certain types of contingent payments, variable lease payments linked to an index or (interest) rate, and amounts during option periods that are reasonably certain. Termination penalties are included if the lease term includes a termination option. In contrast, the lease liability does not include any of the following payments:

- Payments for items not included in the lease
- payments in optional extension periods, unless an extension is reasonably certain
- Future changes in variable payments that depend on an index or a price
- Variable payments related to the lessee's future sales or use of the leased asset

The discount rate is the lessee's marginal borrowing rate. To determine its marginal borrowing rate, the Group obtains interest from various external sources and makes certain adjustments to reflect the terms of the lease and the nature of the asset.

The initial measurement of the right of use is based on the lease liability. Adjustments are necessary for:

- Rent prepayments
- Leasing subsidies or incentives received
- Initial direct costs incurred
- An estimate of the costs incurred for dismantling, removal or rebuilding of the underlying tangible asset and/or site, which the lessee must necessarily bear.

In subsequent measurement, the asset from a right of use is depreciated on a straight-line basis unless ownership of the underlying asset is transferred to the Group at the end of the lease term or the cost of the right of use takes into account that the Group will exercise a purchase option. In this case the right of use is amortised over the useful life of the underlying asset, which is determined in accordance with the rules for property, plant and equipment. In addition, the right of use is continuously adjusted for impairment where necessary. The lease liability is recognized at amortized cost using the effective interest method. It is revalued if future lease payments change due to a change in index or interest rates, if the Group adjusts its estimate of the expected payments under a residual value guarantee, if the Group changes its assessment regarding the exercise of a purchase, renewal or termination option or if de facto fixed lease payments change. Lease payments are divided into interest expenses and a reduction of the lease obligation.

The Group has decided not to recognise rights of use and lease liabilities for leases that are based on assets of minor value and for short-term leases. The Group recognizes the lease payments related to these leases as an expense on a straight-line basis over the term of the lease. In the balance sheet, the Group reports rights of use separately and lease liabilities under financial liabilities.

The lessor's accounting is comparable with the old IAS 17 standard. Lessors continue to classify leases as finance or operating leases when the lease commences. In order to classify each lease, the Group has made an overall assessment of whether the lease transfers substantially all the risks and rewards incidental to ownership of the underlying asset. If this is the case, the lease is classified as a finance lease; if not, it is an operating lease. In making this assessment, the Group considers certain indicators, such as whether the lease covers most of the economic life of the asset.

If the Company is the lessor under a finance lease, the assets under the lease are recognized in the balance sheet and presented as a receivable in the amount of the net investment in the lease. The Group does not act as lessor, but subleases some of its real estate. The Group accounts for the main lease and the sub-lease separately when acting as an intermediary lessor. It classifies the sublease on the basis of its right of use under the main lease and not on the basis of the underlying asset. Lease payments under operating leases are recognised by the Group as income under other operating income on a straight-line basis over the term of the lease.

There were no sale and leaseback transactions in which the company acts first as seller and then as lessee in the 2019 financial year.

Prior to January 1, 2019, lease transactions were classified as either finance leases or operating leases. For contracts entered into before this date, the Group has made the following assessment of whether an arrangement was, or contained a lease:

- performance of the agreement was dependent on the use of a specific asset or assets; and
- the agreement conferred a right to use the asset. An arrangement conveys a right to use an asset if the following conditions are met:
    - The buyer had the ability or right to operate the asset, receiving or controlling more than a negligible amount of output.
    - The buyer had the ability or right to control physical access to the asset while receiving or controlling more than a negligible amount of output.
    - Facts and circumstances indicated that it was unlikely that other parties would take over more than a negligible amount of the output and that the unit price was neither contractually fixed per unit of production nor reflected the current market price per unit of output.

Leases for which the Group bears all material risks and rewards of ownership are classified as finance leases. On initial recognition, the asset underlying the lease was recognised at the lower of fair value and the present value of the minimum lease payments. In the following, the accounting for the asset was continued in line with the Group's accounting rules for assets of this type. The minimum lease payments made under the lease were divided into an interest and repayment portion. The interest portion was recognised in the financial result with an effect on income. Rental and lease payments made by the Group as lessee under operating leases were recognised in other operating expenses during the period of the lease.

Up to and including 2018, lease payments under an operating lease were recognised as an expense in the income statement on a straight-line basis over the term of the lease, unless another systematic basis reflected the time pattern of the benefit to the Company. An operating lease exists if the lease agreement does not transfer all material risks and opportunities to the lessee. AENOVA has regularly reviewed all leasing relationships to determine whether they were operating or finance leases.

In the case of leasing transactions in which the Group acted as lessor, it classified the agreement as either a finance lease or an operating lease when it was concluded. To classify each lease, the Group made an overall assessment of whether the lease transfers substantially all the risks and rewards incidental to ownership of the underlying asset. If this was the case, the lease was classified as a finance lease. A receivable was recognized in the amount of the net investment in the lease and the interest income was recognized in profit or loss. All other leasing transactions in which the Group was lessor were classified as operating leases. In this case, the leased asset remained in the consolidated balance sheet and was depreciated. The lease payments were recognised as income on a straight-line basis over the term of the lease.

3.20. Cash and cash equivalents

Cash and cash equivalents include cash in hand and bank balances with a term of up to three months.

99% of cash and cash equivalents are held by banks and credit institutions with a Moody's rating of Baa2 or better. These 99% include at least 79% that are even rated A1 or higher.

4. Financial Risk Management

Due to its business activities, AENOVA is exposed to certain financial risks. These can be divided into three areas:

- Credit default risk,
- Liquidity risk and
- market risk (foreign currency risk, interest rate risk).

Group risk management focuses on unforeseeable events on the financial markets and attempts to minimize adverse effects on the Group result.

The overall responsibility for establishing and monitoring a group-wide risk management system lies with the Executive Board. Risk management is carried out by defined persons responsible within the Corporate Accounting, Corporate Controlling and Treasury departments in accordance with defined guidelines approved by the Management Board. Risk identification, assessment and hedging are carried out in close cooperation and coordination with the operating business units.

This section provides information on risk positions, the objectives of risk management, the methods and processes used to measure and manage risk, and the Group's capital management.

The risk management policies are designed to help the Group identify and analyze risks so that appropriate controls and risk limits can be established to monitor risks and comply with risk limits.

The AENOVA Group's credit agreements contain financial covenants. AENOVA monitors compliance with these covenants on an ongoing basis using forecasts and simulations. All covenants were observed with sufficient leeway in the year under review.

4.1. Credit default risk

Default risk is the risk of financial loss if a customer or business partner is unable to meet its contractual obligations in relation to a financial instrument and arises mainly from the Group's trade receivables from customers.

The carrying amount of financial assets corresponds to the maximum default risk. The maximum default risk is shown in the following table:

KEUR	Dec. 31, 2019	Dec. 31, 2018
Trade receivables and contract assets	90.244	82.527
Cash and cash equivalents	51.705	49.571
Other financial assets	10.517	10.749
Maximum credit exposure	**152.465**	**142.847**

The default risk is analysed and controlled by a central responsibility (credit risk management). The outstanding amounts are analysed and evaluated on a weekly basis and measures are defined with the responsible market managers. In the case of new business relationships, the individual company is generally responsible for analysing the default risks in order to determine risk-adequate payment and delivery terms. Central credit risk management reviews and approves the terms and conditions on a case-by-case basis, taking into account the assessment of an external and independent rating agency.

External customer ratings are used if available. If these are not available, an internal risk assessment is carried out based on a qualitative analysis of the customer (financial ratios, other key figures), past experience and other criteria. As a result of the analysis, risk limits per customer are set, reviewed and approved by the management. No risk limits were exceeded in the reporting period. There were no significant concentrations of risk in the period under review, as the total portfolio of receivables is spread over a sufficiently large number of individual customers from different countries.

Goods are sold with retention of title clauses so that AENOVA has a secured claim in the event of default. The Group has no trade receivables or contract assets for which no impairment losses have been recognized due to collateral. AENOVA does not require collateral with regard to trade and other receivables.

Loss rates are calculated on the basis of actual credit losses over the last three years. These rates have been multiplied by scaling factors, where necessary, to reflect differences between the economic conditions at the time of historical data collection, current conditions and the Group's view of economic conditions over the expected life of the receivables.

The maximum period to be considered when estimating expected credit losses is the maximum contractual period during which the Group is exposed to credit risk.

4.2. Liquidity risk

Liquidity risk describes the risk that AENOVA will not be able to meet its financial obligations when they fall due, such as the repayment of financial debts or the settlement of liabilities to suppliers. As part of its liquidity management, Treasury ensures that there are always sufficient liquid funds available to meet payment obligations in a timely manner under both normal and difficult conditions without incurring unacceptable losses or the risk of damage to the company's reputation.

A liquidity forecast is prepared for the purpose of short- and medium-term liquidity management. The preparation is carried out by the Group companies, consolidation and evaluation takes place at the level of AENOVA Holding GmbH, where it is ensured that sufficient liquidity reserves are available to meet operational payment obligations and financing obligations. The liquidity forecast takes into account AENOVA's financing plans (interest and redemption payments), compliance with certain financial key figures ("financial covenants"), compliance with internal targets regarding balance sheet key figures and - if available - external regulatory or legal requirements.

AENOVA uses the liquidity forecast to track the main payment movements and to ensure that the AENOVA Group has sufficient liquidity. Furthermore, the Group uses the monthly balance sheets, income statements, working capital planning and investment reports to monitor long-term liquidity. As a matter of principle it is ensured that sufficient financial resources are available to cover expected operating expenses and to service financial liabilities. This does not include the potential impact of extraordinary events that cannot be reliably planned, such as natural disasters.

In addition to the effective management of liquidity and working capital, the Group reduces the liquidity risk with a revolving loan from Unicredit AG, London, in the amount of KEUR 50,000. As of December 31, 2019, KEUR 10,000 of the revolving loan had been utilized. An additional KEUR 2,500 thousand (previous year: KEUR 2,500 thousand) is reserved for guarantees.

Most of the liabilities are fixed in terms of interest and repayment date. The concentration of risk is mainly due to the fixed payment amounts and dates with respect to Unicredit AG, London and Deutsche Bank AG, London, while at the same time there are limited borrowing possibilities on the free market. AENOVA considers itself exposed to a low risk concentration due to the sufficient available liquidity and existing credit lines. The refinancing of the existing credit lines as of March 6, 2020 will ensure long-term liquidity.

The contractually agreed future cash outflows of the financial liabilities recognised in the balance sheet are shown undiscounted in the following table. This includes interest and principal payments. Cash outflows of financial liabilities that are repayable on demand are shown at the earliest possible repayment date. Payments whose amount depends on a variable interest rate are shown at market conditions on the respective balance sheet date. As of December 31, 2019, it is not foreseeable that the cash outflows will occur significantly earlier or at a significantly different amount.

Dec. 31, 2019 KEUR	< 1 year	1-5 years	> 5 years
Trade payables	60.700	144	25
Bank loans	511.777	142.879	1.937
Derivative financial liabilities	-	-	-
Accrued liabilities	24.346	4.884	4.374
Leasing liabilities	8.399	23.595	23.209
Shareholder loans		207.672	
Accrued interest	-	98.739	-
Other financial liabilities	53.929	11.903	1.242
	659.151	**489.816**	**30.787**

Dec. 31, 2018 KEUR	< 1 year	1 - 5 years	> 5 years
Trade payables	53.493	228	25
Bank loans	1.749	655.784	2.436
Derivative financial liabilities	-	-	-
Accrued liabilities	15.910	15.749	4.645
Leasing liabilities	4.403	14.254	17.840
Shareholder loans	-	207.672	-
Accrued interest	-	80.026	-
Other financial liabilities	38.928	17.874	1.379
	114.482	**991.588**	**26.326**

4.3. Market risk

4.3.1. Foreign exchange risk

Foreign currency risks result from operating activities and investments in foreign operations. The foreign currency risk of individual subsidiaries is managed and optimized on the basis of the respective functional currency.

Group management has set up guidelines according to which the individual companies must hedge against foreign currency risks. Individual companies that conduct transactions in currencies other than their functional currency are required to hedge foreign currency risks with the involvement of Treasury. Hedging is carried out either by means of forward exchange transactions approved by Group management or by holding foreign currencies in reserve. The operating units are prohibited from concluding derivatives for speculative reasons or from raising or investing funds in foreign currencies.

Foreign currency cash flows are analyzed on an ongoing basis and, if necessary, hedged by means of forward transactions such as currency options or forward transactions in order to avoid currency losses. Payment surpluses from sales transactions are offset by natural hedging by controlling incoming and outgoing payments in the respective currency (natural hedge strategy).

Foreign currency risks are presented within the framework of a sensitivity analysis in accordance with IFRS 7. This analysis shows the effect of a hypothetical change in the relevant risk variables on profit before tax by showing the effect of a revaluation or devaluation of the euro in relation to foreign currencies that are material to the Group. This analysis uses financial instruments that are denominated in a currency other than the functional currency and are of a monetary nature. In accordance with the requirements of IFRS 7, effects from the translation of the financial statements into the Group reporting currency are not included in the analysis. There are no effects on equity in the Group with the exception of the effects on profit before tax:

KEUR +10% increase of EUR	2019	2018
against CHF	-2.117	-1.566
against USD	-678	170
against GBP	-1.428	-6
against RON	-42	174
Total	**-4.264**	**-1.228**

KEUR -10% increase of EUR	2019	2018
against CHF	2.117	1.566
against USD	678	-170
against GBP	1.428	6
against RON	42	-174
Total	**4.264**	**1.228**

4.3.2. Interest rate risk

AENOVA's interest rate risk results from its long-term, variable-interest loans. By borrowing at variable interest rates, the Group is exposed to cash flow interest rate risk. By borrowing funds at fixed interest rates, the Group is subject to fair value interest rate risk.

The Group analyses its interest rate risks on a dynamic basis. Based on the various scenarios, the Group can manage its cash flow interest rate risk through variable-to-fixed interest rate swaps. Such interest rate swaps have the economic effect of converting floating rate bonds into fixed rate bonds. When the interest rate swaps are entered into, the difference between the fixed interest rates and the variable interest rates can be offset based on the contractual notional amounts.

AENOVA is exposed to interest rate risks due to bank loans with variable interest rates. The interest rates consist of a fixed margin and a variable interest component based on EURIBOR. The variable component has a floor of 1.00%, so that if the EURIBOR is less than 1.00%, the margin plus 1.00% is applied as the variable interest rate. The nominal amount of non-current bank loans with variable interest rates amounted to KEUR 639,040 as of 31 December 2019. AENOVA does not currently use any payer interest rate swaps. The most recently concluded payer swaps expired on March 31, 2017 and were not renewed. Since AENOVA does not expect the EURIBOR to rise above 1.00% in the medium term, the company sees itself as exposed to only a low risk in the medium term.

Interest rate risks are presented within the framework of a sensitivity analysis in accordance with IFRS 7. This shows the effects of changes in the market interest rate on interest payments, interest income and expenses, other income and expense accounts and, where applicable, on equity. The interest sensitivity analysis is based on the following assumptions:

- Changes in the market interest rates of all non-derivative financial instruments with fixed interest rates that are carried at amortised cost are not part of the interest rate risk according to IFRS 7.
- Changes in market interest rates affect the interest income or expense of non-derivative variable-rate financial instruments whose interest payments were not hedged within a hedging relationship. These are therefore included in the calculation of the sensitivity of the effects on profit before tax.
- A change of 100 basis points in the reference interest rate at the reporting date would have increased (decreased) the result by the effect shown in the following table This analysis is based on the risk at the respective reporting date and includes the variable interest financial instruments existing at the reporting date. It is assumed that all other variables, especially foreign exchange rates, remain constant.

KEUR Scenario 1: increase in interest rate structure by 100 base points	2019	2018
Effect on earnings before income taxes	-	-
Effect on equity	-	-

KEUR Scenario 2: decrease in interest rate structure by 100 base points	2019	2018
Effect on earnings before income taxes	-	-
Effect on equity	-	-

5. Notes to the consolidated statement of comprehensive income

5.1. Revenues

The AENOVA Group generates revenues primarily from the sale of the following dosage forms:

- Solids
- Semi-solids and liquids
- Soft gelatine capsules

Revenues consist of gross revenues less customer discounts and rebates.

The following table presents revenues from contracts with customers by major dosage form and development and licensing activities. They are also broken down by the time of revenue recognition.

Jan. 1 - Dec. 31, 2019 KEUR	Sale of goods	Rendering of Service & Others	Total 2019
Product lines			
Solids (SOL)	411.148		411.148
Semi-Solids and liquids (SEL)	133.442		133.442
Softgel capsules (SGC)	112.257		112.257
Services & Other	-	68.801	68.801
Revenues	**656.847**	**68.801**	**725.647**

Jan. 1 - Dec. 31, 2018 KEUR	Sale of goods	Rendering of Service & Others	Total 2019
Product lines			
Solids (SOL)	399.822		399.822
Semi-Solids and liquids (SEL)	143.050		143.050
Softgel capsules (SGC)	130.518		130.518
Services & Other	-	48.549	48.549
Revenues	**673.390**	**48.549**	**721.940**

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Revenue transferred to customers over time	669.498	608.300
Revenue transferred to customers at a point in time	56.149	113.640
Revenues	**725.647**	**721.940**

Discounts and rebates relate exclusively to goods sold. Revenues from the provision of services relate to analytical services, packaging services, contract development and other services.

As permitted by IFRS 15, no information is provided on the remaining benefit obligations as at 31 December 2019 that have an expected original maturity of one year or less.

The following table shows the breakdown of revenues by geographical region:

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Germany	279.046	268.045
Rest of Europe	343.446	343.566
USA	43.321	36.845
Rest of world	59.835	73.483
Revenues	**725.647**	**721.940**

The following table provides information on receivables, contract assets and contract liabilities from contracts with customers:

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Contract assets	51.182	40.274
Contract liabilities	9.456	8.107
Revenue recognised in contract liability at the beginning of the period	1.014	175

The contract assets mainly relate to the AENOVA Group's claims for consideration for services from the contract manufacturing of pharmaceuticals that have been completed but not yet invoiced as of the balance sheet date. The contract assets are reclassified to the item "Trade receivables" as soon as the rights become unconditional. This usually takes place when the invoice is issued to the customer.

The contract liabilities mainly relate to investment grants received from customers for the acquisition of machinery for the production of pharmaceuticals, for which revenues are recognized over a certain period of time.

5.2. Other operating income

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Capitalised services	687	988
Release of provisions (previous periods)	4.149	6.923
Reimbursements	192	114
Income from subleasing right-of-use assets	364	373
Gain on disposal of tangible and intangible assets	101	2.123
Income from investment grants	339	331
Remaining other operating income	4.225	34.588
Other operating income	**10.056**	**45.439**

Capitalised services mainly relate to work performed by the company itself in connection with the installation and conversion of property, plant and equipment. Income from the reversal of provisions mainly relates to existing onerous contracts, warranty provisions and performance bonuses. Miscellaneous other operating income mainly includes the reversal of value adjustments on devalued receivables from previous periods, income from canteen sales and refunds.

5.3. Cost of materials

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Costs of raw materials, consumables and supplies	-270.497	-277.411
Costs of services purchased and subcontracting	-14.364	-15.129
Cost of materials	**-284.861**	**-292.541**

5.4. Employee benefit expenses

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Wages and salaries	-200.970	-190.918
thereof termination benefits	*-4.159*	*-3.239*
Expenses for temporary workers	-16.427	-14.817
Other personnel expenses	-6.963	-6.173
Social security, post-employment and welfare costs	-41.327	-38.273
thereof pension costs for defined benefit plans	*-5.074*	*-5.201*
thereof pension costs for defined contribution plans	*-1.386*	*-265*
thereof social security expenses	*-34.867*	*-32.807*
Employee benefit expenses	**-265.687**	**-250.181**

The expenses for defined contribution plans mainly include the employer's contribution to the statutory pension scheme. For the development of personnel expenses due to share-based payments, see 11 Share-based payments.

The average number of employees in fiscal year 2019 was 4,386 (2018: 4,319), of which 2,735 (2018: 2,647) were employed in production, 728 (2018: 730) in quality assurance and 923 (2018: 942) in other areas.

From the personnel expenses, KEUR 10,200 (2018: KEUR 5,362) are attributable to development employees.

5.5. Impairment loss/gain

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Reversal of bad debt allowance (previous periods)	661	1.538
Impairment loss on trade receivables and contract assets	-555	-846
Impairment loss/gain on trade receivables and contract assets	**107**	**692**

5.6. Other operating expenses

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Plant and machinery expense	-50.288	-46.447
Legal and other advisory	-8.504	-7.936
Expenses for leasing	-2.582	-7.980
thereof lease expense for short-term leases	*-1.376*	-
thereof lease expense for low-value leases	*-1.148*	-
Expenses for production and office facilities	-3.770	-3.779
Expenses related to onerous contract	-	-2.533
Distribution costs	-4.412	-4.595
Administration expenses	-1.998	-1.732
Insurance expenses	-2.162	-1.856
Travelling expenses	-1.687	-1.729
Marketing & advertising expenses	-611	-828
Loss on disposal of assets	-271	-3.783
Warranty expenses	-750	-525
Licences, provisions and patents	-28	-190
Material overhead costs	-11.126	-10.931
Other operating expenses	-6.534	-6.258
Other operating expenses	**-94.723**	**-101.101**

From the other operating expenses of KEUR -94,723 (2018: KEUR -101,101), expenses of KEUR -3,510 relate to related parties.

Plant and machinery expenses mainly include costs for the operation and maintenance of production facilities.

In addition to the costs of tax consultancy and auditing, the legal and consultancy expenses mainly comprise consultancy expenses in connection with strategic projects of the Group.

Other material overheads mainly include consumables for laboratory and analysis activities, packaging materials for freight, work clothing or material costs not included in the bill of materials.

5.7. Financial income

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Income from foreign exchange differences	4.412	11.094
Interest income	12	3.829
Other	430	111
Financial Income	**4.855**	**15.034**

The foreign exchange gains result mainly from exchange rate fluctuations for realised foreign currency transactions and mainly relate to foreign currency transactions in CHF, USD and GBP. Both unrealized and realized foreign currency gains result from deliveries and services.

5.8. Financial expenses

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Interest expenses on financial liabilities measured at amortised cost	-63.804	-67.082
Expenses from foreign exchange differences	-6.308	-12.676
Interest cost on defined benefit plans	-876	-864
Other	-1.488	-1.320
Financial expenses	**-72.477**	**-81.942**

Interest expenses for financial liabilities measured at amortised cost are mainly attributable to interest expenses in connection with bank loans and amount to KEUR -37,989 (2018: KEUR -39,006) in the 2019 financial year and interest on shareholder loans to KEUR -18,713 (2018: KEUR -18,825).

The interest expenses incurred in 2019 in connection with the leasing liabilities amount to KEUR 4,873.

Interest on bank loans mainly comprises interest expenses to Unicredit Bank, London, and Deutsche Bank AG, London, as agents for the lenders. Interest due to shareholders relates entirely to loans granted by Apollo Holding 11 S.à r.l. Other financial expenses mainly include bank charges in connection with regular payment transactions and bank charges in connection with corporate transactions.

Foreign exchange losses result from exchange rate fluctuations for realised (KEUR 4,451) and unrealised (KEUR 1,858) foreign currency transactions and mainly relate to foreign currency transactions in CHF, USD and GBP. Both unrealized and realized foreign currency losses result from deliveries and services.

5.9. Income taxes

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Current taxes	-10.295	-4.661
Deferred taxes	10.792	10.657
Income taxes	**497**	**5.996**

The calculation of current taxes in Germany is based on a uniform corporate income tax rate of 15% on distributed and retained earnings, plus a solidarity surcharge of 5.5%. In addition to corporate income tax, trade tax is levied on profits earned in Germany. The average trade tax rate is 13.72% (2018: 13.69%), resulting in a total domestic tax rate of 29.55%. This rate is used to measure domestic deferred taxes.

The taxable income generated by foreign subsidiaries is determined on the basis of the respective national tax law and taxed at the tax rate applicable in the country of domicile. The tax rates applied for this purpose are between 12.50% and 29.55%.

The following table shows the reconciliation between the expected income tax expense and the income tax expense actually reported. The tax rate of 29.55% (2018: 29.52%) used in the reconciliation is the total domestic tax rate.

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Earnings before income taxes (EBT)	**-53.080**	**-27.495**
Expected tax rate	29,55%	29,52%
Expected income taxes	**15.685**	**8.117**
Tax effects resulting from:		
Changes of tax rates	914	9
Tax rate differences	1.962	2.414
Non-taxable dividend income	1.540	7.894
Non-tax deductible interest expenses	-9.556	-11.205
Other non-tax-deductible items	-4.509	-1.065
Local / state tax additions / deductions	-1.262	-
Non recognition of deferred tax assets on tax losses brought forward	-380	-409
Reduction of tax assets deferred the previous year on tax losses brought forward	-353	-735
Adjustment of deferred taxes previous years	-3.474	431
Income offset against tax loss not recognised as deferred tax assets	-	953
Prior year current taxes	-240	334
Other effects	170	-742
Income taxes	**497**	**5.996**
Effective income tax rate	0,94%	21,81%

The non-recognition of deferred tax assets on tax losses of KEUR 380 relates to Swiss Caps USA, Inc., Swiss Caps Holding and Aenova France SAS (2018: KEUR 409). The reduction in deferred tax assets on tax losses carried forward of KEUR 353 reported in the previous year mainly relates to Swiss Caps Holding S.à r.l. (2018: KEUR 735). These losses were not recognised, as it is not considered probable that the loss carryforwards can be used due to multi-year tax planning. In total, deferred tax assets of KEUR 23,675 (2018: KEUR 23,887) on tax losses and loss carryforwards were not recognized.

The tax loss carryforwards in Germany and France can be used indefinitely in terms of their amount and ability to be carried forward, taking into account the minimum taxation. In Luxembourg, the tax loss carryforwards can be used indefinitely and without restriction. In other countries, however, losses can only be carried forward for a certain period of time (e.g. Switzerland: seven years; USA: 20 years).

The tax loss carryforwards and tax credits amount to KEUR 134,432 as of December 31, 2019 (2018: KEUR 152,697). Deferred tax assets of KEUR 5,159 (2018: KEUR 6,120) were recognized for these tax losses and tax credits to the extent that sufficient taxable temporary differences exist or to the extent that utilization is probable based on business expectations. Deferred tax assets were recognized for tax credits of Haupt Pharma Latina and Temmler Italia.

No deferred tax assets were recognized for interest carryforwards amounting to KEUR 302,630 (in 2018: KEUR 270,292). The interest carryforwards result from non-deductible interest expenses for bank and shareholder loans based on § 4h EStG ("interest barrier"). Interest carryforwards were not recognized, as it is not considered probable that the interest carryforwards can be used due to the financing structure and multi-year corporate planning.

The deferred tax assets and liabilities were formed for temporary differences for the following balance sheet items:

KEUR	Jan. 1, 2019 Net	Recognized in Profit or Loss	Currency translation	Recognized in other comprehensive income	Dec. 31, 2019 Net	Deferred tax asset	Deferred tax liability
Share-based payments	1.046	1	-	-	1.047	1.047	-
Tax loss carryforward	6.120	-962	1	-	5.159	5.159	-
Non-current assets	**-48.745**	**10.649**	**-46**	**-**	**-38.142**	**3.804**	**-41.946**
Intangible assets	-28.057	7.259	4	-	-20.794	324	-21.118
Property, plant and equipment*	-1.879	-1.005	-24	-	-2.908	3.354	-6.262
Right-of-use assets*	-18.400	4.684	5	-	-13.710	4	-13.714
Other non-current financial assets	-	-820	-31	-	-852	-	-852
Other non-current assets	-409	531	-	-	122	122	-
Current assets	**-2.413**	**-6.551**	**-76**	**-**	**-9.040**	**10.463**	**-19.504**
Inventories	10.474	-1.767	5	-	8.713	8.713	-
Trade receivables	-2.411	2.338	-3	-	-75	270	-345
Contract assets	-10.921	-1.592	-15	-	-12.528	49	-12.577
Other current financial assets	-16	-2.088	-54	-	-2.157	987	-3.144
Other current assets	461	-3.442	-10	-	-2.991	444	-3.436
Non-current liabilities	**13.224**	**5.675**	**42**	**2.330**	**21.271**	**21.556**	**-285**
Provision for pensions	7.730	307	15	2.330	10.382	10.498	-116
Other non-current provisions*	-1.088	1.530	-2	-	440	588	-148
Non-current financial liabilities*	15.497	-5.135	29	-	10.391	10.391	-
Other non-current liabilities	-8.915	8.973	-	-	58	79	-21
Current liabilities	**400**	**1.981**	**-5**	**-**	**2.375**	**3.964**	**-1.588**
Trade payables	-37	122	-	-	85	189	-105
Current provisions	-382	-127	-33	-	-543	66	-608
Current financial liabilities*	1.299	-257	-	-	1.042	1.917	-875
Other current liabilities	-480	2.243	28	-	1.791	1.792	-
Total	**-30.367**	**10.792**	**-84**	**2.330**	**-17.329**	**45.993**	**-63.322**

* Reclassification IFRS 16

Deferred tax assets include deferred taxes on actuarial gains and losses of KEUR 2,759 (2018: KEUR 429) recognised directly in equity.

Deferred tax assets are recognized to the extent that there are sufficient taxable temporary differences or it is sufficiently probable that a positive taxable result will be generated in the future. Before offsetting, the Group has recognized deferred tax assets of KEUR 45,993 (2018: KEUR 31,007) for the fiscal years 2019 to 2023. To the extent legally permissible, deferred tax assets are netted against deferred tax liabilities.

In total, temporary differences in connection with investments in subsidiaries exist in the amount of KEUR 6,531 (2018: KEUR 6,150) for which no deferred tax liabilities have been recognized, as the temporary differences are not expected to be realized in the foreseeable future.

6. Notes to the consolidated balance sheet

6.1. Intangible assets

KEUR	Goodwill	Licences, patents, trademarks and other rights	Development costs	Software	Customer contracts and relationships	Other intangible assets	Prepay-ments to third party	Total
Cost								
At Jan. 1, 2019	**275.084**	**10.629**	**40.208**	**52.462**	**235.622**	**86.510**	**2.753**	**703.267**
Additions*	3.682	384	-	3.005	-	-	-	7.070
Transfers	-	-	-	629	-	-	-	629
Disposals	-	-651	-8	-1.187	-	-	-674	-2.520
Currency translation	-	57	7	11	-	-225	-	-150
At Dec. 31, 2019	**278.766**	**10.419**	**40.207**	**54.919**	**235.622**	**86.285**	**2.079**	**708.296**
Accumulated amortisation and impairment								
At Jan. 1, 2019	**-10.127**	**-7.033**	**-33.418**	**-42.372**	**-168.504**	**-69.609**	**-306**	**-331.369**
Additions (amortisation)	-	-1.217	-1.202	-5.393	-19.827	-5.504	-	-33.143
Impairment losses	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-
Disposals	-	-130	8	375	-	-	-	252
Currency translation	-	-43	-7	-5	-	198	-	144
At Dec. 31, 2019	**-10.127**	**-8.424**	**-34.619**	**-47.395**	**-188.331**	**-74.915**	**-306**	**-364.116**
Carrying amount								
At Jan. 1, 2019	**264.957**	**3.596**	**6.790**	**10.090**	**67.118**	**16.901**	**2.447**	**371.898**
At Dec. 31, 2019	**268.639**	**1.996**	**5.588**	**7.524**	**47.291**	**11.370**	**1.773**	**344.180**

* Correction of non-material effects in the area of goodwill

KEUR	Goodwill	Licences, patents, trademarks and other rights	Development costs	Software	Customer contracts and relationships	Other intangible assets	Prepay-ments to third party	Total
Cost								
At Jan. 1, 2018	**275.864**	**16.749**	**40.201**	**52.009**	**257.219**	**86.502**	**3.182**	**731.725**
Additions	-	136	-	1.280	-	17	90	1.523
Disposals of businesses	-780	-566	-	-70	-21.596	-	-18	-23.031
Transfers	-	-	-	517	-	-	-501	16
Disposals	-	-5.731	-	-1.283	-	-	-	-7.014
Currency translation	-	41	7	9	-	-10	-	47
At Dec. 31, 2018	**275.084**	**10.629**	**40.208**	**52.462**	**235.622**	**86.510**	**2.753**	**703.267**
Accumulated amortisation and impairment								
At Jan. 1, 2018	**-10.127**	**-5.649**	**-32.209**	**-36.860**	**-163.032**	**-64.058**	**-306**	**-312.242**
Additions (amortisation)	-	-2.044	-1.202	-5.792	-21.494	-5.559	-	-36.092
Disposals of businesses	-	488	-	70	16.022	-	-	16.581
Impairment losses	-	-2.645	-	-	-	-	-	-2.645
Transfers	-	-	-	-	-	-	-	-
Disposals	-	2.857	-	213	-	-0	-	3.070
Currency translation	-	-41	-7	-3	-	9	-	-41
At Dec. 31, 2018	**-10.127**	**-7.033**	**-33.418**	**-42.372**	**-168.504**	**-69.609**	**-306**	**-331.369**
Carrying amount								
At Jan. 1, 2018	**265.737**	**11.100**	**7.991**	**15.148**	**94.186**	**22.443**	**2.876**	**419.484**
At Dec. 31, 2018	**264.957**	**3.596**	**6.789**	**10.090**	**67.118**	**16.901**	**2.447**	**371.898**

From the total research and development expenses of KEUR 14,323 (2018: KEUR 7,725), development costs of KEUR 0 (2018: KEUR 0) were capitalised as intangible assets. In the financial year, impairment losses of KEUR 0 (2018: KEUR 2,645) on intangible assets were recognized under amortization. Other intangible assets mainly comprise technological know-how.

All patents and trademarks held are pledged to Unicredit Bank, London, as security for the loan receivables.

Significant intangible assets mainly comprise customer bases and order on hand, which were acquired as part of the acquisition of the AENOVA Group of companies. The acquired customer bases can be categorized according to different customer types. As of the balance sheet date, the carrying amounts reported under customer contracts and customer relationships and the remaining useful lives of the customer bases are as follows:

KEUR	Dec. 31, 2019	Dec. 31, 2018
Customer base - Contract Manufacturing Organisation	28.287	36.127
Customer base - Contract Development and Manufacturing Organisation	17.740	27.873
Customer base - Private Label Germany	-	238
Customer base - Over The Counter	845	1.971
Customer base - Private Label USA	-	351
Customer base - Licenses	419	559
Customer base	**47.291**	**67.118**

Remaining useful lifes in years	Dec. 31, 2019	Dec. 31, 2018
Customer base - Contract Manufacturing Organisation	7,3	8,0
Customer base - Contract Development and Manufacturing Organisation	1,8	2,8
Customer base - Private Label Germany	0,0	0,8
Customer base - Over The Counter	0,8	1,8
Customer base - Private Label USA	0,0	0,8
Customer base - Licenses	3,0	4,0

For the purpose of impairment testing, goodwill in the amount of KEUR 268,640 (2018: KEUR 264,958) is allocated to a cash-generating unit (CGU), which is the lowest level within the Group at which goodwill is monitored for internal management purposes.

The book value of the CGU Aenova Group is compared with the recoverable amount in the course of the impairment test. An impairment loss on goodwill is recognized if the net assets of the CGU Aenova Group including the related goodwill exceed the recoverable amount of the CGU Aenova Group. The recoverable amount is defined as the higher of fair value less costs to sell and value in use. It is not always necessary to determine the fair value less costs to sell and the value in use for a CGU if one of the two exceeds the net assets including goodwill of the CGU. In this case only the value in use was determined, as it exceeds the net assets including goodwill of the CGU Aenova Group. The key assumptions on which the calculation of the value in use is based include estimated growth rates and weighted average cost of capital. Forecasts of future cash flows take into account past experience and are based on management's best estimate of future developments.

The value in use was calculated on the basis of future cash flows derived from the current planning 2020 - 2022 of the CGU Aenova Group approved by the management. The planning is based on the development of sales volumes in the individual markets, expected new products and experience. For the planning period 2020 - 2022 a compound annual growth rate of 3.5% for sales and 11.8% for EBITDA was assumed. The higher EBITDA growth rate compared to the previous year is mainly a combination of additional contribution margins from sales growth and operational improvements. In addition, work will continue on price quality and the related improved gross margin. After the 2022 financial year, constant growth rates are assumed for the development of planned sales and EBITDA. The respective growth rate of 1% does not exceed the average expected long-term inflation rate and was also used to determine the terminal value.

The discount rates reflect current market assessments of the time value of money and the specific risks associated with each cash-generating unit. The calculation of the discount rate takes into account the risk-free interest rate, a corresponding company-specific risk and borrowing costs.

The following fundamental assumptions form the basis for planning and discounting:

	2019	2018
Discount rate value in use (after tax)		
CGU Aenova Group	6,17%	7,43%
Planned EBITDA growth (average of next three years)		
CGU Aenova Group	11,80%	6,00%
Sustainable growth rate (terminal value)		
CGU Aenova Group	1,00%	1,00%

An impairment loss is recognized when the net assets of a CGU, including the pro-rata goodwill, exceed the recoverable amount. The recoverable amount of the CGU Aenova Group of 1,207.5 MEUR (2018: 881.5 MEUR) exceeds the net assets including the pro-rata goodwill by 711.8 MEUR (2018: 305.1 MEUR). The increase in the recoverable amounts is due to a planning scenario that was newly established during the business year and to the lower interest rate level.

A reduction of the EBITDA growth rate by 3% for the next three years would reduce the recoverable amount of the CGU Aenova Group to 1,153.0 MEUR, but at the same time exceed the net assets of the company including pro-rata goodwill by 657.2 MEUR.

The Group has performed sensitivity analyses with regard to an increase/decrease in the discount rates applied. An increase in the discount rate of one percentage point would not have resulted in an impairment loss. The recoverable amount of the CGU Aenova Group would still exceed the net assets, including pro-rata goodwill, by 500.7 MEUR.

6.2. Property, plant and equipment

KEUR	Land and buildings	Construction in progress	Plant and machinery	IT equipment	Other property, plant and equipment	Total
Cost						
At Jan. 1, 2019	**200.883**	**27.120**	**344.246**	**17.197**	**9.352**	**598.798**
Recognition of right of use from the first-time application of IFRS 16	-31.723	-1.504	-24.498	-125	-75	-57.925
Adjusted status at Jan. 1, 2019	**169.160**	**25.616**	**319.748**	**17.072**	**9.277**	**540.873**
Additions	3.474	7.795	13.836	1.538	455	27.098
Transfers	9.122	-16.062	8.730	642	34	2.466
Disposals	-40	-579	-2.256	-1.371	3	-4.242
Currency translation	243	-155	439	17	9	553
At Dec. 31, 2019	**181.960**	**16.614**	**340.497**	**17.898**	**9.779**	**566.748**
Accumulated depreciation						
At Jan. 1, 2019	**-91.915**	**-1.618**	**-220.016**	**-13.421**	**-9.042**	**-336.012**
Recognition of right of use from the first-time application of IFRS 16	9.264	-	7.468	35	37	16.805
Adjusted status at Jan. 1, 2019	**-82.651**	**-1.618**	**-212.548**	**-13.385**	**-9.005**	**-319.208**
Depreciation expense	-7.154	-26	-20.593	-1.162	-438	-29.373
Impairment losses	-520	-	-371	-1	-	-892
Transfers	0	-	-3.106	11	-	-3.095
Disposals	622	116	3.718	1.311	35	5.803
Currency translation	-196	-	-357	-17	-9	-579
At Dec. 31, 2019	**-89.898**	**-1.529**	**-233.255**	**-13.244**	**-9.417**	**-347.343**
Carrying amount						
Adjusted status at Jan. 1, 2019	**86.509**	**23.998**	**107.200**	**3.686**	**272**	**221.665**
At Dec. 31, 2019	**92.062**	**15.085**	**107.242**	**4.654**	**362**	**219.406**

KEUR	Land and buildings	Construction in progress	Plant and machinery	IT equipment	Other property, plant and equipment	Prepayments on fixed assets	Total
Cost							
At Jan. 1, 2018	**204.708**	**22.860**	**331.185**	**20.591**	**8.746**	**814**	**588.903**
Additions	2.594	14.970	21.986	656	237	-	40.442
Disposals of businesses	-	-	-	-89	-23	-	-112
Transfers	-5.718	-10.534	-4.507	-3.696	372	-814	-24.897
Disposals	-1.184	-186	-5.065	-319	-2	-	-6.756
Currency translation	484	10	647	54	23	-	1.218
At Dec. 31, 2018	**200.883**	**27.120**	**344.246**	**17.197**	**9.352**	**-**	**598.798**
Accumulated depreciation							
At Jan. 1, 2018	**-86.970**	**-1.322**	**-214.479**	**-16.145**	**-8.357**	**-**	**-327.273**
Depreciation expense	-10.157	-	-25.565	-1.256	-373	-	-37.351
Disposals of businesses	-	-	-	61	21	-	82
Impairment losses	-	-70	-89	-	-	-	-159
Transfers	5.118	-316	16.699	3.692	-312	-	24.881
Disposals	326	90	3.941	263	2	-	4.621
Currency translation	-232	-	-523	-36	-22	-	-814
At Dec. 31, 2018	**-91.915**	**-1.618**	**-220.016**	**-13.421**	**-9.042**	**-**	**-336.012**
Carrying amount							
At Jan. 1, 2018	**117.738**	**21.538**	**116.706**	**4.445**	**388**	**814**	**261.630**
At Dec. 31, 2018	**108.968**	**25.502**	**124.230**	**3.776**	**310**	**-**	**262.786**

Impairment losses of KEUR 892 (2018: KEUR 159) were recognised on property, plant and equipment in the financial year. All property, plant and equipment is pledged as collateral to Unicredit Bank, London.

Investments of KEUR 5,129 (2019: KEUR 4,672) have been contractually agreed for the 2020 financial year.

6.3. Right of use

As part of the transition to IFRS 16, assets for the right of use of leased assets amounting to KEUR 62,312 were recognised as of 1 January 2019. The development of the rights of use by asset class is shown below:

KEUR	Right-of-use Land and buildings	Right-of-use Plant and machinery	Right-of-use IT and office equipment	Right-of-use Other property, plant and equipment	Prepayments on Right-of use, other	Total
Cost						
At Jan. 1, 2019	**52.470**	**27.384**	**364**	**1.232**	**-**	**81.450**
Additions	238	1.380	107	655	516	2.897
Transfers	-	-	-	-	-	-
Disposals	-	-8.541	-	-	-	-8.541
Currency translation	43	-107	-1	4	-	-60
At Dec. 31, 2019	**52.751**	**20.116**	**470**	**1.892**	**516**	**75.746**
Accumulated depreciation						
At Jan. 1, 2019	**-11.089**	**-8.013**	**-**	**-37**	**-**	**-19.139**
Depreciation expense	-5.388	-2.484	-232	-740	-	-8.843
Impairment losses	-492	-10	-	-2	-	-503
Transfers	-	-	-	-	-	-
Disposals	-	4.744	-	-	-	4.744
Currency translation	-29	19	0	-1	-1	-10
At Dec. 31, 2019	**-16.997**	**-5.743**	**-232**	**-779**	**-1**	**-23.752**
Carrying amount						
At Jan. 1, 2019	**41.381**	**19.371**	**364**	**1.195**	**-**	**62.312**
At Dec. 31, 2019	**35.754**	**14.373**	**239**	**1.113**	**516**	**51.995**

6.4. Other non-current financial assets

KEUR	Dec. 31, 2019	Dec. 31, 2018
Other loans and receivables	98	557
Other Investments	299	299
Non-current loans related parties	813	757
Other non-current financial assets	**1.209**	**1.612**

Other loans and receivables include guarantees to customs authorities. Other investments comprise the shares in Loxxess Pharma GmbH, Wolfratshausen, which is not included in the consolidated financial statements of Apollo 5 GmbH for reasons of materiality, and a long-term loan to a related party.

6.5. Other non-current assets

KEUR	Dec. 31, 2019	Dec. 31, 2018
Prepayments to third party, non-current	290	563
Other non-current assets	1.698	2.736
Other non-current assets	**1.988**	**3.299**

6.6. Inventories

KEUR	Dec. 31, 2019	Dec. 31, 2018
Raw materials and supplies	43.576	47.044
Work in progress	1.316	1.589
Semi-finished goods	1.721	3.441
Finished products	2.559	3.809
Trading goods	-	410
Inventories	**49.172**	**56.294**

Net inventories amounted to KEUR 49,172 (2018: KEUR 56,294) at the balance sheet date. Write-downs on gross inventories (e.g. due to marketability devaluations and quality defects) amount to KEUR 9,437 (2018: KEUR 10,140).

All inventories are pledged as collateral to Unicredit Bank, London.

In 2019, inventories of KEUR 284,861 (2018: KEUR 292,541) were recognised as an expense.

6.7. Trade receivables

Eight German production sites have concluded agreements with two factoring banks for silent factoring. The agreements stipulate that certain parts of the trade receivables are sold to third parties. Furthermore, the contracts stipulate that the del credere risk is transferred to the factoring companies. A certain part of the sold receivables is retained by the factoring companies to finance the sales deductions and is therefore not refinanced. This amount was recognised as other asset. The existing contractual relationship at three locations is unlimited and can be terminated with a notice period of six months. The existing contracts at the other five locations were extended in May 2019 until the end of May 2020.

A factoring agreement has also been installed at two Italian locations. The factoring agreement was concluded with a factoring bank. This agreement stipulates that certain parts of the trade receivables are sold to third parties. It is also regulated that the del credere risk is transferred to the factoring company. The contract has an indefinite term and can be terminated at any time.

At two locations in Switzerland, factoring agreements were signed with a factoring bank as of 31.12.2015. The agreement was extended in July 2019 until December 2022. The notice period is six months. The agreements stipulate that certain parts of the trade receivables from third parties will be sold. Furthermore, the contracts stipulate that the del credere risk is transferred to the factoring companies. A certain part of the sold receivables is retained by the factoring companies to finance the sales deductions and is therefore not refinanced.

The AENOVA Group's purchased receivables amount to KEUR 58,863 (2018: KEUR 63,735).

KEUR	Dec. 31, 2019	Dec. 31, 2018
Trade receivables, gross	41.994	45.740
Individual allowance for doubtful trade receivables	-1.198	-1.084
General allowance for doubtful trade accounts receivables	-1.733	-2.403
Trade receivables, net	**39.062**	**42.253**

KEUR	Dec. 31, 2019	Dec. 31, 2018
Individual impaired	1.198	1.084
Not past due nor impaired	26.022	23.461
Past due less than 30 days, not impaired	12.004	12.870
Past due between 31 and 90 days, not impaired	758	3.118
Past due more than 90 days, not impaired	2.012	5.207
Trade receivables, gross	**41.994**	**45.740**

The AENOVA Group's credit and market risks as well as impairments of trade receivables are explained in section 4.1

As of December 31, 2019, the specific bad debt allowances of KEUR 1,198 (2018: KEUR 1,084) relate to several customers who have indicated that they do not expect to be able to settle the outstanding amounts due to their economic circumstances or have filed for insolvency.

The following tables show the development of individual and general bad debt allowances on trade receivables:

KEUR	Dec. 31, 2019	Dec. 31, 2018
Individual allowance at beginning of period	1.084	2.476
Other additions	778	780
Reversal	-260	-2.151
Use	-413	-68
Currency translation	9	47
Individual allowance at the end of period	**1.198**	**1.084**

KEUR	Dec. 31, 2019	Dec. 31, 2018
General allowance at beginning of period	2.403	-
Other additions	448	2.370
Reversal	-771	-
Use	-77	-
Currency translation	-269	33
General allowance at the end of period	**1.733**	**2.403**

Of the total impairment losses, KEUR 2,322 relates to financial assets measured at FVOCI. The development of value adjustments during the year was as follows:

KEUR	Dec. 31, 2019	Dec. 31, 2018
Receivables at beginning of period	**2.793**	**1.869**
Net remeasurement of allowance	-471	924
Allowance at the end of period	**2.322**	**2.793**

The change in impairment losses in 2019 is mainly due to a decrease in trade receivables of KEUR - 3,191 (previous year: KEUR 4,154). As a result of the Group-wide forced receivables management, receivables more than 30 days overdue decreased by 66%, which contributed to a reduction of the impairment in 2019.

6.8. Other current financial assets

KEUR	Dec. 31, 2019	Dec. 31, 2018
Other receivables from third party	9.280	9.124
Short-term loans and advance payments to employees	28	13
Other current financial assets	**9.307**	**9.137**

Other receivables from third parties include receivables from various factoring companies in the amount of KEUR 9,280 (2018: KEUR 9,124).

6.9. Other current assets

KEUR	Dec. 31, 2019	Dec. 31, 2018
VAT receivables	8.272	6.647
Prepayments to third party	1.939	1.662
Other current non-financial assets	15.089	11.638
Other current assets	**25.301**	**19.947**

Miscellaneous other current assets include the claims arising from a purchase agreement tax clause. The increase is due to the increase in prepaid expenses.

6.10. Cash and cash equivalents

KEUR	Dec. 31, 2019	Dec. 31, 2018
Cash at bank	51.681	49.537
Cash on hand	24	33
Cash and cash equivalents	**51.705**	**49.571**

Cash and cash equivalents bear interest at variable rates for credit balances that can be terminated daily. Short-term deposits are made for different periods of between one day and three months, depending on the Group's immediate cash requirements.

6.11. Equity

For a detailed statement of changes in equity, please refer to the statement of changes in consolidated equity.

6.11.1. Share capital

The share capital of Apollo 5 GmbH amounts to KEUR 25 as of December 31, 2019 and is held entirely by Apollo 8 GmbH. The share capital was fully paid in at the balance sheet date. It consists of one share with a nominal value of KEUR 25.

6.11.2. Capital reserves

The capital reserves include reserves from share-based payments. The capital reserves amount to KEUR 129,410 as of December 31, 2019 (2018: KEUR 129,410).

For further details, please refer to section 11 "Share-based payment".

6.11.3. Other components of equity

The other components of equity comprise

- Exchange rate differences: The reserve for currency differences is used to record differences from the translation of the financial statements of foreign subsidiaries
- Revaluation of defined benefit obligations: Actuarial gains/losses relate to defined benefit obligations and also include deferred taxes thereon. Deferred taxes on actuarial gains/losses recognized in other comprehensive income for 2019 amount to KEUR 2,759 (2018: KEUR 429).
- First-time adoption of IFRS 9, IFRS 15 and IFRS 16 in the amount of KEUR 6,804. This figure includes deferred taxes in the amount of KEUR -2,349.

6.12. Provisions for pensions and similar obligations

KEUR	Dec. 31, 2019	Dec. 31, 2018
Provisions for defined benefit plans	63.038	51.328
Provisions for additional claims for elderly care Italy	2.772	3.022
Provisions for jubilee and sabbaticals	2.595	2.272
Provision for pensions and similar obligations	**68.405**	**56.622**

6.12.1. Provisions for defined benefit plans

The Group has various defined benefit plans in various Group companies, which include various post-employment benefit arrangements. The beneficiaries of these commitments are mainly employees or their surviving dependants in Germany, Switzerland and Ireland. The benefit plans comprise 1,923 (2018: 1,935) beneficiaries, of which 1,124 (2018: 1,141) are active employees, 484 (2018: 489) are former employees with vested benefits and 315 (2018: 305) are pensioners and surviving dependants.

In Germany, there are various defined benefit pension plans which give pensioners the right to annual pension payments or a one-off capital payment. A defined benefit plan grants those entitled to a pension a certain percentage of the last salary at the time of retirement upon reaching the age of 65, depending on the years of pensionable service. Under another defined benefit plan, beneficiaries are entitled to benefits upon reaching the age of 65, the amount of which depends on the length of service. In the form of direct commitments, entitled employees are entitled to pension benefits in the form of deferred compensation upon reaching the age of 65.

The regulatory framework in Germany is provided by the Company Pensions Act. Accordingly, the pension adjustment obligation for pension commitments is based on inflation expectations, unless the commitment provides for a fixed annual adjustment.

In Switzerland, there are various defined contribution plans with a guaranteed interest rate, which provide both statutory and voluntary benefits in the event of retirement. The annual contributions are determined on the basis of salary and paid to a collective foundation. The payments are reinsured by an insurance company that bears the default risk. In the event that the insurance contract is terminated by the pension fund or insurance company, the employer must pay the restructuring contributions. Consequently, the Group classifies the plans as defined benefit plans.

At the time of retirement, the accrued contributions including the yield are converted into a pension by means of conversion factors, which is paid out to the beneficiary. Part or all of the benefits can also be drawn by the insured person in the form of a lump-sum payment. The Board of Trustees of the collective foundation, which is composed of equal numbers of employer and employee representatives, reviews the management and administration of the pension plans organized in the collective foundation.

The regulatory framework in Switzerland is provided by the Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG).

The defined benefit pension plans in Ireland are closed to new entrants. The benefit at the start of retirement, which is paid in the form of a pension, is dependent on final salary and length of service. The legal framework is provided by the Pensions Act. The pension plans are subject to a minimum funding requirement, which is set and monitored by the Pensions Authority.

The amounts recognised in the balance sheet as at 31 December 2019 are composed as follows:

KEUR	Dec. 31, 2019	Dec. 31, 2018
Fair value of plan assets	**59.316**	**55.118**
Switzerland	*31.284*	*28.784*
Ireland	*15.358*	*14.035*
Germany	*12.674*	*12.299*
Present value of DBO	**122.354**	**106.447**
Switzerland	*47.665*	*39.733*
Ireland	*17.181*	*15.018*
Germany	*57.508*	*51.696*
Net liability	**63.037**	**51.329**

The following table shows the reconciliation of the opening balance to the closing balance for the net liability from defined benefit obligations and its components:

KEUR	Present value of obligation		Fair value of plan asset		Net debt	
	2019	2018	2019	2018	2019	2018
At January 1	106.447	105.011	55.118	52.378	51.329	52.633
Acquisition of business	-	-	-	-	-	-
Profit and loss						
Current service cost	2.672	2.668	-	-	2.672	2.668
Past service cost	-	-	-	-	-	-
Interest income/expense	1.665	1.561	789	697	876	864
Administrative expenses	-	-	-140	-125	140	125
	4.337	4.229	649	572	3.688	3.657
Other comprehensive income						
Return on plan asset, exluding amounts included in interest expense/income	-	-	-286	-748	286	748
Actuarial gains/losses from						
- change in demographic assumptions	-	20	-	-	-	20
- change in financial assumptions	12.657	-791	-	-	12.657	-791
- experience	-1.280	-1.571	-	-	-1.280	-1.571
	11.377	-2.342	-286	-748	11.662	-1.594
Other						
Exchange differences	1.676	1.472	1.135	1.052	541	420
Contributions (Employer)	-	-	2.884	2.631	-2.884	-2.631
Contributions (Employee)	1.589	1.419	1.589	1.419	-	-
Benefit payments	-3.071	-3.739	-1.773	-2.581	-1.298	-1.158
Effects from transfers	-	397	-	397	-	-
	194	-451	3.835	2.917	-3.641	-3.369
At December 31	**122.355**	**106.447**	**59.316**	**55.118**	**63.038**	**51.329**

As of December 31, 2019, the weighted average term of the defined benefit obligation is 15 years (previous year: 14 years).

As of December 31, 2019, KEUR 40,522 (2018: KEUR 36,241) of the defined benefit obligation relates to plans that are not funded by plan assets and KEUR 81,833 (2018: KEUR 70,206) of the defined benefit obligation relates to plans that are wholly or partially funded by plan assets.

The plan assets held by the collective foundation in Switzerland consist exclusively of credit balances from insurance contracts with a life insurance company. The plan assets in Ireland are managed by a pension trust, which is legally independent, and are mainly invested in equities and bonds. The plan assets in Germany consist of reinsurance policies taken out to cover the commitments and assets paid into a pension fund. The fair value of plan assets is composed of the following categories of assets:

	Dec. 31, 2019	Dec. 31, 2018
Equity instruments	7%	7%
Debt instruments	11%	10%
Property	2%	2%
Liability insurance Germany	21%	22%
Liability insurance Switzerland	53%	52%
Other assets	7%	7%
Total	**100%**	**100%**

Market price quotations on active markets exist for all equity and debt instruments as well as for real estate and other assets.

The expected employer contributions for 2020 are expected to amount to KEUR 2,899.

The weighted average per country of the underlying actuarial assumptions is as follows:

	December 31, 2019			December 31, 2018		
	Switzerland	Germany	Ireland	Switzerland	Germany	Ireland
Discount rate	0,13%	1,30%	1,30%	0,85%	2,00%	2,00%
Salary increase	2,00%	1,00%	2,00%	2,00%	1,00%	2,00%
Pension increase	0,00%	1,60%	0,00%	0,00%	1,30%	0,00%

The Heubeck Richttafel 2018G was used as the biometric basis for calculation in Germany, BVG2015 GT in Switzerland and ILT15 in Ireland.

An increase or decrease in the key actuarial assumptions by 0.25 percentage points would have the following effects on the present value of the pension obligations as at 31 December 2019:

	Impact on defined benefit obligation 2019		Impact on defined benefit obligation 2018	
Change in assumption	**0,25%**	**-0,25%**	**0,25%**	**-0,25%**
Discount rate	-3,6%	3,8%	-3,3%	3,5%
Salary growth rate	0,5%	-0,5%	0,5%	-0,5%
Pensions growth rate	2,0%	-1,1%	1,3%	-0,6%

A change in life expectancy of +1 year would increase the defined benefit obligation by 2.7% (2018: 2.3%), while a change in life expectancy of -1 year would reduce the obligation by 2.7% (2018: 2.6%).

The sensitivity analyses are based on the change in an actuarial assumption while all other assumptions remain constant. The sensitivities were determined in the same way as the DBO as of December 31, 2019. If several assumptions change simultaneously, the resulting effect does not necessarily have to correspond to the sum of the individual effects. The effects of the individual changes in assumptions are not linear.

6.12.2. Provisions for supplementary pension rights Italy

The provisions for additional pension claims for Italy include provisions in connection with the "Trattamento di fine rapporto" at two companies in Italy. This is a legal obligation for companies in Italy under which employees are entitled to a severance payment on termination of employment.

6.12.3. Provisions for service anniversaries and sabbaticals

Employees of individual subsidiaries in Switzerland and Germany are entitled to anniversary bonuses and sabbaticals. The provisions were calculated in accordance with IAS 19 using the projected unit credit method. The same mortality tables as for the pension commitments were used as the biometric calculation basis. The present value of obligations for service anniversaries and sabbaticals amounted to KEUR 2,595 as of December 31, 2019 (2018: KEUR 2,272). The applicable weighted discount rate was 1.3% in 2019 (2018: 2.0%).

6.13. Other provisions

KEUR	Dec. 31, 2019		Dec. 31, 2018	
	current	non-current	current	non-current
Warranty provisions	1.904	-	1.699	-
Provisions for legal claims	356	-	342	-
Restructuring provisions	3.594	205	713	2.482
Provision for customer bonus	561	-	919	-
Other provisions	7.306	3.264	5.651	10.444
Other current & non-current provisions	**13.720**	**3.469**	**9.324**	**12.927**

6.13.1. Other short-term provisions

	Provision for				
KEUR	Warranty Provisions	Provisions for legal claims	Restructur-ing Provisons	Provision for customer bonus	Other provisions
At Jan. 1, 2019	**1.699**	**342**	**713**	**919**	**5.651**
Additions	1.409	103	3.462	1.030	10.402
Use	-623	-90	-175	-1.253	-9.019
Release	-582	-	-596	-138	-409
Transfers	-	-	190	-	678
Currency translation	0	0	0	2	2
At Dec. 31, 2019	**1.904**	**356**	**3.594**	**561**	**7.307**

6.13.2. Other long-term provisions

	Provision for	
KEUR	Restructur-ing provisions	Other provisions
At Jan. 1, 2019	**2.482**	**10.444**
Additions	48	2.426
Use	-	-8.415
Release	-2.136	-490
Transfers	-190	-700
Currency translation	0	-1
At Dec. 31, 2019	**205**	**3.264**

All provisions are based, among other things, on discretionary scope, assumptions, past experience and estimates, which are subject to certain uncertainties (with regard to the amount and timing of their utilisation). The individual provisions are measured and accounted for in accordance with management's estimates based on past experience.

6.13.3. Provisions for warranties

The provision is calculated both on the basis of historical experience and on expectations regarding future defaults of the products sold within the warranty period. The provisions for warranties mainly relate to products sold in the financial years 2018 and especially 2019. The Group expects to settle the majority of the provisions in 2020.

6.13.4. Provisions for litigation costs

The provision for litigation costs in the amount of KEUR 356 (2018: KEUR 342) mainly relates to risks in connection with ongoing legal cases. The legal cases include customs proceedings against the Swiss Customs Directorate. The Group expects to use the majority of the provisions in 2020.

6.13.5. Provision for restructuring

The restructuring provisions of KEUR 3,799 (2018: KEUR 3,195) mainly relate to expenses in connection with the closure of the Berlin site (KEUR 3,266). The main payments, which were determined both in the context of social plans and in the context of individual agreements, are expected to be paid out in 2020. On January 1, 2019, in connection with the transition to IFRS 16, an amount of KEUR 2,378 was offset as an impairment against the right of use.

6.13.6. Provision for customer bonuses

The provisions for customer bonuses relate to outstanding invoices in the amount of KEUR 561 (2018: KEUR 919). They will be utilized in 2020.

6.13.7. Other accrued liabilities

The current other provisions in the amount of KEUR 7,307 (2018: KEUR 5,651) include provisions for earn-out payments from the acquisition of Haupt Pharma AG, existing onerous contracts, follow-up costs and outstanding fees.

The non-current other provisions of KEUR 3,264 (2018: KEUR 10,444) mainly relate to earn-out payments from the acquisition of Haupt Pharma AG, severance payments and provisions for existing onerous contracts.

The change in current and non-current other provisions is due to the reclassification according to maturity.

The decrease in other provisions by KEUR 5,525 is primarily due to the earn-out payments made in the year under review and the use and release of provisions for existing onerous contracts.

6.14. Financial liabilities

6.14.1. Non-current financial liabilities

KEUR	Dec. 31, 2019	Dec. 31, 2018
Non-current bank loans	144.816	643.254
Non-current shareholder loans	207.672	207.672
Non-current leasing liabilities	46.181	32.087
Non-current accrued liabilities	98.739	80.026
Non-current financial liabilities	**497.409**	**963.039**

Non-current accrued liabilities relate entirely to accrued interest on shareholder loans.

6.14.2. Other non-current liabilities

KEUR	Dec. 31, 2019	Dec. 31, 2018
Other non-current liabilities	12.105	10.421
Other non-current liabilities	**12.105**	**10.421**

Other non-current liabilities include liabilities due to investment grants from customers.

6.14.3. Current financial liabilities

KEUR	Dec. 31, 2019	Dec. 31, 2018
Current bank loans	511.777	16.714
Current accrued liabilities	15.910	13.623
Current leasing liabilities	7.524	4.411
Current financial liabilities	**535.211**	**34.748**

6.14.4. Loan liabilities

UniCredit Bank AG, London, acts as agent for the loan under the Senior First Letter of Credit Agreement and as security agent for the loan under the Senior Second Letter of Credit Agreement. Deutsche Bank AG is acting as agent for the Senior Second Term Loan. The loans are fully syndicated.

As at the reporting date of 31 December 2019, the Group had the following loan liabilities:

KEUR	Year of maturity	Nominal value as of Dec 31, 2019	Book value as of Dec 31, 2019	Nominal value as of Dec 31, 2018	Book value as of Dec 31, 2018
1st Lien	2020	500.000	499.445	500.000	498.715
2nd Lien	2021	139.040	138.231	139.040	138.114
Revolving Credit Facility	2020	10.000	10.000	15.000	15.000
Other	various	8.916	8.916	8.139	8.139
Total		**657.956**	**656.592**	**662.179**	**659.968**

The 1st Lien loan had a nominal amount of KEUR 500,000 at a base interest rate of 4% plus EURIBOR on the balance sheet date. If the EURIBOR falls below 1%, 1% is applied. The term of the bullet loan ends on September 29, 2020.

The 2nd Lien loan had a nominal amount of KEUR 139,040 at a base interest rate of 7.5% plus EURIBOR on the balance sheet date. If the EURIBOR falls below 1%, 1% is applied. The term of the bullet loan ends on September 29, 2021.

The credit line of the revolving loan is KEUR 50,000. As of 31 December 2019, KEUR 10,000 of this amount had been drawn down. An additional KEUR 2,500 (previous year: KEUR 2,500) is reserved for guarantees. The term of the loan expires on 29 September 2020 and the revolving loan bears interest at EURIBOR plus a base rate of 3.75%.

The difference between the nominal amounts and the carrying amounts results from the application of the effective interest method in accordance with IFRS 9. loans are initially recognised at fair value less directly attributable transaction costs. Transaction costs are amortised over the term of the loan as interest expense using the effective interest method and increase the carrying amount of the liability.

Significant assets are pledged as collateral for the banks claims under company-specific collateral agreements. AENOVA is obliged to submit inventory lists of the pledged assets at regular intervals to Unicredit Bank, which manages these claims. The assets pledged as collateral are certain company shares, credit balances on bank accounts, receivables assigned as part of a global assignment, inventories, movable assets and certain intangible assets in the area of patents and trademarks.

As of 31 December 2019, the following financial assets were pledged as collateral (carrying amounts):

KEUR	Dec. 31, 2019	Dec. 31, 2018
Cash and cash equivalents	51.705	49.571
Trade receivables, other receivables and other assets	75.206	71.528
Movable fixed assets (including inventory)	231.708	215.023
Patents, licenses, intellectual property	73.769	104.494
Total	**432.388**	**440.616**

6.15. Other current liabilities

KEUR	Dec. 31, 2019	Dec. 31, 2018
Accrued liabilities for personnel expenses	16.836	16.648
Liabilities social security	2.263	2.083
Prepayments from third parties	7.658	6.711
VAT payables	1.207	86
Other	2.416	3.700
Other current liabilities	**30.379**	**29.228**

7. Information on leases

The Group is a lessee of land and buildings, production facilities and other machinery, motor vehicles, and office and business equipment.

The term of the leasing agreements in the asset class land and buildings is typically up to twenty years. The Group has no purchase option on land and buildings and there is no automatic transfer of ownership. AENOVA leases buildings for both administrative and production purposes. Some lease agreements provide for additional rental payments based on changes in local price indices.

The Group leases production facilities under a number of lease agreements that were classified as finance leases in accordance with IAS 17. This category of leased rights of use has a contractual term of between one and ten years.

In addition, the Group leases IT equipment with contractual terms of between one and five years. These leases are either short-term or are based on items of minor value. The Group has decided not to recognize a right of use or lease liabilities for these lease agreements.

The following table shows the maturity analysis of leasing liabilities with the remaining contractual maturities:

KEUR	Dec. 31, 2019
Future minimum lease payments	
Due within 1 year	12.025
Due between 1 and 5 years	32.495
Due later than 5 years	44.918
Total	**89.438**

As of December 31, 2018, the future minimum lease payments from financing agreements and their present values were as follows:

KEUR	Dec. 31, 2018
Due within 1 year	
Future minimum lease payments	7.463
Interest	-3.052
Present value of minimum lease payments	4.411
Due between 1 and 5 years	
Future minimum lease payments	23.379
Interest	-9.044
Present value of minimum lease payments	14.335
Due later than 5 years	
Future minimum lease payments	22.925
Interest	-5.173
Present value of minimum lease payments	17.752
Total	
Future minimum lease payments	53.767
Interest	-17.269
Present value of minimum lease payments	36.497

As of December 31, 2018, future minimum lease payments under non-cancellable operating leases were as follows:

KEUR	Dec. 31, 2018
Future minimum lease payments	
Due within 1 year	6.748
Due between 1 and 5 years	16.414
Due later than 5 years	6.833
Total	**29.996**

There were no variable lease payments in the fiscal year that are not included in the measurement of lease liabilities.

Some leases contain renewal options that are exercisable during the non-cancellable term of the lease. When entering into new leases, the Group analyzes the inclusion of renewal options to provide operational flexibility. An assessment is made on the date of commitment as to whether it is reasonably certain that an extension option will be exercised. For production facilities and buildings with termination options of three or six months, AENOVA assumes a lease term that depends on long-term planning and takes into account whether the exercise of an option to extend the lease agreement is possible with sufficient certainty. With regard to leasing facilities used for administrative purposes (e.g. buildings or rented apartments), AENOVA decides on the leasing term by assuming the non-cancellable leasing term of three or six months. Consequently, such leases are treated as short-term leases and AENOVA does not show any rights of use or lease liabilities in the consolidated balance sheet.

At the end of each financial year, the Group determines again whether the exercise of a renewal option is reasonably certain if a significant event or significant change in circumstances within its control occurs.

The Group estimates the amount of potential lease payments from renewal options that are not sufficiently secure at the end of the financial year at KEUR 45.

At the end of the reporting period, AENOVA entered into a lease that is not to be accounted for until February 2020. The initial value of the leasing liability from this agreement is KEUR 477.

The Group subleases some commercial real estate. The following table provides a maturity analysis of the lease receivables and shows the undiscounted lease payments to be received after the balance sheet date Under IAS 17, the Group did not have any finance leases as lessor.

KEUR	Dec. 31, 2019
Future minimum lease payments	
Due within 1 year	339
Due between 1 and 5 years	1.874
Due later than 5 years	449
Total	**2.662**

KEUR	Dec. 31, 2018
Future minimum lease payments	
Due within 1 year	323
Due between 1 and 5 years	1.062
Due later than 5 years	1.051
Total	**2.436**

Further information on income from subleases and short-term leases is provided in sections 5.2. and 5.6.

8. Additional disclosures on financial instruments

The net result from financial instruments is as follows:

KEUR	Dec. 31, 2019	Dec. 31, 2018
Loans and receivables at amortised cost (AC)	107	692
Financial instruments measured at amortised cost (FLAC)	-66.565	-65.699
Net result from financial instruments	**-66.458**	**-65.007**

The result from loans and receivables of KEUR 107 (in 2018: KEUR -692) includes value adjustments or reversals of value adjustments on receivables.

The result from financial liabilities measured at amortized cost mainly includes interest expenses for bank loans of KEUR 37,989d (2018: KEUR 39,006), interest expenses for shareholder loans of KEUR 18,713 (2018: KEUR 18,825) and interest expenses for bank loans measured using the effective interest method of KEUR 919 (2018: KEUR 1,116). This is offset by interest income of KEUR 12 (2018: KEUR 3,829).

The following table shows the carrying amount and fair value of the financial instruments included in the individual balance sheet items by class and by measurement category:

			Amounts recognised in balance sheet according to IFRS 9					Fair value hierarchy level for financial instruments		
KEUR	Category in accordance with IFRS 9	Carrying amount Dec. 31, 2019	At amortised cost (AC) Financial Assets at amortised cost	FVOCI debt instruments	OL Other financial liabilities	Amounts recognised according to IFRS 16	Fair value Dec. 31, 2019	Level 1	Level 2	Level 3
Financial assets										
Other non-current financial assets	AC	1.209	1.209	-	-	-	1.209	-	-	-
Trade receivables	AC/FVOCI	39.062	3.496	35.566	-	-	39.062	-	35.566	-
Other current financial assets	AC	28	28	-	-	-	28	-	-	-
Factoring Receivables	FVOCI	9.280		9.280	-	-	9.280	-	9.280	-
Cash and cash equivalents	AC	51.705	51.705	-	-	-	51.705	51.705	-	-
Financial liabilities										
Non-current liabilities to banks	OL	144.816		-	144.816	-	160.733	-	160.733	-
Non-current liabilities to related parties	OL	207.672	-	-	207.672	-	193.189	-	193.189	-
Non-current accrued interests to related parties	OL	98.739	-	-	98.739	-	139.906	-	139.906	-
Non-current leasing liabilities	n.a.	46.181	-	-	-	46.181	-	-	-	-
Trade payables	OL	60.869	-	-	60.869	-	60.869	-	-	-
Current liabilities to banks	OL	511.777	-	-	511.777	-	511.777	-	-	-
Current leasing liabilities	n.a.	7.524	-	-	-	7.524	-	-	-	-
Contract liabilities	n.a.	9.456	-	-	-	-	-	-	-	-
Current accrued liabilities	OL	15.910	-	-	15.910	-	15.910	-	-	-
Financial assets		**101.284**	**56.438**	**44.846**	**-**	**-**	**101.284**	**51.705**	**44.846**	**-**
Financial liabilities		**1.102.944**	**-**	**-**	**1.039.783**	**53.705**	**1.082.384**	**-**	**493.828**	**-**

KEUR	Category in accordance with IFRS 9	**Carrying amount Dec. 31, 2018**	**Amounts recognised in balance sheet according to IFRS 9** At amortised cost Financial Assets at amortised cost	FVOCI debt instruments	OL Other financial liabilities	Amounts recognised according to IAS 17	**Fair value Dec. 31, 2018**	**Fair value hierarchy level for financial instruments** Level 1	Level 2	Level 3
Financial assets										
Other non-current financial assets	AC	1.612	1.612	-		-	1.612	-	-	-
Trade receivables	AC/FVOCI	82.527	4.399	78.128		-	82.527	-	78.128	-
Other current financial assets	AC	13	13	-		-	13	-	-	-
Factoring Receivables	FVOCI	9.124	-	9.124		-	9.124	-	9.124	-
Cash and cash equivalents	AC	49.571	49.571	-		-	49.571	49.571	-	-
Financial liabilities										
Non-current liabilities to banks	OL	643.254	-	-	643.254	-	651.691	-	651.691	-
Non-current liabilities to related parties	OL	207.672	-	-	207.672	-	268.754	-	268.754	-
Non-current accrued interests to related parties	OL	80.026	-	-	80.026	-	80.026	-	-	-
Non-current leasing liabilities	n.a.	32.087	-	-	-	32.087	32.087	-	-	-
Trade payables	OL	53.746	-	-	53.746	-	53.746	-	-	-
Current liabilities to banks	OL	16.714	-	-	16.714	-	16.714	-	-	-
Current leasing liabilities	n.a.	4.411	-	-	-	4.411	4.411	-	-	-
Other current financial liabilities	OL	-	-	-	-	-	-	-	-	-
Current accrued liabilities	OL	13.623	-	-	13.623	-	13.623	-	-	-
Financial assets		**142.847**	**55.595**	**87.252**	**-**	**-**	**142.847**	**49.571**	**87.252**	**-**
Financial liabilities		**1.051.533**	**-**	**-**	**1.015.036**	**36.497**	**1.121.052**	**-**	**920.445**	**-**

Due to the short maturities of cash and cash equivalents, trade receivables and payables, as well as other current receivables and assets and other current liabilities, it is assumed for these items that the fair values correspond to the carrying amounts.

The fair values of non-current financial instruments are determined as the present values of expected future cash flows. Standard market interest rates based on the corresponding maturities are used for discounting. In order to determine the fair values for trade receivables (FVOCI) and receivables from factoring companies, it is assumed that the fair value corresponds to the nominal volume.

In determining the fair value of an asset or liability, the Group uses market observable data as far as possible. Based on the input factors used in the valuation techniques, the fair values are allocated to different levels in the fair value hierarchy:

- **Level 1:** Quoted prices (unadjusted) in active markets for identical assets and liabilities.
- **Level 2:** Valuation parameters that are not quoted prices included in Level 1, but which can be observed for the asset or liability either directly (as prices) or indirectly (as derivatives of prices).
- **Level 3:** Valuation parameters for assets or liabilities that are not based on observable market data

No reclassifications between the individual levels were made in the past financial year. If necessary, a reclassification is made at the end of the reporting period.

9. Contingent liabilities

As of December 31, 2019, AENOVA is exposed to liability risks from guarantees amounting to KEUR 2,426 (in 2018: KEUR 3,121). A claim is considered possible but not probable, which is why it is not recognized as a provision. It is not possible to estimate the probable amount or date of utilisation. Furthermore, there is a latent risk that not all of the obligations for pensions and similar obligations earned in the past will be recognized. It is not possible to make a sufficiently reliable estimate of the probability of occurrence and the amount of any existing obligations.

10. Transactions with related companies and persons

According to IAS 24, related parties are companies and persons that directly or indirectly exercise control over the company or have the ability to exercise significant influence over the company.

10.1. Parent company and ultimate parent company

The parent company of Apollo 5 GmbH is Apollo 8 GmbH. Apollo 8 GmbH is entered in the commercial register of the Munich Local Court under HRB 200075. The sole shareholder of Apollo 8 GmbH is Apollo 11 S.á r.l., Luxembourg.

Apollo 5 GmbH has received various loans from Apollo 11 Holding S.á r.l. in the form of subordinated loans with deferred interest payments. The loans originally amounted to KEUR 261,152 and were taken out in connection with the acquisition of the operating business of Aenova Group GmbH (merged into Aenova Holding GmbH in 2016) and are due in 2022 and 2023. As of December 31, 2019, the nominal value amounted to KEUR 207,672 (2018: KEUR 207,672). In 2019 the accrued interest expense amounted to KEUR 18,713 (2018: KEUR 18,826). Total accrued interest amounted to KEUR 98,739 (2018: KEUR 80,026).

The shareholder loans are based on an effective interest rate of 9%. Interest is deferred as part of the carrying amount until repayment.

BC Partner GmbH Beteiligungsberatung received a management fee of KEUR 200 in 2019 (2018: KEUR 200). As of December 31, 2019, outstanding invoices amounted to KEUR 0 (2018: KEUR 0).

10.2. Members of management in key positions of the company

In accordance with IAS 24, the management of Apollo 5 GmbH and the advisory board of AENOVA Holding GmbH are related parties as members of the AENOVA Group's top management and supervisory level.

Executive board 2019	
Ralf Schuler	Managing Director of Apollo 5 GmbH
Jan Kengelbach	Managing Director of Apollo 5 GmbH (since November 11, 2019)
Stefan Zuschke	Managing Director of Apollo 5 GmbH (until November 11, 2019)

Executive board 2018	
Dr. Mohammad Naraghi	Managing Director of Apollo 5 GmbH (until September 14, 2018)
Michael Wunderlich	Managing Director of Apollo 5 GmbH (until September 12, 2018)
Stefan Zuschke	Managing Director of Apollo 5 GmbH (since August 2, 2018)
Ralf Schuler	Managing Director of Apollo 5 GmbH (since September 25, 2018)

Advisory board 2019	
Raymond Svider	Chairman of the advisory board (since April 1, 2019)
Dr. Ewald Walgenbach	Chairman of the advisory board (until March 31, 2019)
Moritz Elfers	Member of the advisory board (until July 31, 2019)
Maximilian Kastka	Member of the advisory board
Otto Prange	Member of the advisory board

Advisory board 2018	
Dr. Ewald Walgenbach	Chairman of the advisory board
Stefan Zuschke	Member of the advisory board (until August 1, 2018)
Jan Kengelbach	Member of the advisory board (inactive since December 19, 2017)
Moritz Elfers	Member of the advisory board
Maximilian Kastka	Member of the advisory board
Otto Prange	Member of the advisory board

The total remuneration for the management in 2019 of KEUR 1,113 relates in full to fixed and variable short-term benefits (2018: KEUR 1,463), of which KEUR 33 is attributable to pension costs (2018: KEUR 15) and KEUR 0 thousand to severance and pension-related compensation.

The members of the advisory board of Apollo 5 GmbH received remuneration as compensation for the time and effort spent in connection with their activities as members of the advisory board and for their consulting services. The remuneration of the Advisory Board members was entirely attributable to short-term services and amounted to KEUR 73 in the financial year (2018: KEUR 71).

An earn-out agreement exists with a related party company. The provision recorded at the end of the year amounts to KEUR 3,856 (cf. section 6.13.7). The earn-out payments made in the year under review amount to KEUR 3,811.

10.3. Other related companies and persons

Other related parties are close relatives of persons in key positions and companies that are controlled by or exercise significant influence over other related parties. Companies that exercise control or significant influence over related parties are also considered related parties.

In the 2019 financial year, AENOVA sold goods and services amounting to KEUR 11,304 to companies and purchased goods and services amounting to KEUR 3,625 thousand from companies that are controlled by persons in key positions or over which significant influence is exercised. Related parties provided consulting services in the amount of KEUR 484 (2018: KEUR 490). As of the balance sheet date, there were outstanding receivables from the group of related companies in the amount of KEUR 9,691 and outstanding liabilities in the amount of KEUR 530. There were no liabilities from finance leases with related companies as of the reporting date.

11. Share-based payments

The managing directors and selected managers (executives) of the AENOVA Group hold 0.98% of the shares in Apollo 11 S.à r.l. as of December 31, 2019 through a Management KG. The Management KG holds 3.92% of the shares in Apollo 11 S.à r.l., which in turn holds all shares in the AENOVA Group. The shares are granted by Apollo Warehouse S.à r.l., the founding limited partner of Management KG, as the fulfilling company.

This is an equity-settled share-based payment arrangement, as the entity grants shares to managers at an agreed price. These transactions are measured at fair value at the grant date. Since the receiving company (Apollo 5 GmbH) has no obligation to settle, the remuneration is accounted for as "equity-settled" in the capital reserves as a contribution from shareholders.

The purchase price of the shares is derived from the fair value of the shares at the time of issue.

An exit bonus is generally granted if the amount of exit proceeds exceeds an agreed minimum threshold. The exit can either take the form of an IPO or a sale of the AENOVA Group.

The amount of the remuneration depends on the amount of the exit proceeds less related costs, as well as the amount of the participation of the respective beneficiary. The fair value was measured using an option price model based on various assumptions. Specific exit clauses are applied in the event of premature departure of an employee. These clauses define the criteria for the formation of a claim and the amount of the exit bonus. The term of the management program is 4 years.

The valuation of the benefit granted is based on a company valuation of the Apollo Group, which is based on the corporate planning for the period 2020 - 2022 approved by the management. The exit bonus was valued using a Monte Carlo simulation.

At the beginning of 2018, the management programme was modified by lowering the multipliers that determine the threshold value and the amount of the exit bonus. This increased the fair value of the shares.

For KG shares subscribed to in previous years by employees of the Apollo 5 Group and the associated granting of benefits, KEUR 0 (2018: KEUR 0) was recognised in personnel expenses and in the same amount as an increase in capital reserves. As in the previous year, no new shares in Apollo 11 were issued in the fiscal year.

12. Auditors' fees and services

The following table provides an overview of the auditor's fees and services

KEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Auditing services	577	624
thereof from the previous year	148	138

13. Events after the balance sheet date

With the closing date of March 6, 2020, the AENOVA Group successfully refinanced the syndicated loans (1st and 2nd Lien) and the revolving loan (RCF) existing on the reporting date. The new financing again consists of 1st and 2nd Lien as well as a revolving credit facility that was moved at the time of closing. A covenant has been agreed for the RCF, which is to be tested from a drawdown of the RCF line of more than 40%.

The new bullet maturity 2nd Lien was issued by a single lender in the nominal amount of 100.0 MEUR. In order to improve the AENOVA Group's cash flow profile and thus enable further investments in the Group's growth, a staggered interest rate of 13.0% for the first 30 months was agreed with the lender. No interest payments are made during this period, but are added to the nominal amount in the form of PIK (payment-in-kind) and interest is paid. The term of the loan ends on September 8, 2025. This 2nd Lien loan had already been granted in January 2020 subject to the conclusion of a 1st Lien.

The new 1st Lien is a syndicated loan with a nominal value of 440.0 MEUR and a maturity date of March 6, 2025; due to high demand from lenders, an interest margin of 5.0% and 0.0% interest floor was achieved, so that the current total interest rate corresponds to that of the previous financing (4.0% interest margin and 1.0% interest floor).

The credit line of the new revolving loan is 50.0 MEUR, of which 12.5 MEUR is also available for guarantees and current account. The term of the loan expires on September 6, 2024. At the closing date, this line of credit was undrawn. Existing bank guarantees of 1.3 MEUR were transferred from the old to the new line.

This secures the Group's refinancing for the next five years with a significantly reduced interest payment burden.

In addition, two capital measures took place in February and March 2020. On the one hand, the AENOVA Group received a contribution of 120.0 MEUR from the shareholder to the capital reserves. On the other hand, the shareholder loan and the majority of the interest accrued on it were contributed to the capital reserve (totaling 306.0 MEUR). As a result of the capital measures and the simultaneous reduction in the loan amounts, the leverage is significantly reduced.

Since January 2020, Covid-19 disease has also been spreading worldwide. Depending on the further development, it could possibly lead to temporary bottlenecks in the supply chain as well as to temporary closures of individual production areas or even plants. The financial impact cannot be estimated at the time of preparation due to the high uncertainties regarding its spread and distribution. However, extensive measures have been taken within the Group to protect the health of its employees. The supply of materials to the locations is supported by strategic purchasing. Possible production downtimes may therefore only be of a temporary nature. At the same time, a stable to positive demand trend is emerging, so that the management does not see any threat to the AENOVA Group's continued existence at the time of preparation.

Starnberg, April 9, 2020

Ralf Schuler	Jan Kengelbach
Apollo 5 GmbH Managing Director	Apollo 5 GmbH Managing Director

Group Management Report

1 Group Setup

The AENOVA Group (hereinafter referred to as "AENOVA" or the "AENOVA Group") comprises Apollo 5 GmbH, Starnberg as parent company and 31 subsidiaries, of which 16 sites have manufacturing operations. The parent company is managed by two managing directors. The present consolidated financial statements cover the period from January 1, 2019 to December 31, 2019.

Apollo 5 GmbH emerged from a shelf company established on 28 June 2012 and commenced operations on 23 July 2012 under new articles of association. The parent-subsidiary relationship came into existence for the first time with the contribution of the shares in Aenova Holding GmbH, Starnberg, with effect from September 27, 2012. Aenova Holding GmbH in turn is a shareholder of the Swiss Caps Group and Dragenopharm. In 2012 Aenova Holding GmbH acquired the Temmler Group as well as Euro Vital Pharma GmbH, Hamburg. In 2013 and 2014 respectively, the acquisitions of the Haupt Pharma Group, Contract Packaging Resources Inc. Greensboro (USA) and the foundation of Aenova Asia-Pacific Ltd, Singapore, which was consolidated for the first time in the financial year 2016, followed. In 2015 the acquisition of IIP GmbH, Aschaffenburg, Germany, took place, which was merged into a Group company in 2018. Euro Vital Pharma GmbH was sold in 2018. C.P.M. ContractPharma GmbH & Co KG Arzneimittelherstellung und Verpackung, Feldkirchen, which was acquired as part of the Temmler Group acquisition, was merged into another Group company in 2019.

1.1 Business model of the Group

The AENOVA Group is one of the world's largest pharmaceutical contract manufacturers for development, production and marketing of pharmaceuticals and food supplements. AENOVA operates a total of 16 production sites in six countries. The group is represented in eight European countries, Asia and the USA. The AENOVA Group is based in Starnberg near Munich. The group of companies has approximately 4,400 employees.

The range of services covers the entire value chain of development and production of all common dosage forms and product groups for pharmaceuticals and food supplements. These include among others

- **Solids** like tablets, hard capsules, effervescent
- **Semi-solids and liquids** such as ointments, gels and creams, suppositories and sterile and non-sterile liquids such as tinctures, drops and injectables
- **Soft gelatine capsules**

The processed active ingredients range from common generic substances such as paracetamol and ibuprofen to special highly potent active substances such as hormones and cytotoxics.

AENOVA is a B2B (business to business) service provider with decades of experience and competence in the pharmaceutical and healthcare sector. The range of products and services is used by originators (developers of patent-protected products), generic companies and suppliers of food supplements and veterinary products.

The AENOVA group of companies can offer its customers a complete service from a single source. This includes:

- Drug development (process and product development, especially formulation)
- Regulatory Services
- Analytical Services
- Further service & support and global tech transfer
- Commissioned production
- Packaging
- Clinical Trial Services (production and special logistics handling for clinical studies)
- Logistics
- Purchase, validation of raw materials and active pharmaceutical ingredients (APIs)
- supply chain management

The core activities of the group are:

- Business Development & Innovation - innovative product ideas, concept and product development, formulation and analysis development, pharmacotherapy, shelf-life testing, regulatory support and market authorisations
- Contract manufacturing of tablets, film-coated tablets and coated tablets, effervescent products, hard capsules, soft gelatine capsules, VegaGels® (gelatine-free soft capsules), creams and ointments, suppositories and sterile and non-sterile liquid dosage forms
- Contract packaging - blisters, sleeves, bottles, sachets, cartons, labels, folding boxes, brochures and leaflets
- Quality management - production control and packaging according to international standards (e.g. cGMP or HACCP) as well as control and release of raw materials and finished products
- Clinical trial supplies - bulk manufacturing and procurement of testing materials, primary packaging, blinding and secondary packaging, labelling, controlled storage, distribution, quality planning, quality control and release, project management
- Supply Chain Management - control and planning process, procurement, storage
- Analysis - Testing of Active Pharmaceutical Ingredients (APIs), excipients and finished products, shelf life testing, development and validation of methods, method transfer, EU approval
- Sales, customer service and consulting - Sales of AENOVA products/technologies and contract manufacturing capacities, license management, professional consulting and support with regard to processes, products, formulation, registrations and communications, formulation proposals and writing of company trademarks.

1.2 Objectives and strategies

The global healthcare market will continue to grow steadily in the coming years. The reasons for this include demographic change in the industrialized countries, increasing health awareness and growing prosperity in the emerging markets.

In addition, the outsourcing trend is expected to continue in the coming years, with further consolidation of production capacities. AENOVA will benefit from this environment as a CDMO (contract development and manufacturing organization), i.e. as a service provider for the development and manufacturing of pharmaceutical and consumer healthcare (CHC) products.

Within the framework of the corporate strategy, the 'Made in Europe' seal of approval and the Group's long experience are positioned as a distinguishing feature. Five points form the value proposition of the AENOVA Group

1) Customers and patients come first
2) Reliability and excellence in everything we do
3) Impeccable product quality according to international standards
4) Fast product availability through competence in formulations and technology transfer
5) Continuous cost focus for competitive solutions

To implement its strategy, the AENOVA Group has set two priorities:

1) Management of the business through three Business Units (BU) in order to set uniform Group-wide standards in operational excellence and customer service, but with a focus on the respective dosage forms:

    - BU Solids
    - BU Semi solids & liquids
    - BU Soft-gel capsules

    This concept has been gradually implemented since the end of 2017 and is expected to be fully operational by mid 2021. The organizational requirements already exist.

2) A group-wide transformation along the three thrusts of "Operational Excellence, Commercial Excellence and Organizational Excellence" defined in the strategy: Several individual projects are currently being implemented with the aim of generating profitable growth, improving operating performance, particularly with regard to delivery reliability, and strengthening the organization by replacing and refilling critical positions.

Based on these value propositions, growth is seen in the following areas, among others:

- Solid dosage forms (solids): expansion of capacities and portfolio for human and veterinary pharmaceuticals and CHC through broad technologies and strategic partnerships
- Semi-solid and liquid dosage forms (semi-solids and liquids): focus on special technologies, e.g. injectables
- Soft gelatine capsules (soft-gel capsules): Expansion of the competence spectrum and participation in the trend towards food supplements (Cornu plant)
- Development services: Growth in development services with high-value product segments that also form a pipeline for future production. A "fee for service" approach is being pursued.

1.2.1 Pharma: originators and generics, OTC

AENOVA can offer both originator and generic products, both prescription and over-the-counter (OTC).

Researching pharmaceutical companies are increasingly focusing on their core competencies of innovative research and development as well as marketing and sales. Production is increasingly being regarded by researching pharmaceutical companies as not being strategically important, especially after the expiry of patents. AENOVA is a competent partner here, especially since the large pharmaceutical companies are also increasingly focusing on production costs. With rising cost pressure, outsourcing to CDMOs is becoming more and more common.

The generics industry, on the other hand, continues to be characterized by growing volumes, but also by higher price sensitivity in the commodity segment. Large companies will outsource large parts of this segment and concentrate on differentiable products and services.

AENOVA's strategy is to grow faster than the market in this segment, among other things by

- Focus on core customers and expansion of the 'share of wallet', e.g. by covering a wider range of products or additional services
- Winning new strategic customers with special technologies
- Focus on Life Cycle Management
- Focus on acquisitions of products with a long-term commitment to the production site

1.2.2 CHC

This segment comprises the area of pharmaceutical, non-prescription drugs. CHC products are produced according to pharmaceutical standards in a large number of AENOVA's plants. One sub-segment is the food supplements sector, which is not a strategic focus for AENOVA, with the exception of soft gelatine capsules from the dedicated plant for vitamins, minerals and supplements (VMS) in Cornu, Romania.

From Cornu, AENOVA can offer customers a very wide range of capsule sizes and suture technologies as well as extensive experience in processing active ingredients. Due to this advantage, AENOVA plans to grow significantly in the soft gelatine capsule market. AENOVA will focus on high-quality VMS (vitamins, minerals, supplements) such as special natural extracts. The expansion of the plant in Cornu has substantially increased capacity. The expansion of coating and packaging capacity at the site increases the attractiveness of the product range.

1.2.3 Animal Health

In this segment, AENOVA is aiming for market leadership in antibiotics and plans to expand this further, e.g. in injectables and antiparasitic agents.

Large global veterinary companies have focused on Research & Development and Marketing & Sales. AENOVA relies here on long-term partnerships and will continue to grow, especially with the largest suppliers in this segment.

In Europe, smaller, regional companies complement the customer spectrum. Customers in the USA and the Asia-Pacific region are served opportunistically or with special technologies.

1.3 Research and Development

AENOVA provides development services on behalf of customers for various pharmaceutical product dosage forms. The development services cover all areas of product development, i.e. formulation and process development, analytical method development and drug registration. AENOVA covers a broad portfolio with the development of soft gelatine capsules, solid dosage forms (including high potent APIs and hormones) as well as semi-solid and liquid dosage forms (including sterile injectables). AENOVA does not conduct any research.

Development services are an essential component of the product portfolio. Close cooperation with customers at an early stage creates potential to bind customers to the Group for commercial production as well.

In 2019, AENOVA processed 218 development projects on behalf of customers, which were in various implementation phases.

At the end of the 2019 financial year, a total of 125 employees (previous year 72 employees) were working in development at various locations. The increase in the number of employees compared to the previous year is mainly due to a new allocation of existing staff to the development area.

2 Business Report

As a result of the first-time application of IFRS 16, from 2019 payments for all material leases will be capitalised as rights of use with simultaneous recognition of a lease liability. Rental and leasing expenses are thus taken into account as depreciation and interest. In the comparative figures, the payments for the contracts classified as operating leases under IAS 17 are included as operating expenses.

2.1 Overall economic situation and industry-related conditions

2.1.1 Economic development

With 0.5%, economic growth in Germany in 2019 was below previous year (1.5%).[1] The same trend was seen in the euro zone, where the growth rate of real GDP in the euro zone was 1.2%, significantly below the prior-year figure of 1.9%.[2]

In Switzerland, GDP growth in 2019 was well below the original growth rate of 0.9%.[3]

In the United States, GDP growth of 2.4% was achieved in 2019 (previous year 2.9%).[4]

The lower growth rates in the individual countries do only have a limited impact on the pharmaceutical industry, which, unlike, for example, manufacturers of luxury goods or plant engineering companies, produces products that are essentially independent of economic cycles.

There were no regulatory changes in 2019 that had a material impact on AENOVA's business. The outcome of the negotiations on future economic relations with the UK after the transitional period in 2020 is still completely uncertain. Due to the low level of business with the UK, delayed or lower orders will not have a material impact on the Group as a whole.

2.1.2 Development of the pharmaceutical and consumer healthcare market

According to estimates by the market research company IQVIA, the global pharmaceutical market will continue to grow over the next five years, with various opportunities and challenges being identified in the markets. On the one hand, initiatives are being taken to improve access to innovative products, while on the other hand, cost containment measures remain an important issue in almost all countries.

According to IQVIA, the global pharmaceutical market will reach a total volume of around 1.25 trillion US dollars in 2019. Worldwide drug expenditures will reach an annual growth rate of approximately 4 - 5% over the next five years and exceed the 1.5 trillion US dollar mark by 2023.[5]

In last year's IQVIA study, the USA and the pharmerging markets are[6] named as the most important growth drivers with annual growth rates of 4 - 7% and 5 - 8% respectively. In the US, spending growth is influenced by the introduction of new products and brand pricing. In contrast, patent expirations and generics in particular will put pressure on the growth potential in the United States.[7] Growth in the pharmerging markets will be driven primarily by the increase in per capita consumption, but also by greater acceptance of newer drugs due to the population's rising purchasing power. Although China,

1 p. 42
2 p. 28
3 https://de.statista.com/statistik/daten/studie/14555/umfrage/wachstum-des-bruttoinlandsprodukts-in-der-schweiz/
4 https://de.statista.com/statistik/daten/studie/14558/umfrage/wachstum-des-bruttoinlandsprodukts-in-den-usa/
5 https://www.iqvia.com/blogs/2019/10/growth-perspectives-for-the-pharma-market
6 Definition of pharmerging markets (IQVIA report p. 47; chart page 7): According to the definition used here, pharmerging markets are countries with an absolute growth in expenditure of more than USD 1 billion over a five-year period and a per capita income of less than USD 30,000 (including countries such as China, Brazil, Russia, India, Mexico, Turkey, Egypt, Pakistan, Poland).
7 IQVIA report "The Global Use of Medicine in 2019 and Outlook to 2023"

Brazil and India currently have the highest drug expenditure within the pharmerging markets, IQVIA forecasts that Turkey, Egypt and Pakistan will show the highest growth rates by 2023.

In Europe, cost containment measures and slower growth in new products are contributing to a slowdown in growth of 1 - 4%, compared to annual growth of 4.7% over the past five years.[8]

IQVIA forecasts that spending on specialty drugs in the developed pharmaceutical markets will increase until 2023. Specialty drugs treat chronic, complex or rare diseases and are usually rather expensive. The top ten industrialised countries account for 66% of global expenditure on these speciality drugs. Growth is driven by the five therapeutic areas of oncology, autoimmune diseases, immunology, HIV and multiple sclerosis.

The United Kingdom left the EU on 31st January 2020 and became a "third country" of the EU. This marks the beginning of a transitional period which will last until 31 December 2020. The European Medicines Agency (EMA) has stated that during this period, the EU pharmaceutical legislation set out in the "acquis communautaire" will continue to apply to the United Kingdom. This means that pharmaceutical companies can continue their activities in the country until the end of the year.

This gives companies until 31 December 2020 to make the necessary changes to ensure that their authorised medicines comply with EU law and can remain on the European market. Marketing authorisation holders (MAHs) and applicants can continue to be based in the United Kingdom.[9]

According to Nicholas Hall's forecasts, the CHC/OTC market will grow at an annual rate of about 5% until 2023. For the year 2023 a turnover of about 170 billion US dollars is predicted. The top 15 countries in the market generate around 80% of total sales; the USA, China and Japan alone account for almost 50%.[10]

The pressure to cut healthcare costs, combined with the growing public demand for self-medication and the increasing purchasing power in certain regions are reasons for the positive outlook of the CHC/OTC market. The annual growth rate in Western Europe is expected to increase slightly to 3% by 2023, while the countries of Central and Eastern Europe (CEE) are forecast to grow at an annual rate of around 5%.[11]

By category, VMS (Vitamins, Minerals, Supplements) dominate the market. Expenditure on vitamins and supplements is expected to grow by 4% annually until 2023, reaching a volume of over 51 billion US dollars. The second-largest category by sales of OTC drugs for the treatment of colds, coughs and allergies is also predicted to grow 4% annually over the forecast period. So-called lifestyle OTCs, which include products for weight loss, sedation or smoking cessation, will have the highest annual growth rate of all categories by 2023, at 7%.[12]

2.1.3 Market for contract development and production

The development and production of pharmaceuticals is becoming increasingly complex, also against the background of globalisation. For this reason, small and medium-sized pharmaceutical companies in particular, which lack manufacturing capacity or expertise in certain technologies, are deciding to outsource these tasks to specialized service providers. Various large pharmaceutical companies pursue a "second source" strategy and use contract manufacturers as additional production facilities to their own plants. The special expertise and capacities of pharmaceutical contract manufacturers enable pharmaceutical companies to bring their products to market efficiently, cost-effectively, quickly and reliably.

---

8 IQVIA report “The Global Use of Medicine in 2019 and Outlook to 2023”
9 https://www.europeanpharmaceuticalreview.com/news/111816/ema-announces-next-steps-for-uk-pharma-industry-after-brexit/
10 Nicholas Hall YearBook 2019 - OTC Global Review
11 Nicholas Hall YearBook 2019 - OTC Global Review
12 Nicholas Hall YearBook 2019 - OTC Global Review

According to PharmSource, the global market for pharmaceutical contract manufacturing (excl. API production) has a volume of over 21 billion US dollars. The top ten companies alone - which also include the AENOVA Group - generate almost 40% of the total turnover with around 8 billion US dollars. The 36 largest suppliers in the market (sales of more than 100 million US dollars) account for 65% of sales in the overall market.[13] AENOVA is located in the upper segment of the "Tier-2 Group" (sales between US$ 0.5 and 1 billion) of CDMOs, all of which have predominantly conventional technologies and a broad range of services in their portfolio. These companies are characterized by a predominantly global orientation.[14]

Despite the pharmaceutical industry's strong interest in biologics and complex injectables, solids continue to account for the majority of marketed products and will continue to make a significant contribution to industry sales for the foreseeable future. Solids are the strongest segment in the pharmaceutical contract manufacturing market with 42% and a sales volume of around 9 billion US dollars.

Injectables account for 27% of the market, the so-called specialty segment (soft gelatine capsules, blow-fill seals, transdermal and inhalation products) accounts for 21% and the semi-solids/liquids segment for 10% of total sales.[15]

The greatest demand of pharmaceutical companies for CDMO services will continue to be in the production of small molecules[16]and the packaging and production of solids.[17]

2.2 Business performance

The Business Year 2019 closed with Sales of 725.6 MEUR, an increase of 3.7 MEUR compared to the previous year, so that the budget of 730.5 MEUR[18] was not fully reached. Sales to a low-margin key account were significantly reduced and were therefore 19.2 MEUR[19] below budget. This decline was only partially compensated by positive sales developments with other customers.

Apart from the influences mentioned above, there were no significant changes in the product or service portfolio that had an impact on the course of business.

In 2019, approximately 115 MEUR[20] of new business was generated.

Despite the slight increase in Sales compared to last year, EBITDA, at 87.3 MEUR, was significantly lower than last year's EBITDA (-28.4 MEUR). This is mainly due to the one-off income of 27.0 MEUR from the sale of Euro Vital Pharma GmbH in 2018. The EBITDA of 90.0 MEUR planned for 2019 was almost achieved (-2.7 MEUR).

EBITDA adjusted for special items, at 97.2 MEUR, was below the previous year's value (-2.2 MEUR), but above the budget target (+4.2 MEUR). The special effects include all one-time expenses and income. These include, for example, severance payments.

At 72.8 MEUR, depreciation, amortization, and impairments were slightly below the previous year's level. The net financial result of -67.6 MEUR in fiscal year 2019 remained largely stable compared to the previous year (-66.9 MEUR). Due to the one-off effect of 27.0 MEUR from the sale of Euro Vital Pharma GmbH in 2018, the loss before taxes in the financial year 2019 decreased by -25.6 MEUR to a

13 PharmSource "Trend Report: Contract Dose Manufacturing Industry by the Numbers… - 2019 Edition"
14 p. 26
15 PharmSource "Trend Report: Contract Dose Manufacturing Industry by the Numbers… - 2019 Edition"
16 Definition small molecules: https://de.wikipedia.org/wiki/Niedermolekulare_Verbindung
17 PharmSource "Trend Report: Contract Dose Manufacturing Industry by the Numbers… - 2019 Edition"
18 The figures for planning given in the previous year's report were updated in the 2019 financial year.
19 Without Haupt Pharma Berlin 17.8 MEUR
20 Measured in peak sales: Year with the highest sales in the course of the project

net loss of 53.1 MEUR compared to the previous year. The net loss for the financial year 2019 amounted to 52.6 MEUR.

The realignment of the Group in the year under review is proving successful. Although the sales targets for 2019 could not be fully achieved, the Group shows a stable and sustainable level of earnings. In particular, the optimization projects that have been implemented had a positive impact on the net assets, financial position and results of operations. In the area of working capital, the improvements in receivables management and extended payment terms were particularly noticeable.

2.3 Financial and non-financial performance indicators

AENOVA's management controls the AENOVA Group primarily on the basis of sales and EBITDA as well as the following key financial figures:[21]

	2019	2019 budgeted	2018
Gross profit margin in %	60,4%	59,8%	59,1%
EBITDA margin in %	13,4%	12,7%	13,5%
Total Cashflow in MEUR	1,6	4,9	15,5
Days sales outstanding (DSO)	19,7	20,3	21,6
Days payables outstanding (DPO)	76,4	69,8	65,4
Days on hand (DOH)	112,2	102,8	107,1

1) EBITDA-related[22]indicators

- [23]Gross margin : This was 60.4% (previous year 59.1%). It improved on the previous year by passing on cost increases to customers, optimising the purchase of raw materials and actively shaping the customer portfolio.
- EBITDA margin[24]: This was 13.4% (previous year 13.5%). Compared to the previous year, the improvement in the gross margin had a positive effect. However, this effect was slightly overcompensated by higher personnel expenses due to new hires and salary adjustments as well as lower operating income, which included a one-time effect in the previous year.

2) Working Capital/Cash Management[25]

- Total cash flow: AENOVA's total cash flow as a key figure for liquidity management was 1.6 MEUR (previous year: 15.5 MEUR). Although the cash flow decreased compared to the previous year, the inflow in 2018 was marked by payments received from the sale of Euro Vital Pharma GmbH. The cash flow from operating activities improved by 5% compared to the previous year.
- Receivables management/Days Sales Outstanding (DSO)[26]: DSO was reduced by 1.9 days to 19.7 days compared to the previous year due to intensified receivables management.
- Liabilities management/Days Payables Outstanding (DPO)[27]: The ratio increased by 11.0 days to 76.4 days compared with the previous year, mainly due to the utilization of payment terms.

21 In order to determine the key figures, the effects of IFRS 15 are deducted, as these only represent an accounting measure and are hardly taxable.
22 EBITDA: Earnings before Interest, Tax, Depreciation, and Amortization
23 Gross margin: ratio of gross profit to sales and changes in inventories
24 EBITDA margin: ratio of EBITDA adjusted for special effects to sales revenue
25 The calculation of the key figures in days is made before adjustments to IFRS 9 and 15. for better comparability, the previous year's KPIs were also adjusted for Euro Vital Pharma GmbH, which was sold in 2018.
26 Days Sales Outstanding (DSO): Ratio of trade receivables to average sales revenues of the last three months multiplied by 30 days
27 Days Payables Outstanding (DPO): Ratio of trade payables (adjusted by CAPEX creditors) to average cost of materials and changes in inventories over the last three months multiplied by 30 days

- Inventory turnover/days on hand (DOH)[28]: This indicator rose from 107.1 days in the previous year to 112.2 days. This results from a slight increase in inventories before disclosure of contract assets in accordance with IFRS 15.

The EBITDA-related key figures are determined monthly on the basis of IFRS figures. Working capital and cash management are reported monthly.

2.4 Earnings situation

The following table contains the consolidated income statement for the financial year 2019.

MEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Revenues	725,6	721,9
Changes in inventories of finished goods and work in progress	-3,2	-8,6
Other operating income	10,1	45,4
Cost of materials	-284,9	-292,5
Employee benefit expenses	-265,7	-250,2
Impairment loss/gain	0,1	0,7
Other operating expenses	-94,7	-101,1
Earnings before interest, tax, depreciation and amortisation (EBITDA)	**87,3**	**115,7**
Depreciation and amortisation expense	-72,8	-76,2
Earnings before interest and taxes (EBIT)	**14,5**	**39,4**
Financial income	4,9	15,0
Financial expenses	-72,5	-81,9
Earnings before income taxes (EBT)	**-53,1**	**-27,5**
Income taxes	0,5	6,0
NET LOSS OF THE YEAR	**-52,6**	**-21,5**
Non-recurring effects	9,9	-16,3
EBITDA (before non-recurring)	**97,2**	**99,4**

AENOVA achieved revenues of 725.6 MEUR in the financial year, which is 3.7 MEUR more than in the previous year's period. This was achieved despite the targeted reduction of business volumes with the largest customer to date due to the low profitability of this supply relationship.

Sales were generated in the following regions:

MEUR	Jan. 1 - Dec. 31, 2019	Jan. 1 - Dec. 31, 2018
Germany	279,0	268,0
Rest of Europe	343,4	343,6
USA	43,3	36,8
Rest of world	59,8	73,5
Revenues	**725,6**	**721,9**

Compared to the previous year, the sales increases in Germany and the USA more than compensated for the sales declines in the rest of the world. The increase in Germany is mainly due to strong growth with the customer Boehringer Ingelheim. Growth in the USA region is driven by a major project won with the Fresenius Group. A significant decline in sales was recorded in the Asia-Pacific region, which is part of the "Rest of the World" cluster. This is mainly due to the deliberate reduction of the business volume

28 Days on hand (DOH): ratio of inventories to average cost of materials and changes in inventories over the last three months multiplied by 30 days

with a major customer for food supplements and vitamin products. There were no significant changes in the "Rest of Europe" cluster.

During the fiscal year, there were two major price and volume influences compared to the previous year, which had a negative impact on revenues. These are the sale of Euro Vital Pharma GmbH, which contributed to sales for ten months in 2018, and the strategic decision to reduce business volumes with the aforementioned major customer.

Due to measurement after the date on which the power of disposal passes to the customer, finished and unfinished products decreased by -3.2 MEUR (previous year: -8.6 MEUR). Other operating income amounted to 10.1 MEUR (previous year: 45.4 MEUR) and is mainly composed of income from the release of provisions (4.1 MEUR,previous year: 6.9 MEUR), the release of allowances for doubtful receivables (0.6 MEUR, previous year: 1.5 MEUR), and rental income (0.4 MEUR, previous year: 0.4 MEUR). In the previous year, this item also included income from the sale of Euro Vital Pharma GmbH and the sale of further fixed assets of 29.3 MEUR.

Cost of materials amounted to 284.9 MEUR (previous year: 292.5 MEUR). The biggest savings were achieved in the area of raw materials. Price increases could partly be passed on to the customer.

Personnel expenses amounted to 265.7 MEUR (2005: 250.2 MEUR), with a personnel expense ratio of 36.8% of total output[29] (previous year: 35.1%). The increase was due to new hires, especially for capacity expansion in the production area, and to salary adjustments.

Other operating expenses decreased by 6.4 MEUR to 94.7 MEUR compared to the previous year. The change in accounting for leased assets due to IFRS 16 had an impact of 5.6 MEUR on this figure.

At 72.5 MEUR, amortization of intangible assets, depreciation of property, plant, and equipment, and amortization of rights of use were slightly below the previous year's level (previous year: 76.2 MEUR). Depreciation and amortization amounted to 63.4 MEUR for acquired assets and 8.9 MEUR for rights of use under leases, which will be accounted for in accordance with IFRS 16 from 2019. Amortization of intangible assets decreased compared to the previous year, in particular due to the expiration of amortization of items capitalized in the course of company acquisitions.

The net financial result of the business year amounted to -67.6 MEUR (previous year: -66.9 MEUR), with the interest result changing by only -0.6 MEUR compared to the previous year, although interest expenses increased by approximately 1.5 MEUR due to IFRS 16. The change resulted in particular from these interest effects. Further information on the financing structure is provided in section 2.5 Financial situation.

Foreign currency and inflation effects had an overall insignificant impact on the net assets, financial position and results of operations and mainly relate to revenues and personnel expenses in foreign currencies (mainly EUR against CHF, USD and GBP).

The tax result of 0.5 MEUR was significantly influenced by the release of deferred tax liabilities due to scheduled amortization of intangible assets capitalized in the course of purchase price allocations.

Overall, the 2019 earnings situation was not yet able to reflect the improvements achieved in the gross margin. However, the optimizations in the customer portfolio and in the production area will have an impact on the coming years.

29 Sales revenues plus changes in inventories

2.5 Financial situation

Cash and cash equivalents amounted to 51.7 MEUR (previous year 49.6 MEUR) as of the reporting date. They mainly consisted of balances with banks. Within cash and cash equivalents, the following developments occurred:

- Cash inflow from operating activities (less income taxes paid) increased to 85.8 MEUR (previous year 81.7 MEUR). The improvement in Working Capital[30] had a positive effect of 6.5 MEUR (previous year: -14.4 MEUR).
- Cash flow from investing activities (-26.1 MEUR, previous year +9.1 MEUR) mainly reflects investments in intangible assets (-3.4 MEUR) and property, plant, and equipment (-23.7 MEUR). The most significant investments concern the expansion and modernization of various production sites such as Tittmoning, Bad Aibling, Cornu, and Wolfratshausen. Investments were made in buildings and machine capacity as well as in IT infrastructure. The previous year's figure was strongly influenced by payments received from the sale of Euro Vital Pharma GmbH.
- The cash outflow from financing activities of -58.1 MEUR (previous year: -75.3 MEUR) resulted mainly from the repayment of lease liabilities (-9.4 MEUR) and loans (-5.4 MEUR) as well as interest paid (-44.4 MEUR).

Excluding the one-off effect in 2018 from the sale of Euro Vital Pharma GmbH, the financial position has developed positively compared to the previous year.

2.6 Net assets

The following overview shows the net assets as of the balance sheet date:

ASSETS		
MEUR	**Dec. 31, 2019**	**Dec. 31, 2018**
Intangible Assets	344,2	371,9
Property, plant and equipment	219,4	262,8
Right-of-use assets	52,0	-
Other non-current financial assets	1,2	1,6
Other non-current assets	2,0	3,3
Deferred tax assets	46,0	30,2
Non-current assets	**664,8**	**669,8**
Inventories	49,2	56,3
Trade receivables	39,1	42,3
Contract assets	51,2	40,3
Income tax claims	1,5	0,2
Other current financial assets	9,3	9,1
Other current assets	25,3	19,9
Cash and cash equivalents	51,7	49,6
Current assets	**227,3**	**217,7**
Total assets	**892,0**	**887,4**

30 Working Capital: Balance of trade receivables/payables. Contract assets and inventories

EQUITY & LIABILITIES		
MEUR	**Dec. 31, 2019**	**Dec. 31, 2018**
Share capital	0,0	0,0
Capital reserves	129,4	129,4
Loss carried forward	-532,6	-483,7
Other components of equity	-11,1	-3,5
Equity	**-414,3**	**-357,8**
Provision for pensions and similar obligations	68,4	56,6
Other non-current provisions	3,5	12,9
Non-current financial liabilities	497,4	963,0
Other non-current liabilities	12,1	10,4
Deferred tax liabilities	63,3	60,5
Non-current liabilities	**644,7**	**1.103,5**
Trade payables	60,9	53,7
Income tax liabilities	21,4	14,6
Current provisions	13,7	9,3
Current financial liabilities	535,2	34,7
Other current liabilities	30,4	29,2
Current liabilities	**661,6**	**141,6**
Total equity and liabilities	**892,0**	**887,4**

Non-current assets amounted to 664.8 MEUR as of the reporting date (previous year: 669.8 MEUR). They mainly consisted of intangible assets of 344.2 MEUR (previous year: 371.9 MEUR), tangible assets of 219.4 MEUR (previous year: 262.8 MEUR), and the rights of use recognized for the first time on the basis of IFRS 16, amounting to 52.0 MEUR. Rights of use represent leasing contracts capitalized in accordance with IFRS 16. The portion which had already been capitalized in accordance with IAS 17 amounted to 41.2 MEUR. It was transferred from property, plant and equipment to rights of use, which explains the reduction in property, plant and equipment. The total investments in the acquired fixed assets of 34.2 MEUR during the reporting year are divided into investments in land and buildings (3.5 MEUR), equipment and machinery (13.8 MEUR), construction in progress (7.8 MEUR), IT equipment including software and licenses (4.5 MEUR), and other (4.6 MEUR). Almost half of the investments were for capacity expansion. There were no advance payments for tangible assets. Investments in rights of use amounted to 2.9 MEUR. Plant and machinery accounted for 1.4 MEUR thereof.

In total, investments, including customer investments, of 44.4 MEUR are planned for 2020, which will contribute to the modernization and expansion of the production sites.

Intangible assets are mainly composed of goodwill of 268.6 MEUR (previous year: 265.0 MEUR) and customer contracts and relationships of 47.3 MEUR (previous year: 94.2 MEUR). The decline in customer contracts and relationships was due to scheduled amortization of established clientele.

Current assets amounted to 227.3 MEUR as of the reporting date (previous year: 217.7 MEUR). They consisted mainly of trade receivables (39.1 MEUR, previous year 42.3 MEUR), contract assets (51.2 MEUR, previous year 40.3 MEUR), inventories (49.2 MEUR, previous year 56.3 MEUR), and cash and cash equivalents (51.7 MEUR, previous year 49.6 MEUR). The factoring ratio of 60% is identical to the previous year's value. The reduction in inventories is based on a higher proportion of inventories, which are shown as contract assets in accordance with IFRS 15. The change in contract assets results from a changed product mix at the reporting date.

The negative shareholders' equity of 414.3 MEUR (previous year: 357.8 MEUR), together with goodwill of 268.6 MEUR, had a significant influence on the financial position. As of the reporting date, shareholders' equity consisted of subscribed capital of KEUR 25 (previous year: KEUR 25), a capital reserve of 129.4 MEUR (previous year: 129.4 MEUR), an accumulated deficit of 532.6 MEUR (previous year: 483.7 MEUR), and other components of -11.1 MEUR (previous year: -3.5 MEUR). The accumulated loss includes the net loss of 52.6 MEUR (previous year: 21.5 MEUR) and the other components of equity include an effect of -9.7 MEUR from the revaluation of pension provisions.

Long-term liabilities amounted to 644.7 MEUR as of the reporting date (previous year: 1,103.5 MEUR). They mainly consisted of long-term financial liabilities of 497.4 MEUR (previous year 963.0 MEUR). The change in long-term financial liabilities compared to the previous year resulted from three effects: The 1st Lien loan of nominally 500 MEUR, which expires in 2020, was reclassified to current liabilities; due to IFRS 16, lease liabilities increased by 14.1 MEUR and accrued interest on the shareholder loan increased by 18.7 MEUR (2006: 18.8 MEUR). The shareholder loan of 207.7 MEUR is a subordinated loan with bullet interest payments from Apollo 11 Holding S.á r.l. (total of 306.4 MEUR as of 31.12.2019). Other significant items within long-term liabilities were the pension provisions (68.4 MEUR), which increased by 11.8 MEUR, mainly due to the annual revaluation based on changed parameters, and deferred tax liabilities (63.3 MEUR, previous year 60.5 MEUR).

Current liabilities amounted to 661.6 MEUR as of the reporting date (previous year: 141.6 MEUR). Due to the changed reporting of the 1st Lien loan, short-term financial liabilities increased to 535.2 MEUR (previous year 34.7 MEUR). In addition, trade accounts payable increased by 7.2 MEUR to 60.9 MEUR and income tax liabilities by 6.8 MEUR to 21.4 MEUR.

Overall, foreign currency effects had an insignificant impact on the financial position and mainly concern trade receivables and payables in foreign currencies (mainly EUR against CHF and USD).

As of the balance sheet date 31 December 2019, the asset situation was characterised by negative equity and disproportionately high current liabilities in relation to the assets side. As a result of the refinancing and the capital measures that took place at the beginning of 2020, which are presented in the Notes, and the positive earnings and order situation, the economic situation at the time of preparation is satisfactory.

2.7 Financial structure

In September 2014, as part of a refinancing, the existing loans were extended, partially modified and replaced by new contracts. A total of 639.0 MEUR was raised under the agreements ("1st Lien" and "2nd Lien") in force as of December 31, 2019.

UniCredit Bank AG, London, acted as agent for 1st Lien and as security agent for 2nd Lien. Deutsche Bank AG acted as agent for 2nd Lien. The loans were fully syndicated.

The 1st Lien Loan had a nominal amount of 500.0 MEUR at the reporting date, with a base interest rate of 4% plus Euribor. If the Euribor fell below 1%, 1% was applied. The final termination date of the bullet loan was September 29, 2020.

The 2nd Lien Loan amounted to a nominal 139.0 MEUR at the reporting date, with a base interest rate of 7.5% plus Euribor. If the Euribor fell below 1%, 1% was applied. The final termination date of the bullet loan was September 29, 2021.

The revolving credit facility (RCF) amounted to 50.0 MEUR, of which 2.5 MEUR were reserved for guarantees. As of December 31, 2019, 10.0 MEUR of the free credit line was utilized. The term of the loan expired on September 29, 2020.

Refinancing took place in March 2020. Details are presented in the supplementary report in the notes.

2.8 Human resources and social affairs

The AENOVA Group had an average of 4,386 employees in the past financial year (2018: 4,319 employees). There is a Group-wide performance-oriented remuneration system that includes target agreements and target achievement checks for employees. This is intended to show employees development potential while at the same time strengthening performance motivation.

The AENOVA Group was able to improve its Ecovadis ranking (CSR) by 2 points and was awarded a silver medal for the first time.

For many years, AENOVA has enabled young people to train as IT specialists, chemical laboratory assistants, machine and plant operators, warehouse logistics specialists, industrial mechanics, office clerks, industrial clerks and others. This makes a significant contribution to securing the next generation of employees and to social responsibility. In 2019, the Group employed over 100 trainees.

The employees represent a significant value of the AENOVA Group. Employee identification with AENOVA and the employees' efforts for the Group are a key factor for success. AENOVA promotes the improvement of employee qualifications through various initiatives such as divisional training and focuses on the continuous recruitment and training of qualified junior staff.

2.9 General statement

The AENOVA Group is solidly financed for the coming years. Business development in the year under review was in line with expectations. The optimization measures initiated in 2019 are designed for the long term and will continue to have a positive impact on future results. As at the reporting date of February 29, the operating result was above plan.

3 Opportunity and risk report

AENOVA's operating processes are designed to identify short- and medium-term risks and opportunities in order to be able to take timely countermeasures or exploit opportunities in the event of risks. As part of the Group-wide risk management system, each division is required to identify and assess risks, communicate them and develop measures to deal with them. Appointments have been set up with responsible employees from various areas of the company (Development, Sales, Manufacturing and Quality, SCM, Finance, IT and HR) in order to coordinate risks across all areas and decide on measures to be taken.

As a result, decision papers are prepared and made available to AENOVA's management. These templates are discussed and approved in meetings with AENOVA management. From today's perspective, the AENOVA Group is generally very well positioned to generate further sales growth from current market developments.

Since January 2020, Covid-19 disease has been spreading worldwide. Depending on the regional characteristics of the pandemic, there could be temporary restrictions or bottlenecks in the supply chain. Temporary closures of individual areas or even production sites cannot be ruled out. On the other hand, the pharmaceutical industry is classified as systemically relevant, so that all AENOVA plants can produce to date. Closure by the authorities is considered rather unlikely. The order situation is also positive. In addition, extensive organisational precautions have been taken throughout the Group to protect the health of the employees and to maintain the operation of the plants in order to ensure a continuous supply of pharmaceuticals to the market. Task forces have been set up at both Group and site level to identify and address risks at an early stage. The risk of failure of complete production facilities, even temporarily, is minimized by a wide range of organizational measures. The default risk for parts of production due to high absences in individual operating areas is assessed as medium, but it is assumed that these temporary restrictions can be largely compensated for with regard to the year as a whole. Strategic purchasing, which is also integrated into the task forces, ensures the supply of production and consumables through extensive initiatives.

Unless the Covid-19 pandemic leads to significant unforeseen events, management believes that there is a low to medium risk that the risks listed in this chapter will lead to a significant deviation from the plan with regard to the future net assets, financial position and results of operations of the Group.

3.1 Competition

The healthcare market is characterized by intense competition. Nevertheless, AENOVA can benefit from this due to its broadly diversified product range and cost position, particularly in the area of soft capsules. AENOVA's strategic focus is on the portfolio of high-quality products with below-average price sensitivity.

In order to position itself in the competition in the pharmaceutical and healthcare market, AENOVA has positioned itself as follows:

- Alignment of the organization towards customer satisfaction through continuous improvement of delivery performance
- Pooling of production resources in competence centers with a strong focus on operational excellence and cost management
- Strengthening and reorganisation of the sales department with a clear focus on comprehensive customer service
- Optimization of procurement and planning processes by strengthening strategic purchasing and resources in supply chain management
- Selective expansion of capacities in bottleneck areas.

The opportunities of gaining new market shares are considered to be medium. AENOVA is able to cope with the risks in the area of competition, with the consequence of revenue losses, due to the high regulatory requirements, the high transfer costs and the positioning it has taken, and classifies these as low.

3.2 Insourcing

As a contract manufacturer, AENOVA is exposed to the risk that customers use their own production capacities in order to fully utilize them (insourcing) or build up capacities and withdraw production volumes from AENOVA. This effect is counteracted by other customers outsourcing parts of their production to the CDMO market. This in turn presents an opportunity for AENOVA.

Aenova counteracts the risk described above with a competitive cost structure, good customer relationships over many years and permanently good quality.

Overall, the risks from insourcing are considered to be low. Altogether, we expect that major customers will continue to have a strong interest in stable partnerships with strategic CDMO partners. In addition, many medium-sized customers do not have their own or insufficient production capacities. Furthermore, insourcing activities are associated with barriers to switching. Should individual customers nevertheless insource parts of the portfolio, AENOVA can prepare itself accordingly due to the necessary lead times, at least in the more strongly regulated pharmaceutical segment, and react with production changes.

3.3 Procurement/price risk

The global procurement of raw materials and the associated market effects, especially with regard to the development of material prices and material availability, hold both opportunities and risks for AENOVA.

Capacity bottlenecks for special raw materials that are difficult to predict and, in individual cases, high volatility in the raw materials sector can cause major fluctuations in procurement prices, which can have both negative and positive effects on sales and margin development. This applies both to chemical substances such as vitamins, but especially to biological materials such as plant extracts or fish oil, whose availability is strongly influenced by climate and harvesting conditions.

AENOVA's central, globally active strategic purchasing department defines strategic product groups and derives specific purchasing strategies from them. In this way, AENOVA, as a leading European contract manufacturer, strengthens its position in the procurement market with access to attractive terms and delivery conditions.

In order to minimize risks, the procurement market is permanently monitored by the strategic purchasing department; negotiations with suppliers are conducted on the basis of this information. The aim is to establish alternative suppliers for key raw materials in order to avoid dependencies and potential supply bottlenecks.

Thanks to sufficient own stocks, contracts and procurement via traders, it was possible to bridge short-term supply bottlenecks that arose in the wake of the Covid-19 pandemic. The supply risk for materials from China, which was still apparent at the end of February to the beginning of March, has been reduced by the resumption of production in the supplier country. The production and export restrictions in India and the resulting shortage of available materials can also be cushioned to date by rescheduling production and using alternative procurement sources and air freight. AENOVA is in intensive contact with suppliers and customers with the aim of ensuring timely delivery at coordinated prices.

The risk of production stoppages or production delays due to limited material availability depends largely on exogenous influences, the effects of which AENOVA attempts to minimize through the measures defined above. In view of the defined measures, the management classifies the risk in the area of procurement/price risk as medium.

3.4 Market/demand

The development of the market and the demand offers Aenova some opportunities. Overall, the market for pharmaceutical products is growing due to an aging society in the developed world and an increasing share of the population in developing countries gaining access to medical products.

In addition, research-based pharmaceutical companies are increasingly focusing on their core competencies in research and development and marketing. The area of production is increasingly regarded as non-strategic by research-based pharmaceutical companies. In this situation, AENOVA is a competent partner who, as a contract manufacturer, regards the production of pharmaceuticals as its core competence and offers customers solutions from a single source to meet their challenges.

It is still expected that a large number of new molecular entities (NMEs) will come onto the market over the next few years. Several products are currently in a late phase of clinical development. AENOVA can also benefit from this.

In order to take advantage of these opportunities and achieve increases in sales, AENOVA focuses on individual customer relations in combination with full service. The entire range of products and services is offered as part of key account management. Potential major orders are accompanied by the management, involving all relevant technical and non-technical areas.

The opportunities are estimated to be medium, due to the positioning of the Group and its long-standing customer relationships. The Covid-19 pandemic is currently having an overall positive effect on demand. The demand for preparations that support the immune system also plays a role.

Market risks are seen in particular in the unequal economic recovery in Europe, the political tensions in Africa and the Middle East. The management considers the market risks to be low overall.

3.5 Political decisions

Political developments in the health care sector, particularly with regard to cost-cutting plans, have a global impact on industry. Specifically, the bundling of orders by health insurance companies and the procedures for awarding large orders (tender procedures), which can represent both an opportunity and a risk for Aenova, should be mentioned here.

As one of the major European competitors, AENOVA can profit from the further increase in regulatory requirements for pharmaceutical manufacturers. For the implementation and compliance with regulations, processes and resources are required whose costs can be spread over more products by larger market participants and can therefore in our opinion be better managed by them than by smaller suppliers.

The effects of the brexite and politically driven trade conflicts in the USA are not expected to have a significant influence on AENOVA's business.

Significant further political changes that could have an impact on AENOVA's business are currently not expected. For this reason, the management currently classifies the risks from political decisions as low.

3.6 Interest and currency risks

Due to its business activities, AENOVA is generally exposed to interest rate and currency risks. Group-wide risk management focuses on unforeseeable events on the financial markets and attempts to minimize adverse effects on the Group's earnings. The variable interest components of the long-term loans 2019 had a floor of 1%. In contrast, the variable interest components of the long-term loans newly concluded in fiscal year 2020 have a floor of 0%. Hedging instruments could be used if inflation were to rise. AENOVA does not expect any interest rate increases in the short or medium term. We therefore see no relevant risk in the development of interest rates.

AENOVA is exposed to foreign currency risks because sales and purchasing are conducted in different currencies. In most transactions there is a natural currency hedge; for example, the subsidiary in the United States acts in the American market as both buyer and seller. In Switzerland, a significant portion of purchasing and sales is made in AENOVA's functional currency, the euro. This reduces the currency risks to which AENOVA is exposed. Foreign currency risks are continuously analyzed and assessed in order to take timely measures to hedge currencies and reduce this risk.

AENOVA's risk management is carried out according to defined guidelines with the aim of minimizing the risk of fluctuations in results. The Corporate Treasury department identifies, evaluates and attempts to minimize risks in close cooperation and coordination with the operating business units.

Management currently classifies the risks from interest rate and currency fluctuations as low.

3.7 Liquidity and default risks

Liquidity risk describes the risk that AENOVA will not be able to meet its financial obligations when they fall due. These include in particular the repayment of financial debts and the settlement of liabilities to suppliers and employees. As part of its liquidity management, the Group ensures that sufficient liquid funds are always available.

A liquidity forecast is prepared for the purpose of short- and medium-term liquidity management. The liquidity forecast takes into account AENOVA's financing plans (interest payments), existing and expected liabilities and payment obligations, necessary investments and compliance with certain financial key figures ("financial covenants").

The liquidity forecast for the 2020 financial year is heavily dependent on the assumptions underlying the planning calculation: The planned increase in sales revenues is mainly based on volume growth and price adjustments. The gross margin will increase. Other operating expenses will increase at a lower rate than sales growth. In the area of personnel expenses, significant increases are expected, influenced by volume growth, but also by collective wage agreements and other salary adjustments. The 2019 financial year was used for stabilisation. The planning assumptions for fiscal year 2020 provide for ongoing optimization measures.

AENOVA uses the liquidity forecast to track the main payment movements and to ensure that the AENOVA Group has sufficient liquidity. Furthermore, the Group uses the monthly balance sheets, income statements, working capital planning and investment reports to monitor long-term liquidity.

In addition to the effective management of liquidity and working capital, the Group reduces the liquidity risk by means of a revolving loan of 50.0 MEUR, of which 10.0 MEUR had been drawn at the balance sheet date.

Due to the available liquidity and the refinancing in March 2020 (for details, see supplementary report in the notes), the liquidity risk for the next two financial years can be classified as low. Compliance with financial covenants

3.8 Compliance with financial covenants

In accordance with the loan agreements in force on the reporting date, AENOVA must comply with financial covenants and examine them separately if the RCF drawdown exceeds the 35% threshold. In the 2019 financial year, an audit of the financial covenants was not required throughout.

If key planning premises do not materialize, there is a risk that AENOVA will not achieve the forecasts or simulations and thus possibly not meet the financial covenants. A breach of the covenants would result in the bank loans becoming due or the banks being able to exercise their right of termination.

Based on the monitoring processes, management currently sees a low risk with regard to compliance with the financial covenants.

4 Forecast report

The planning on which the forecast report is based was adopted before the outbreak of the Covid-19 pandemic. Due to the continued good order situation, the management did not adjust the assumptions regarding the expected development in 2020 at the time of preparation, despite the uncertainties regarding the further developments with regard to Covid-19.

For the business year 2020, the Executive Board expects Sales of 735.0 MEUR. Adjusted for the closure of the Berlin site, Sales are expected to amount to 726.6 MEUR, with increasing growth in the following years, and a continued stable earnings and liquidity situation. This estimate is based in particular on the expected developments in the pharmaceutical and consumer healthcare markets, as well as on the strategic projects and optimization measures that the Group has launched in the financial years 2015 to 2019.

In the pharmaceutical market, volumes are expected to continue to rise in the coming years due to the expiration of major patents and an increase in the market share of generic products. It is expected that the intense competition in the generics segment will continue. Research-based pharmaceutical companies are increasingly focusing on their core competencies of research and development, marketing and sales. The trend towards outsourcing continues, and some companies are also consolidating their supplier base, also with respect to CDMOs.

The consumer healthcare sector is influenced by various market trends. Saturated OTC markets such as Germany are recording a slight decline in OTC business via pharmacies, but are showing growth with more favourable distribution channels.

Service providers for the pharmaceutical industry must be cost-competitive; opportunities for differentiation arise from high delivery reliability and a comprehensive range of services, which includes development services and logistics in addition to the production of different dosage forms. At the same time, the continuously increasing regulatory requirements must be met.

AENOVA has defined strategic initiatives and introduced measures to position itself in line with market conditions and thus be optimally positioned for the future:

- Expansion of the product range / differentiation

  AENOVA's core business comprises the development and production of pharmaceutical products and food supplements in modern oral dosage forms, such as soft gelatine and hard capsules, tablets, effervescent tablets, as well as sterile (and non-sterile) liquids and udder injectors. AENOVA offers a comprehensive portfolio of services including development, procurement of raw materials, production, analysis, packaging and logistics.

  The product range has been and will continue to be successively expanded through expansion at the existing sites, especially the soft gelatine site in Cornu and the animal health sector in Latina.

- Comprehensive focus on service excellence, quality and cost management

  Within the framework of AENOVA's strategy, a strong customer orientation and the aspect of service excellence represent an important cornerstone. Significant progress was already made in the 2019 financial year, particularly in the area of delivery performance. In addition, measures were initiated to expand capacity and simplify the internal supply chain, leading to further improvements in customer satisfaction.

  In the area of quality management, permanent improvements are implemented in compliance with the increasing quality requirements of regulators and customers.

  AENOVA has made considerable investments in additional personnel in 2019. In addition, programs for the further development of supply chain management and production systems have contributed to an improvement in the cost structure and, in particular, to increased company performance.

The Sales of 735.0 MEUR planned for the 2020 business year lead to EBITDA (before special items) of 94.1 MEUR and EBITDA (after special items) of 90.9 MEUR[31]. Adjusted for the Berlin site, which is to be closed, the AENOVA Group plans to increase its sales from 710.9 MEUR in 2019 to 727.2 MEUR (+2.2%) in 2020. Due to the increase in revenues, it is expected that the Group's liquidity position will develop positively in the future, whereby the cash flow in 2020 will be burdened by the closure of the Berlin location. The increase in sales reflects the continuing demand in the European market in the pharmaceutical sector. In this respect, EBITDA before special effects is rising.

The planning for 2020 is based exclusively on organic growth.

AENOVA expects the following key figures to develop in the 2020 financial year:

- Receivables management/Days Sales Outstanding (DSO)[32] : AENOVA is planning a 0-day change in the DSO value for the 2020 financial year.

31 before the effects of the Covid-19 pandemic and including the Berlin site, which is currently undergoing closure
32 Days Sales Outstanding (DSO): Ratio of trade receivables to net sales.

- Liabilities Management/Days Payables Outstanding (DPO)[33] : For the financial year 2020, AENOVA plans to reduce the key figure by 6 days due to extended payment terms with various suppliers.
- Inventory management/turnover rate (DOH)[34]: Due to numerous optimization programs, the management expects an improvement of 3 days for the 2020 fiscal year compared to the 2019 fiscal year.
- Total cash flow: AENOVA expects a neutral total cash flow before acquisitions for the 2020 financial year, among other things due to further strategic investments in the context of the expansion and extension of various locations and the closure of the Berlin location.

  A stable liquidity situation is expected in 2020.

AENOVA's financing is secured on the basis of the refinancing in March 2020 and the earnings and financial planning prepared by the management.

The estimates in this report are based on the current state of knowledge and the information available at the time of preparation. Due to the uncertainties of any planning, actual developments may differ from current estimates.

The risks arising from the current Covid-19 situation cannot be assessed concretely. However, the management has taken extensive measures to protect the health of employees and to maintain production. Overall, there are no discernible risks that could endanger the continued existence of the Group.

For the period from January 1, 2020 to the preparation of the consolidated financial statements, AENOVA's asset, financial and earnings situation developed better than planned, as the unaudited monthly financial statements show. More than 60% of the budgeted total annual turnover is already covered by incoming orders.

Starnberg, April 9, 2020

Ralf Schuler	Jan Kengelbach
Apollo 5 GmbH Managing Director	Apollo 5 GmbH Managing Director

33 Days Payables Outstanding (DPO): Ratio of trade payables (adjusted for CAPEX creditors) and average cost of materials including changes in inventories.

34 Inventory turnover: Ratio of inventories to average cost of materials including changes in inventories.