PAGE 44–74

CONSOLIDATED FINANCIAL STATEMENTS

OVERVIEW OF SELECTED CONSOLIDATED COMPANIES

C.H. BOEHRINGER SOHN AG & CO. KG, INGELHEIM AM RHEIN

BOEHRINGER INGELHEIM VETMEDICA GMBH, INGELHEIM AM RHEIN

ARGENTINA D
Boehringer Ingelheim Animal Health Argentina S.A., *Buenos Aires*

AUSTRALIA D R
Boehringer Ingelheim Animal Health Australia Pty. Ltd., *North Ryde*

BELGIUM D
Boehringer Ingelheim Animal Health Belgium S.A., *Brussels*

BRAZIL D P R
Boehringer Ingelheim Animal Health do Brasil Ltda., *São Paulo*

CANADA D
Boehringer Ingelheim Animal Health Canada Inc., *Burlington*

CHINA D P R
Nanchang Boehringer Ingelheim Animal Health Co., Ltd., *Nanchang*
Boehringer Ingelheim Animal Health (Shanghai) Co., Ltd., *Shanghai*
Boehringer Ingelheim Animal Health Operations (China) Co., Ltd., *Taizhou*
Boehringer Ingelheim Vetmedica (China) Co., Ltd., *Taizhou*

DENMARK D P
Boehringer Ingelheim Animal Health Denmark A/S, *Copenhagen*

FRANCE D P R
Boehringer Ingelheim Animal Health France, *Lyon*

GREAT BRITAIN D P
Boehringer Ingelheim Animal Health UK Limited, *Bracknell*

ITALY D P
Boehringer Ingelheim Animal Health Italia S.p.A., *Milan*

JAPAN D R
Boehringer Ingelheim Animal Health Japan Co., Ltd., *Tokyo*

MEXICO D
Boehringer Ingelheim Animal Health México S.A. de C.V., *Mexico City*

NETHERLANDS D P R
Boehringer Ingelheim Animal Health Netherlands B.V., *Velserbroek*

NEW ZEALAND D P R
Boehringer Ingelheim Animal Health New Zealand Limited, *Auckland*

PHILIPPINES D
Boehringer Ingelheim Animal Health Philippines, Inc., *Makati City*

PUERTO RICO P
Boehringer Ingelheim Animal Health Puerto Rico LLC, *Barceloneta*

SOUTH AFRICA D
Boehringer Ingelheim Animal Health South Africa Pty Ltd., *Randburg*

SOUTH KOREA D
Boehringer Ingelheim Animal Health Korea Ltd., *Seoul*

SPAIN D
Boehringer Ingelheim Animal Health España, S.A., *Barcelona*

TAIWAN D
Boehringer Ingelheim Animal Health Taiwan Co., Ltd., *Taipei*

THAILAND D
Boehringer Ingelheim Animal Health (Thailand) Limited, *Bangkok*

USA D P R
Boehringer Ingelheim Animal Health USA, Inc., *Wilmington, Delaware*
Newport Laboratories, Inc., *Wilmington, Delaware*

GERMANY D P R
Boehringer Ingelheim Corporate Center GmbH, *Ingelheim am Rhein*
Boehringer Ingelheim GmbH, *Ingelheim am Rhein*
Boehringer Ingelheim Pharma GmbH & Co. KG, *Ingelheim am Rhein*
Boehringer Ingelheim microParts GmbH, *Dortmund*
Boehringer Ingelheim Venture Fund GmbH, *Ingelheim am Rhein*
Boehringer Ingelheim Biopharmaceuticals GmbH, *Ingelheim am Rhein*
Boehringer Ingelheim Veterinary Research Center GmbH & Co. KG, *Hanover*
Boehringer Ingelheim Middle East and Africa GmbH, *Ingelheim am Rhein*

D *Distribution*
P *Production*
R *Research and development*

C.H. BOEHRINGER SOHN GRUNDSTÜCKSVERWALTUNG GMBH & CO. KG, INGELHEIM AM RHEIN

BOEHRINGER INGELHEIM INTERNATIONAL GMBH, INGELHEIM AM RHEIN

ARGENTINA D

Boehringer Ingelheim S.A., *Buenos Aires*

AUSTRALIA D

Boehringer Ingelheim Pty. Ltd., *North Ryde*

AUSTRIA D P R

Boehringer Ingelheim RCV GmbH & Co. KG, *Vienna*

Forschungsinstitut für molekulare Pathologie Gesellschaft mbH, *Vienna*

ViraTherapeutics GmbH, *Innsbruck*

BELGIUM D

SCS Boehringer Ingelheim Comm.V., *Brussels*

BRAZIL D P

Boehringer Ingelheim do Brasíl Química e Farmaceutica Ltda., *São Paulo*

Solana Agro Pecuária Ltda., *Arapongas*

CANADA D

Boehringer Ingelheim (Canada) Ltd., *Toronto*

CHILE D

Boehringer Ingelheim Ltda., *Santiago de Chile*

CHINA D P

Boehringer Ingelheim Shanghai Pharmaceuticals Co. Ltd., *Shanghai*

Boehringer Ingelheim Biopharmaceuticals (China) Co., Ltd., *Shanghai*

Boehringer Ingelheim (China) Investment Co., Ltd.,*Shanghai*

Boehringer Ingelheim International Trading (Shanghai) Co., Ltd., *Shanghai*

COLOMBIA D

Boehringer Ingelheim S.A., *Santa Fé de Bogotá*

CZECH REPUBLIC D

Boehringer Ingelheim, spol. s.r.o., *Prague*

DENMARK D

Boehringer Ingelheim Danmark A/S, *Copenhagen*

ECUADOR D

Boehringer Ingelheim Del Ecuador Cia. Ltda., *Quito*

FINLAND D

Boehringer Ingelheim Finland Ky, *Espoo*

FRANCE D

Boehringer Ingelheim France S.A.S., *Paris*

GREAT BRITAIN D

Boehringer Ingelheim Ltd., *Bracknell*

GREECE D P

Boehringer Ingelheim Ellas A.E., *Athens*

HONG KONG D

Boehringer Ingelheim (Hong Kong) Ltd., *Hong Kong*

INDIA D

Boehringer Ingelheim India Private Ltd., *Mumbai*

INDONESIA D P

PT Boehringer Ingelheim Indonesia, *Jakarta*

ISRAEL D

Boehringer Ingelheim Israel Ltd., *Tel Aviv*

ITALY D P

Boehringer Ingelheim Italia S.p.A., *Milan*

Bidachem S.p.A., *Fornovo S. Giovanni*

JAPAN D P R

Nippon Boehringer Ingelheim Co., Ltd., *Tokyo*

Boehringer Ingelheim Seiyaku, *Yamagata*

Boehringer Ingelheim Japan, Inc., *Tokyo*

MEXICO D P

Boehringer Ingelheim Mexico S.A. de C.V., *Mexico City*

Boehringer Ingelheim Vetmedica S.A. de C.V., *Guadalajara*

Boehringer Ingelheim Promeco S.A. de C.V., *Mexico City*

NETHERLANDS D

Boehringer Ingelheim B.V., *Alkmaar*

NEW ZEALAND D

Boehringer Ingelheim (N.Z.) Ltd., *Auckland*

NORWAY D

Boehringer Ingelheim Norway KS, *Asker*

PERU D

Boehringer Ingelheim Peru S.A.C., *Lima*

PHILIPPINES D

Boehringer Ingelheim (Philippines), Inc., *Manila*

POLAND D

Boehringer Ingelheim Sp. z o.o., *Warsaw*

PORTUGAL D

Unilfarma-Uniao Internacional de Laboratórios Farmacêuticos, Lda., *Lisbon*

RUSSIAN FEDERATION D

OOO Boehringer Ingelheim, *Moscow*

SERBIA D

Boehringer Ingelheim Serbia DOO Beograd, *Belgrad*

SOUTH AFRICA D

Ingelheim Pharmaceuticals (Proprietary) Ltd., *Randburg*

SOUTH KOREA D

Boehringer Ingelheim Korea Ltd., *Seoul*

SPAIN D P

Boehringer Ingelheim España S.A., *Barcelona*

SWEDEN D

Boehringer Ingelheim Aktiebolag, *Stockholm*

SWITZERLAND D R

Boehringer Ingelheim (Schweiz) GmbH, *Basel*

Amal Therapeutics SA, *Geneva*

TAIWAN D

Boehringer Ingelheim Taiwan Ltd., *Taipei*

THAILAND V

Boehringer Ingelheim (Thai) Ltd., *Bangkok*

TURKEY D

Boehringer Ingelheim Ilaç Ticaret A.S., *Istanbul*

USA D P R

Boehringer Ingelheim Pharmaceuticals Inc., *Wilmington, Delaware*

Boehringer Ingelheim Fremont, Inc., *Wilmington, Delaware*

Boehringer Ingelheim USA Corporation, *Wilmington, Delaware*

VIETNAM D

Boehringer Ingelheim Animal Health Vietnam Limited Liability Company, *Ho Chi Minh City*

CONSOLIDATED BALANCE SHEET

Assets (in million EUR)	Notes [1]	31.12.2019	31.12.2018
Intangible assets	(3.1)	4,882	5,120
Tangible assets	(3.2)	4,754	4,280
Financial assets	(3.3)	9,162	6,058
Fixed assets		**18,798**	**15,458**
Inventories	(3.4)	3,563	3,312
Accounts receivable and other assets	(3.5)	5,437	4,573
Cash and cash equivalents		2,195	4,303
Current assets		**11,195**	**12,188**
Prepaid expenses		313	377
Deferred tax assets		3,000	2,784
Exceeding amount of plan assets		174	81
Total assets		**33,480**	**30,888**

Equity and liabilities (in million EUR)	Notes [1]	31.12.2019	31.12.2018
Shareholders' capital		178	178
Group reserves		14,709	12,453
Balance sheet currency conversion difference		– 207	– 298
Equity attributable to the parent company		**14,680**	**12,333**
Non-controlling interests		1	1
Group equity		**14,681**	**12,334**
Difference from capital consolidation		**1,471**	**1,511**
Provisions	(3.6)	14,521	13,752
Accounts payable and loans	(3.7)	1,715	2,142
Liabilities		**16,236**	**15,894**
Deferred income		441	463
Deferred tax liabillities		651	686
Total equity and liabilities		**33,480**	**30,888**

[1] For explanations, see relevant section in the notes to the consolidated financial statements.

CONSOLIDATED PROFIT AND LOSS STATEMENT

(in million EUR)	Notes [1]	2019	2018
Net sales	(4.1)	**18,997**	**17,498**
Changes in finished goods and work in process		224	244
Other own work capitalized		11	13
Other operating income	(4.2)	2,040	1,872
Total revenues		**21,272**	**19,627**
Cost of materials	(4.3)	−2,918	−2,606
Personnel expenses	(4.4)	−5,367	−5,276
Amortization of intangible assets and depreciation of tangible assets	(4.5)	−1,180	−1,089
Other operating expenses	(4.6)	−8,025	−7,184
Operating income		**3,782**	**3,472**
Financial income	(4.7)	−369	−654
Holding income	(4.8)	83	358
Income before taxes		**3,496**	**3,176**
Income taxes [2]	(4.9)	−775	−1,101
Income after taxes		**2,721**	**2,075**
Net income	(4.10)	2,721	2,075
Non-controlling interests		0	0
Group profit		**2,721**	**2,075**

[1] For explanations, see relevant section in the notes to the consolidated financial statements.
[2] Due to legal requirements the shareholders' personal taxes arising from group business activities are shown as withdrawals from the group reserves.

CASH FLOW STATEMENT

(in million EUR)	2019
Income after taxes (including non-controlling interests)	2,721
Amortization / reversal of write-downs of intangible assets and depreciation / reversal of write-downs of tangible assets	1,180
Change in provisions for pensions and similar obligations (including change of plan assets)	379
Change in other provisions	498
Other non-cash income and expenses	– 305
Gain from disposals of consolidated companies	– 2
Gain/loss from disposals of fixed assets	– 6
Grants received	– 9
Change in inventories	– 274
Change in accounts receivable and other assets not related to investing or financing activities	– 590
Change in trade accounts payable and other liabilities not related to investing or financing activities	9
Interest income / interest expenses	80
Other income from investments	– 27
Income taxes	775
Income taxes paid	– 1,085
Cash flow from operating activities	**3,344**
Payments to aquire intangible fixed assets	– 221
Payments to aquire tangible fixed assets	– 1,074
Payments to aquire financial fixed assets [1]	– 53
Payments to aquire or generate plan assets	– 10
Payments relating to purchase price adjustments of disposed consolidated entities and disposed fixed assets	– 140
Investments in consolidated companies	– 85
Proceeds from disposals of intangible fixed assets	7
Proceeds from disposals of tangible fixed assets	17
Proceeds from disposals of financial fixed assets [1]	40
Proceeds from disposals of consilidated entities	60
Interest received	23
Income from dividends	15
Cash flow from investing activities	**– 1,421**

CASH FLOW STATEMENT

(in million EUR)	2019
Cash receipts from grants	9
Interest paid	– 49
Cash payments to shareholders of the parent company	– 804
Proceeds from loans / cash repayments of loans	– 185
Cash flow from financing activities	**- 1,029**
Change in financial funds from cash relevant transactions	**894**
Changes in financial funds due to change of consolidated companies	13
Changes in financial funds due to exchange rate movements	16
Financial funds [2] as of 1.1.	**9,454**
Financial funds [2] as of 31.12	**10,377**

[1] Excl. fixed-asset investment securities.
[2] Cash and cash equivalents and investment securities within fixed assets.
(+) = source of funds, (-) = use of funds

STATEMENT OF CHANGES IN GROUP EQUITY

(in million EUR)	Shareholders' capital [1]	Group reserves [2]	Balance sheet currency conversion difference	Equity attributable to the parent company	Non-controlling interests	Group equity
Balance as of 31.12.2017	**178**	**10,868**	**- 388**	**10,658**	**- 1**	**10,657**
Contributions	0	62	0	62	0	62
Withdrawals	0	– 544	0	– 544	0	– 544
Net income	0	2,075	0	2,075	0	2,075
Changes in consolidated companies	0	– 8	– 2	– 10	2	– 8
Currency effects	0	0	92	92	0	92
Balance as of 31.12.2018	**178**	**12,453**	**- 298**	**12,333**	**1**	**12,334**
Withdrawals	0	– 465	0	– 465	0	– 465
Net income	0	2,721	0	2,721	0	2,721
Currency effects	0	0	91	91	0	91
Balance as of 31.12.2019	**178**	**14,709**	**- 207**	**14,680**	**1**	**14,681**

[1] The shareholders' capital consists of the equity of C.H. Boehringer Sohn AG & Co. KG and C.H. Boehringer Sohn Grundstücksverwaltung GmbH & Co. KG. The shareholders' capital consists only of the limited partner's capital contribution.
[2] The shareholders' personal taxes arising from group business activities are shown as withdrawals from the group reserves.

PRODUCT PORTFOLIO

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 Principles and methods

1.1 General principles

The consolidated financial statements of Boehringer Ingelheim for the 2019 financial year were prepared in accordance with Section 264a of the German Commercial Code (HGB), in line with the legal requirements to prepare consolidated financial statements under Section 290 et seq. HGB.

In accordance with Section 297 (1) HGB, the consolidated financial statements consist of the consolidated balance sheet, the consolidated profit and loss statement, the notes to the consolidated financial statements, the cash flow statement and the statement of changes in equity.

The consolidated financial statements were prepared in euros in accordance with Section 298 (1) in conjunction with Section 244 HGB.

To improve the clarity and transparency of the consolidated financial statements, individual items of the consolidated balance sheet and the consolidated profit and loss statement have been combined. These items are presented and explained separately in the notes. The additional disclosures required for the individual items can also be found in the notes.

1.2 Registry information

The parent company is registered under the name C.H. Boehringer Sohn AG & Co. KG, with its headquarters in Ingelheim am Rhein, in the commercial register of Mainz district court under the number HRA 21732.

1.3 Information on the group of consolidated companies

The parent company of the Boehringer Ingelheim Group is C.H. Boehringer Sohn AG & Co. KG, Ingelheim am Rhein. Boehringer AG, Ingelheim am Rhein, is the sole unlimited partner of this company.

The Boehringer Ingelheim Group consists of a total of 175 subsidiaries in Germany and abroad. 150 subsidiaries have been included in the consolidated financial statements of C.H. Boehringer Sohn AG & Co. KG under full consolidation rules. C.H. Boehringer Sohn Grundstücksverwaltung GmbH & Co. KG is a special purpose entity in which C.H. Boehringer Sohn AG & Co. KG bears a majority of the risks and opportunities in economic terms. C.H. Boehringer Sohn AG & Co. KG holds a majority of the voting rights in the other subsidiaries, either directly or indirectly.

In accordance with Section 296 (2) HGB, 22 subsidiaries were not included in the consolidation in the reporting year, as they are individually and collectively insignificant to the Group's net assets, financial and earnings position. The total amount of the sales, equity and net income for the year of the subsidiaries not included in consolidation accounts for less than 1% of the aggregated Group financial statements totals. For two further subsidiaries there are ongoing restrictions on control due to the terms of the articles of association. These companies were also not consolidated in accordance with Section 296 (1) No. 1 HGB.

The total number of subsidiaries decreased by one compared to the previous year:

- Seven companies were founded.
- Two companies were acquired.
- Eight companies lost their separate legal identity by merger.
- One affiliated company was liquidated.
- One company was sold.

The following subsidiaries were exempted from the duty to prepare and disclosure annual financial statements and management reports in accordance with Section 264 (3) HGB:

- Boehringer Ingelheim GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Europe GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Secura Versicherungsvermittlungs GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Grundstücks-GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Finanzierungs GmbH, Ingelheim am Rhein
- Boehringer Ingelheim R&D Beteiligungs GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Venture Fund GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Invest GmbH, Ingelheim am Rhein
- Boehringer Ingelheim Animal Health France Participations GmbH, Ingelheim am Rhein

The following subsidiaries were exempted from the duty to prepare and disclose annual financial statements and management reports in accordance with Section 264b HGB:

- C.H. Boehringer Sohn AG & Co. KG, Ingelheim am Rhein
- C.H. Boehringer Sohn Grundstücksverwaltung GmbH & Co. KG, Ingelheim am Rhein
- Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim am Rhein
- Boehringer Ingelheim Veterinary Research Center GmbH & Co. KG, Hanover

Boehringer Ingelheim participates in one joint venture company, which has not been included in the consolidated financial statements either using the proportionate method or the equity method, since it is not material. Furthermore, Boehringer Ingelheim holds an interest in fifteen associated companies, which have not been accounted for using the equity method either due to their lack of significance. The resulting effect on the Group’s total assets and net income is less than 1%.

1.4 Consolidation methods

For inventories and fixed assets, receivables, liabilities, and income and expense items, transactions between the companies included in consolidation were eliminated as part of debt consolidation procedures in accordance with Section 303 HGB, procedures to eliminate intercompany profits in accordance with Section 304 HGB and income and expenses consolidation procedures in accordance with Section 305 HGB.

The acquisition method was applied when including subsidiaries in the consolidation for the first time in accordance with Section 301 HGB. Companies were included in the consolidation for the first time on the date on which the company became a subsidiary.

The book value of the shares held by the parent company was offset against the corresponding equity of the subsidiary. Equity was carried at the amount of the fair value of the assets, liabilities, prepaid expenses, deferred income and special reserves included in the consolidated financial statements as of the time of consolidation. Any remaining positive balance was recorded as goodwill; any remaining negative balance was recorded as a difference from capital consolidation.

1.5 Currency translation

Assets and liabilities resulting from foreign currency transactions were translated using the average spot exchange rate as of the balance sheet date. The realization principle (Section 298 (1) in conjunction with Section 252 (1) No. 4 half-sentence 2 HGB) and the historical cost convention (Section 298 (1) in conjunction with Section 253 (1) sentence 1 HGB) were applied to items with a remaining term of more than one year.

In these consolidated financial statements, the financial statements of foreign subsidiaries domiciled in a state outside the eurozone that are denominated in a foreign currency have been converted into euros in accordance with Section 308a HGB using the modified closing date rate method.

Using the modified closing date rate method, the asset and liability items of the annual financial statements prepared in foreign currency were translated into euros using the average spot exchange rate as of the balance sheet date, with the exception of equity, which was translated using the historical rate. Items included in the profit and loss statement were translated into euros using the average rate. The resulting translation differences were reported within consolidated equity below the reserves in “Balance sheet currency conversion difference”.

The exchange rates for the Group’s most important currencies changed as follows during the reporting year (basis: 1 EUR):

	Spot rate		Average rate	
	31.12.2019	31.12.2018	2019	2018
US dollar	1.12	1.15	1.12	1.18
Japanese yen	121.94	125.85	122.06	130.41
Chinese renminbi	7.82	7.88	7.73	7.81

2 Accounting policies

2.1 Fixed assets

Acquired tangible and intangible assets are carried at cost, less scheduled straight-line amortization and depreciation determined under consideration of the technical and economic circumstances. This is based on the following useful lives:

Goodwill	10 years
Other intangible assets	2 to 15 years
Buildings	20 years
Technical facilities and machines	10 years
Other facilities, operating equipment	3 to 10 years

Only straight-line depreciation and amortization are used in the consolidated financial statements. Additional write-downs are recorded to reflect impairments when the value of assets has been considered permanently impaired. Manufacturing costs include materials and labor manufacturing costs, an appropriate portion of materials and labor overheads, and the depreciation of fixed assets (to the extent caused by production). Manufacturing costs do not include financing costs.

All capitalized intangible assets have finite useful lives.

Financial assets primarily include investment securities, shareholder rights and loans and were carried at the lower of cost or fair market value, if impaired. In the event that the reasons for the impairment losses recognized in previous financial years were no longer applicable, corresponding reversals were recorded.

2.2 Current assets, prepaid expenses, deferred income and exceeding amount of plan assets

Inventories are carried at the lower of cost or fair market value.

Raw materials, consumables and supplies are capitalized at the lower of average acquisition prices or fair market value on the balance sheet date.

Finished goods and work in progress are measured at manufacturing cost on the basis of individual calculations, taking into account the directly attributable costs of materials, direct labor costs, special direct costs, an appropriate share of material and production overhead costs and production-related depreciation.

Goods for resale are valued at the lower of either acquisition cost or fair market value.

All identifiable risks in inventories arising from above-average storage periods, diminished marketability and lower replacement costs were taken into account by recording appropriate valuation adjustments.

Inventories are valued loss-free – that is, deductions were made from the expected sales prices to reflect costs yet to be incurred.

Receivables and other assets were recognized at cost less allowances for specific risks and general credit risk. Low-interest or non-interest-bearing receivables with a term of more than one year were discounted.

Cash and cash equivalents, consisting of cash, balances at banks and checks, were recognized at the lower of cost or fair market value.

Prepaid expenses recorded in accordance with Section 250 (1) HGB include expenses paid in advance in respect of a defined period of time after the balance sheet date.

Deferred income recorded in accordance with Section 250 (2) HGB include proceeds that represent income relating to a defined period of time after the balance sheet date.

The fair market value of pension plan assets and the corresponding present value of pension obligations have been offset according to German GAAP. The exceeding amount of plan assets has been capitalized separately.

2.3 Difference from capital consolidation

The difference from capital consolidation reported on December 31, 2019 was primarily a result of the business swap of Boehringer Ingelheim's consumer healthcare business and Sanofi's animal health business, which was completed on January 1, 2017. This resulted in a difference from capital consolidation of 1,986 million EUR. The difference is amortized over an estimated period of fifteen years. The remaining balance of the difference amounted to 1,469 million EUR as of December 31, 2019.

The difference from capital consolidation reported on December 31, 2019 also included an amount arising from the acquisition of a US company in 2011. The original difference amounted to 157 million EUR. The difference is amortized over an estimated period of ten years. The remaining balance of this difference amounted to 2 million EUR as of December 31, 2019.

The difference from capital consolidation was primarily influenced by the current year release of 151 million EUR and by subsequent purchase price adjustments. The income from the release of the difference arising from capital consolidation is included in other operating income. The release is made corresponding to the amortization of those assets of the acquired company identified in the purchase price allocation not previously recognized in that company's balance sheet.

2.4 Group reserves

Group reserves include the retained earnings of the consolidated subsidiaries from prior and current years and consolidation entries that affect earnings.

2.5 Provisions

Tax provisions and other provisions include all uncertain liabilities and expected losses from executory contracts. They were carried at the amount required to settle the obligation based on reasonable prudent commercial judgment (that is, including future cost and price increases). Provisions with a remaining maturity of more than one year were discounted using the matched-term, average market interest rate. In the case of pension provisions this interest rate results from the last ten years average market interest rate and in the case of other provisions from the last seven years average market interest rate (in accordance with the "Rückstellungsabzinsungsverordnung", German Regulation on the Discounting of Provisions).

2.6 Accounts payable and loans

Accounts payable and loans were recognized at settlement amount.

2.7 Deferred taxes

To calculate deferred taxes arising from temporary or quasi-permanent differences between the carrying amounts of assets, liabilities, prepaid expenses and deferred income in the group financial statements and their carrying amounts for tax purposes or tax loss carryforwards, the amounts of the resulting tax benefits and expenses at the time that the differences will reverse were measured using tax rates specific to the respective consolidated company (4% – 39%). Deferred tax balances are not discounted. Differences due to consolidation measures in accordance with Sections 300 to 305 HGB were also measured using the company-specific tax rates applicable at the time of the expected reversal of the difference. Deferred tax assets on loss carryforwards were taken into account if it is likely that they will be used within the next five years.

Deferred tax assets and liabilities were reported without offsetting.

3 Notes to the consolidated balance sheet

3.1 Intangible assets

(in million EUR)	Acquired concessions / similar rights	Goodwill	Advance payments	Total
Acquisition / manufacturing costs				
Balance as of 1.1.2018	**6,676**	**5**	**19**	**6,700**
Currency conversion difference	182	0	0	182
Changes in consolidated companies	80	24	0	104
Additions	102	0	21	123
Disposals	– 145	0	0	– 145
Reclassifications	13	0	– 14	– 1
Balance as of 31.12.2018	**6,908**	**29**	**26**	**6,963**
Currency conversion difference	54	0	0	54
Changes in consolidated companies	34	57	0	91
Additions	214	0	7	221
Disposals	– 117	0	0	– 117
Reclassifications	23	0	– 21	2
Balance as of 31.12.2019	**7,116**	**86**	**12**	**7,214**
Accumulated amortization				
Balance as of 1.1.2018	**1,325**	**3**	**0**	**1,328**
Currency conversion difference	36	0	0	36
Changes in consolidated companies	0	0	0	0
Additions	537	0	0	537
Write-ups	0	0	0	0
Disposals	– 58	0	0	– 58
Reclassifications	0	0	0	0
Balance as of 31.12.2018	**1,840**	**3**	**0**	**1,843**
Currency conversion difference	12	0	0	12
Changes in consolidated companies	– 2	0	0	– 2
Additions	589	6	0	595
Write-ups	0	0	0	0
Disposals	– 117	0	0	– 117
Reclassifications	1	0	0	1
Balance as of 31.12.2019	**2,323**	**9**	**0**	**2,332**
Book value as of 31.12.2018	**5,068**	**26**	**26**	**5,120**
Book value as of 31.12.2019	**4,793**	**77**	**12**	**4,882**

3.2 Tangible assets

(in million EUR)	Land and buildings	Technical facilities and machines	Other facilities / operating equipment	Advance payments / construction in progress	Total
Acquisition / manufacturing costs					
Balance as of 1.1.2018	**3,627**	**3,717**	**2,118**	**777**	**10,239**
Currency conversion difference	34	24	18	1	77
Changes in consolidated companies	0	1	0	0	1
Additions	62	88	124	676	950
Disposals	– 19	– 52	– 101	– 1	– 173
Reclassifications	221	192	69	– 481	1
Balance as of 31.12.2018	**3,925**	**3,970**	**2,228**	**972**	**11,095**
Currency conversion difference	27	19	14	3	63
Changes in consolidated companies	– 61	– 97	– 3	– 8	– 169
Additions	62	85	156	770	1,073
Disposals	– 46	– 84	– 110	– 7	– 247
Reclassifications	175	172	85	– 434	– 2
Balance as of 31.12.2019	**4,082**	**4,065**	**2,370**	**1,296**	**11,813**
Accumulated depreciation					
Balance as of 1.1.2018	**2,056**	**2,657**	**1,659**	**0**	**6,372**
Currency conversion difference	22	18	15	0	55
Changes in consolidated companies	0	0	0	0	0
Additions	162	232	158	0	552
Write-ups	– 3	– 5	0	0	– 8
Disposals	– 13	– 48	– 95	0	– 156
Reclassifications	– 1	3	– 2	0	0
Balance as of 31.12.2018	**2,223**	**2,857**	**1,735**	**0**	**6,815**
Currency conversion difference	16	13	10	0	39
Changes in consolidated companies	– 60	– 95	– 3	0	– 158
Additions	190	225	170	0	585
Write-ups	0	0	0	0	0
Disposals	– 40	– 77	– 104	0	– 221
Reclassifications	8	– 14	5	0	– 1
Balance as of 31.12.2019	**2,337**	**2,909**	**1,813**	**0**	**7,059**
Book value as of 31.12.2018	**1,702**	**1,113**	**493**	**972**	**4,280**
Book value as of 31.12.2019	**1,745**	**1,156**	**557**	**1,296**	**4,754**

3.3 Financial assets

(in million EUR)	Investments in affiliated companies	Loans to affiliated companies	Investments in related companies	Loans to related companies	Investment securities	Other loans	Total
Acquisition / manufacturing costs							
Balance as of 1.1.2018	**7**	**0**	**991**	**0**	**5,076**	**173**	**6,247**
Currency conversion difference	0	0	0	0	2	3	5
Changes in consolidated companies	0	0	0	0	0	0	0
Additions	5	0	31	0	117	7	160
Disposals	0	0	– 21	0	– 29	– 145	– 195
Reclassifications	0	0	0	0	0	0	0
Balance as of 31.12.2018	**12**	**0**	**1,001**	**0**	**5,166**	**38**	**6,217**
Currency conversion difference	0	0	0	0	0	0	0
Changes in consolidated companies	– 6	0	– 11	0	0	0	– 17
Additions	0	0	45	4	3,071	5	3,125
Disposals	0	0	– 81	0	– 46	– 8	– 135
Reclassifications	0	0	0	0	0	0	0
Balance as of 31.12.2019	**6**	**0**	**954**	**4**	**8,191**	**35**	**9,190**
Accumulated depreciation							
Balance as of 1.1.2018	**0**	**0**	**397**	**0**	**17**	**3**	**417**
Currency conversion difference	0	0	0	0	0	0	0
Changes in consolidated companies	0	0	0	0	0	0	0
Additions	0	0	2	0	1	0	3
Write-ups	0	0	– 256	0	– 3	0	– 259
Disposals	0	0	– 2	0	0	0	– 2
Reclassifications	0	0	0	0	0	0	0
Balance as of 31.12.2018	**0**	**0**	**141**	**0**	**15**	**3**	**159**
Currency conversion difference	0	0	0	0	0	0	0
Changes in consolidated companies	0	0	0	0	0	0	0
Additions	0	0	3	0	2	0	5
Write-ups	0	0	– 60	0	– 7	0	– 67
Disposals	0	0	– 68	0	– 1	0	– 69
Reclassifications	0	0	0	0	0	0	0
Balance as of 31.12.2019	**0**	**0**	**16**	**0**	**9**	**3**	**28**
Book value as of 31.12.2018	**12**	**0**	**860**	**0**	**5,151**	**35**	**6,058**
Book value as of 31.12.2019	**6**	**0**	**938**	**4**	**8,182**	**32**	**9,162**

As in the previous year, the “Other loans” item does not include any loans to shareholders.

3.4 Inventories

(in million EUR)	31.12.2019	31.12.2018
Raw materials and supplies	635	626
Unfinished goods	1,763	1,602
Finished goods and goods for resale	1,155	1,071
Advance payments to suppliers	10	13
	3,563	**3,312**

3.5 Accounts receivable and other assets

(in million EUR)	31.12.2019	Residual term over 1 year	31.12.2018	Residual term over 1 year
Trade accounts receivable	4,196	2	3,540	0
Receivables from affiliated companies	19	0	24	0
Receivables from related companies	29	0	27	0
Other assets	1,193	176	982	67
	5,437	**178**	**4,573**	**67**

The "Other assets" item includes receivables from shareholders of 123 million EUR (previous year: around half a million EUR).

Receivables from affiliated companies almost exclusively consist of receivables from loans.

Receivables from related companies primarily consist of trade accounts receivable.

3.6 Provisions

(in million EUR)	31.12.2019	31.12.2018
Pension provisions and similar obligations	5,185	4,712
Tax provisions	1,816	1,812
Other provisions	7,520	7,228
	14,521	**13,752**

Provisions for pensions and similar obligations

The provisions for pensions and similar obligations were determined on the basis of actuarial calculations using the projected unit credit method, taking into account future adjustments in salaries and pensions.

In addition to local biometric data (in Germany, for example, 2018 G mortality tables published by Prof. Dr. Klaus Heubeck which have been adjusted for group-specific death probabilities and invalidity rates), pension obligations in the significant countries were calculated on the basis of the following actuarial parameters:

(in % as of December 31, 2019)	Germany	USA	Japan
Discount rate	2.71	3.96	1.08
Salary increase	3.50	4.00	3.51
Pension increase	1.88	3.00	0.00

Discounting rates were determined by reference to average market rates for 15-year maturities in accordance with the German Regulation on the Discounting of Provisions of March 11, 2016. The interest rates used to discount significant foreign pension obligations (USA and Japan) were determined with comparable parameters, in line with the German Regulation on the Discounting of Provisions of March 11, 2016.

The difference calculated in accordance with Section 253 (6) HGB amounts to 743 million EUR (previous year: 767 million EUR).

The plan assets intended solely to cover pension and similar obligations that are unavailable to all other creditors (plan assets as defined in Section 246 (2) sentence 2 HGB) were measured at fair market value, which is essentially derived from stock market prices, and offset against the underlying pension and similar obligations. The fair market value of the plan assets on the balance sheet date was 2,149 million EUR. The related amount of pension obligations and similar obligations was 7,160 million EUR.

Tax provisions

The tax provisions also include provisions for double taxation risks, which have resulted following the implementation of the action plans of the Organisation for Economic Co-operation and Development (OECD) as part of their international initiative known as the “Action Plan on Base Erosion and Profit Shifting” (BEPS).

Other provisions

Other provisions mainly include provisions for discounts and guarantees, personnel-related provisions, provisions for outstanding invoices, as well as provisions for litigation, legal claims and compensation for damages.

3.7 Accounts payable and loans

(in million EUR)	Residual term less than 1 year	Over 1 year	Thereof over 5 years	31.12.2019	31.12.2018	Residual term less than 1 year
Bank loans	247	9	0	256	420	412
Other accounts payable	1,385	74	35	1,459	1,722	1,685
thereof:						
– Trade accounts payable	*822*	*8*	*0*	*830*	*855*	*852*
– Advance payments received	*170*	*22*	*13*	*192*	*164*	*142*
– Accounts payable to affiliated companies	*3*	*5*	*5*	*8*	*9*	*4*
– Accounts payable to related companies	*2*	*0*	*0*	*2*	*1*	*1*
*– Other liabilities**	*388*	*39*	*17*	*427*	*693*	*686*
	1,632	**83**	**35**	**1,715**	**2,142**	**2,097**

* thereof:	31.12.2019	31.12.2018
– from taxes (in million EUR)	*205*	*225*
– social security liabilities (in million EUR)	*35*	*40*

As in the previous year, there were no liabilities secured by mortgages or similar collateral rights on the balance sheet date.

At the end of the year, there were liabilities to shareholders of 61 million EUR (previous year: 255 million EUR). These are presented within the “Other liabilities” item.

Accounts payable to affiliated companies include loans amounting to 4 million EUR (previous year: 4 million EUR) and trade accounts payable amounting to 4 million EUR (previous year: 5 million EUR).

4 Notes to the consolidated profit and loss statement

The structure of the consolidated profit and loss statement was based on the total cost format. Other taxes are included in other operating expenses.

To provide a better view of the earnings position, cost of materials has been partially reclassified to other operating expenses. The previous year’s figure has also been adjusted by 452 million EUR for better comparability.

4.1 Net sales

by businesses (in million EUR)	2019	2018
Human Pharma	13,961	12,559
Animal Health	4,035	3,960
Biopharmaceutical Contract Manufacturing	786	734
Other sales	41	40
Discontinued Operations	174	205
	18,997	**17,498**

by region (in million EUR)	2019	2018
Americas	8,830	8,088
Europe	5,689	5,316
Asia/Australia/Africa (AAA)	4,478	4,094
	18,997	**17,498**

4.2 Other operating income

Other operating income includes income from currency translation of 811 million EUR (previous year: 783 million EUR).

4.3 Cost of materials

(in million EUR)	2019	2018
Costs of raw material, supplies and goods for resale	2,074	1,720
Expenditure on services	844	886
	2,918	**2,606**

4.4 Personnel expenses

(in million EUR)	2019	2018
Wages and salaries	4,349	4,260
Social benefits and retirement benefits	1,018	1,016
thereof: retirement benefits	267	305
	5,367	**5,276**

All interest effects of the measurement of the provisions for pensions and similar obligations were shown as a separate item of financial income.

Average headcount	2019	2018
Production	16,590	16,360
Marketing and sales	18,463	18,776
Research and development	9,154	8,552
Administration	6,104	5,960
Apprentices	704	685
	51,015	**50,333**

The methodology used to calculate the average number of employees was revised for the 2019 consolidated financial statements. The calculated average, which was originally based on the four previous end-of-quarter figures, has been changed to an assessment based on 12 month-end figures. The figures for 2018 have been adjusted in line with the new methodology. This has resulted in an overall difference of -37 employees for 2018.

4.5 Amortization of intangible assets and depreciation of tangible assets

Amortization of intangible assets and depreciation of tangible assets include impairment losses of 181 million EUR (previous year: 116 million EUR).

4.6 Other operating expenses

Other operating expenses include expenses from currency translation of 1,056 million EUR (previous year: 779 million EUR).

In addition, other items included in operating expenses are mainly the charges made to record provisions for legal risks and restructuring, as well as third-party services for research, development, medicine and marketing purposes, administrative expenses, fees and contributions, commissions, rent, freight and expenses for repairs carried out by third parties.

4.7 Financial income

(in million EUR)	2019	2018
Interest result from provisions for pensions and similar obligations and other provisions	– 393	– 665
Other interest expenses and similar expenses	– 133	– 149
Interest expenses and similar expenses	**– 526**	**– 814**
Amortization of and loss on disposal of financial fixed assets and short-term investments	– 2	– 1
Income from other investment securities and from long-term loans	105	104
Other interest income and similar income	54	57
	– 369	**– 654**

Gains and losses from plan assets and interest expense relating to pension and similar obligations were offset in accordance with Section 246 (2) sentence 2 HGB. In total, 357 million EUR in earnings from plan assets and 727 million EUR in interest expense relating to pension and similar obligations are included under "Interest result from provisions for pensions and similar obligations and other provisions".

4.8 Holding income

(in million EUR)	2019	2018
Write-downs on financial assets	– 4	– 2
Write-ups of financial assets	60	256
Income from related companies	27	104
thereof: from disposal of related companies	12	91
	83	**358**

4.9 Income taxes

(in million EUR)	2019	2018
Current income taxes	1,027	1,588
Deferred taxes	– 252	– 487
	775	**1,101**

Current income taxes primarily include the corporation and trade tax expenses of the consolidated companies.

The total balance of deferred tax assets as of the balance sheet date amounted to 3,000 million EUR (previous year: 2,784 million EUR). Deferred tax assets primarily arise on the difference between the carrying amounts of provisions for pension obligations and for discounts, tax goodwill, intangible assets, inventories and tangible assets. Deferred tax liabilities of 651 million EUR (previous year: 686 million EUR) were recorded. These primarily relate to differences between the carrying amounts of intangible assets, tangible assets, inventories and provisions.

4.10 Net income

The net income for 2019 was positively influenced by non-period income (primarily from the reversal of other provisions) of 630 million EUR (previous year: 352 million EUR) and was negatively influenced by non-period expenses (mainly due to taxes for previous years) of 206 million EUR (previous year: 511 million EUR).

5 Notes to the cash flow statement

The cash flow statement shows the changes in cash and cash equivalents (cash and long-term investment securities that can be sold at any time) of the Boehringer Ingelheim Group resulting from cash inflows and outflows in the reporting year. In accordance with the German Accounting Standard on the cash flow statement (DRS 21), the cash flow statement has been broken down according to cash flows from operating activities and cash flows from investing and financing activities.

The changes in the balance sheet items of the affiliated companies included were translated using average rates for the year. As on the balance sheet, cash and cash equivalents are carried at the spot rate. The effect of exchange rate changes on cash and cash equivalents has been shown separately.

The financial funds also include financial assets with a remaining maturity exceeding three months on the date of acquisition. These financial assets can be converted into cash in the short-term.

The financial funds as of December 31, 2019 comprised the following items:

(in million EUR)	2019
Cash and cash equivalents	2,195
Financial assets	8,182
	10,377

The financial funds included 486 million EUR in restricted funds as of the balance sheet date.

6 Other disclosures

6.1 Contingent liabilities

(in million EUR)	31.12.2019	31.12.2018
Liabilities from guarantees	25	21
Warranties and the granting of securities for third-party liabilities	70	235
	95	**256**

The risk of utilization of these contingent liabilities is assessed as low on account of the good net assets, financial and earnings position.

6.2 Other financial commitments and off-balance sheet transactions

(in million EUR)	31.12.2019	31.12.2018
Rental and lease obligations	486	512
Residual other financial commitments	1,610	1,465
thereof: pension-related	0	10
	2,096	**1,977**

There are obligations from rental and lease agreements of 486 million EUR (previous year: 512 million EUR), of which 29 million EUR (previous year: 12 million EUR) relate to long-term rental agreements with non-consolidated subsidiaries.

The purpose of the lease agreements is the lower capital commitment compared to buying property and the absence of the resale risk. Risks could arise from the term of the lease should it not be possible to continue to utilize the properties fully. There are no indications of this at this time.

The residual other financial commitments include future capital expenditures of 1,279 million EUR (previous year: 1,125 million EUR).

6.3 Derivative financial instruments and valuation units

Due to its extensive international structure, the Boehringer Ingelheim Group is highly dependent on developments in the world's currencies and interest rates. To hedge these risks, particularly those emerging from delivery of goods, services, and financing, currency forwards and options are generally used for currency risks. Interest rate swaps and options are used for interest rate risks.

The use of derivative financial instruments and the organizational processes are set out in internal guidelines. There is a strict separation between trading, processing, documentation, and control.

Risk positions are regularly tracked, analyzed, and measured in a special Group-wide financial report. The positions entered into are periodically reevaluated and monitored. The fair value of the derivative financial instruments is calculated using generally accepted market valuation methods (currency forwards based on the present value method) taking into account the market data as of the balance sheet date.

Provisions of 114 million EUR were recognized for currency forwards not included in hedge accounting for which there was a negative fair value within one currency as of the balance sheet date. In line with the imparity principle, positive fair values within one currency are not recognized.

On the balance sheet date, the derivative financial instruments not included in hedge accounting valuation units were as follows:

	Nominal value		Fair value	
(in million EUR)	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Foreign exchange forward contracts	5,620	3,906	− 71	− 27

To the extent that the requirements for hedge accounting of foreign currency forward exchange contracts with highly probable forecasted transactions in accordance with Section 254 HGB are met, the foreign currency forward exchange contracts are not recognized in the balance sheet in line with the net hedge presentation method.

The following accounting policies apply to the recognition of valuation units in accordance with Section 254 HGB:

Economic hedges are accounted for in the financial statements by the use of valuation units. The valuation units are recognized for each foreign currency based on the net amount of highly probable forecasted transactions and currency forwards that match the forecasted net cash flow in terms of maturity, nominal amount and foreign currency (macro hedge). The highly probable forecasted transactions (incoming and outgoing payments for planned sales and purchases) are derived from company planning. Ex-post analysis of planning has shown that the planned transactions are highly probable.

The opposing changes in value of the hedged item and the hedging instrument are fully offset as the critical terms (maturity, nominal amount, and foreign currency) match. An effective hedge can therefore be assumed both prospectively and retrospectively. The critical term match method is exclusively used to measure the prospective and retrospective effectiveness of hedges. Excess amounts under hedging transactions are not included in the valuation units.

As of December 31, 2019, hedges for highly probable forecasted net cash flows were recognized as follows:

January to December 2020:

Net cash flow (in million EUR)		Foreign exchange forward contracts (in million EUR)			
	Nominal value		Nominal value		Fair value
USD	1,674	USD	1,607	USD	–97
JPY	742	JPY	627	JPY	–23
AUD	131	AUD	100	AUD	–3
MXN	97	MXN	96	MXN	–8
CAD	256	CAD	146	CAD	–5
GBP	151	GBP	152	GBP	–9

January to December 2021:

Net cash flow (in million EUR)		Foreign exchange forward contracts (in million EUR)			
	Nominal value		Nominal value		Fair value
USD	2,171	USD	1,309	USD	–51
JPY	744	JPY	370	JPY	–12
AUD	17	AUD	12	AUD	0
MXN	24	MXN	20	MXN	–1
CAD	43	CAD	28	CAD	0
GBP	27	GBP	22	GBP	–1

January to December 2022:

Net cash flow (in million EUR)		Foreign exchange forward contracts (in million EUR)			
	Nominal value		Nominal value		Fair value
USD	2,182	USD	537	USD	–11
JPY	769	JPY	205	JPY	0

January to February 2023:

Net cash flow (in million EUR)		Foreign exchange forward contracts (in million EUR)			
	Nominal value		Nominal value		Fair value
USD	812	USD	145	USD	1
JPY	110	JPY	26	JPY	0

Furthermore, as of December 31, 2019, valuation units for foreign currency receivables were recognized as follows:

Receivables (in million EUR)		Foreign exchange forward contracts (in million EUR)			
	Nominal value		Nominal value		Fair value
RUB	171	RUB	71	RUB	– 5
PLN	59	PLN	16	PLN	0

The amount of the hedged foreign currency risk correlates to the relative change in the exchange rate between the planning date and the realization date of the forecasted transactions. If all currencies were to appreciate or depreciate against the euro by 10.0%, there would be a foreign currency risk of + / – 1,018 million EUR without hedging.

6.4 Research and development expenses

(in million EUR)	2019	2018
Research and development expenses	3,462	3,164

Non-capitalized research and development expenses include, among other items, the costs associated with clinical studies.

6.5 Total auditor fees

Total fees charged to the Group by the auditor for the financial year amounted to 5.9 million EUR. 1.6 million EUR of this relates to audits of financial statements, 0.8 million EUR to other assurance services, 2.2 million EUR to tax advisory services and 1.3 million EUR to other services.

6.6 Subsequent events

On December 18, 2019, an asset purchase agreement was signed between Hypera S.A. and Boehringer Ingelheim on the sale of the Buscopan business in Brazil. This agreement contains the conditions for the closing and execution of the asset sale, including antitrust authority approval, and other relevant conditions. The transaction is expected to be concluded during the 2020 financial year. An amount equivalent to approximately 288 million EUR as of the balance sheet date was agreed as the selling price.

Since the end of the 2019 financial year, we have not become aware of any further events that are of material significance to the Group or that could lead to a reappraisal of its net assets, financial and earnings position.

6.7 Shareholdings

The list of companies included in the consolidated financial statements and the complete list of shareholdings presented in accordance with Section 313 (2) HGB are included in the audited consolidated financial statements submitted to the German Federal Gazette.

Ingelheim am Rhein, 2 March 2020
Boehringer AG

Board of Managing Directors

Hubertus von Baumbach	Carinne Knoche-Brouillon	Dr. Michel Pairet
Jean Scheftsik de Szolnok	Michael Schmelmer	

INDEPENDENT AUDITOR'S REPORT

To C.H. Boehringer Sohn AG & Co. KG, Ingelheim am Rhein

Qualified Audit Opinion on the Consolidated Financial Statements and Audit Opinion on the Group Management Report

We have audited the consolidated financial statements of C.H. Boehringer Sohn AG & Co. KG, Ingelheim am Rhein, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2019, and the consolidated profit and loss statement, cash flow statement and statement of changes in group equity for the financial year from 1 January to 31 December 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of C.H. Boehringer Sohn AG & Co. KG for the financial year from 1 January to 31 December 2019.

In our opinion, on the basis of the knowledge obtained in the audit,

- except for the effects of the matter described in section "Basis for the Qualified Audit Opinion on the Consolidated Financial Statements and the Audit Opinion on the Group Management Report" the accompanying consolidated financial statements comply, in all material respects, with the requirements of German commercial law and give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2019 and of its financial performance for the financial year from 1 January to 31 December 2019, in accordance with German Legally Required Accounting Principles, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Section 322 (3) sentence 1 HGB [Handelsgesetzbuch "German Commercial Code"], we declare that, except for the qualification of the audit opinion on the consolidated financial statements mentioned, our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and the group management report.

Basis for the Qualified Opinion on the Consolidated Financial Statements and the Audit Opinion on the Group Management Report

Contrary to Section 314 (1) number 6 letters a) and b) HGB the total remuneration granted to the members and the former members of the board of managing directors as well as the pension provisions recognized and not recognized for the former members of the board of managing directors are not disclosed in the notes to the consolidated financial statements.

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the German Generally Accepted Standards of Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Other Information

Management is responsible for the other information. The other information comprises the annual report, with the exception of the audited consolidated financial statements and group management report and our auditor's report.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of Management for the Consolidated Financial Statements and the Group Management Report

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with the requirements of German commercial law and that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with German Legally Required Accounting Principles. In addition, management is responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and in compliance with the German Generally Accepted Standards of Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with German Legally Required Accounting Principles.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Frankfurt am Main, 3 March 2020

KPMG AG
Wirtschaftsprüfungsgesellschaft

Original German version signed by

Kneisel	Krauß
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]