Consolidated Financial Statements

for the fiscal years ended
December 31, 2017,
December 31, 2016 and
December 31, 2015
in accordance with IFRS

KNORR-BREMSE

Consolidated Financial Statements

for the fiscal years ended

December 31, 2017,

December 31, 2016 and

December 31, 2015

in accordance with

International Financial Reporting Standards (IFRS)

as adopted by the European Union (EU)

for

Knorr-Bremse AG

Consolidated statement of profit or loss

Consolidated statement of profit or loss	Note	2017 TEUR	2016 TEUR	2015 TEUR
Revenues	E.1.	6,153,543	5,471,256	5,823,508
Changes in inventories of unfinished/finished products	E.2.	38,754	(11,075)	(7,104)
Other own work capitalized	E.2.	31,768	21,075	19,207
Total operating performance		**6,224,065**	**5,481,255**	**5,835,611**
Other operating income	E.3.	81,171	83,280	89,129
Cost of materials	E.4.	(3,009,595)	(2,571,407)	(2,747,342)
Personnel expenses	E.5.	(1,438,871)	(1,272,122)	(1,272,193)
Other operating expenses	E.6.	(741,261)	(668,902)	(636,165)
Earnings before interest, tax, depreciation and amortization (EBITDA)		**1,115,510**	**1,052,103**	**1,269,041**
Depreciation and amortization	E.7.	(211,479)	(165,659)	(170,484)
Earnings before interests and taxes (EBIT)		**904,031**	**886,444**	**1,098,557**
Interest income	E.8.	24,036	19,212	21,698
Interest expenses	E.8.	(38,801)	(28,681)	(29,159)
Other financial result	E.8.	(36,797)	(35,701)	(43,065)
Income before taxes		**852,469**	**841,274**	**1,048,031**
Taxes on income	E.9.	(265,248)	(274,115)	(337,381)
Net income		**587,220**	**567,160**	**710,650**
Thereof attributable to:				
Profit (loss) attributable to non-controlling interests	C.5.	51,716	40,830	57,883
Profit (loss) attributable to the shareholders of Knorr-Bremse AG		535,504	526,330	652,768
		587,220	**567,160**	**710,650**
Earnings per share in Euro				
undiluted		3.32	3.27	4.05
diluted		3.32	3.27	4.05

Consolidated statement of comprehensive income

Consolidated statement of comprehensive income	Note	2017 TEUR	2016 TEUR	2015 TEUR
Net income		**587,220**	**567,160**	**710,650**
Actuarial gains and losses	F.10.1	15,647	(37,363)	10,708
Equity instruments recognized directly in equity		(22,629)	1,326	-
Deferred taxes	E.9.5.	(1,188)	8,540	(3,620)
Items that will not be reclassified in the statement of profit or loss		**(8,171)**	**(27,497)**	**7,088**
Currency translation differences		(119,136)	21,257	43,685
Items that may be reclassified to profit or loss		**(119,136)**	**21,257**	**43,685**
Other comprehensive income after taxes		**(127,307)**	**(6,240)**	**50,773**
Comprehensive income		**459,914**	**560,919**	**761,424**
Total comprehensive income attributable to non-controlling interests	C.5.	43,110	43,689	65,417
Total comprehensive income attributable to the shareholders of Knorr-Bremse AG		416,804	517,231	696,007

Consolidated statement of financial position

Consolidated statement of financial position				
	Note	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Assets				
Intangible assets and goodwill	**F.1., F.2.**	540,495	484,473	333,685
Property, plant and equipment	**F.3.**	1,116,398	1,099,413	1,014,940
Investments accounted for using the equity method		1,950	1,999	7,380
Other financial assets	**F.4.**	93,102	94,161	7,286
Other assets	**F.5.**	11,539	5,663	5,157
Employee benefits	**F.10.**	21,625	13,799	7,637
Deferred tax assets	**E.9.**	85,009	115,645	137,058
Non-current assets		**1,870,117**	**1,815,154**	**1,513,142**
Inventories	**F.6.**	748,823	611,130	625,520
Trade accounts receivables	**F.5.**	1,147,879	971,447	947,304
Other financial assets	**F.4.**	12,518	6,425	1,757
Other assets	**F.5.**	132,118	146,458	134,646
Receivables from construction contracts	**E.1.**	116,171	123,822	101,895
Income tax receivable		67,637	34,202	25,743
Cash and cash equivalents	**F.7.**	1,600,033	1,720,827	1,360,548
Assets held for sale and disposal groups	**F.8.**	32,116	5,638	4,137
Current assets		**3,857,295**	**3,619,949**	**3,201,550**
Total assets		**5,727,412**	**5,435,103**	**4,714,692**

	Notes information	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Equity				
Subscribed capital	**F.9.1.**	67,600	67,600	67,600
Capital reserves	**F.9.2.**	1,310	1,860	1,860
Retained earnings	**F.9.3.**	106,956	94,856	81,184
Other components of equity	**F.9.4**	(166,407)	(54,934)	(45,835)
Profit carried forward		1,302,834	1,177,661	926,413
Profit attributable to the shareholders of Knorr-Bremse AG		535,504	526,330	652,768
Equity attributable to the shareholders of Knorr-Bremse AG	**F.9.5.**	**1,847,798**	**1,813,372**	**1,683,989**
Equity attributable to non-controlling interests	**F.9.5.**	147,951	152,574	154,068
thereof share of non-controlling interests in net income	***C.5.***	*51,716*	*40,830*	*57,883*
Equity		**1,995,748**	**1,965,946**	**1,838,056**
Liabilities				
Provisions for pensions and similar obligations	**F.10.**	310,234	316,654	284,764
Provisions for other employee benefits	**F.10.**	28,433	28,581	28,811
Other provisions	**F.11.**	234,147	246,301	258,565
Financial liabilities	**F.13.**	738,746	756,269	261,941
Other liabilities	**F.12.**	17,346	25,938	26,125
Income tax liabilities		71,704	72,792	74,235
Deferred tax liabilities	**E.9.**	27,262	25,983	39,356
Non-current liabilities		**1,427,873**	**1,472,519**	**973,798**
Provisions for other employee benefits	**F.10.**	15,206	13,506	14,970
Other Provisions	**F.11.**	231,714	226,925	180,223
Trade accounts payable	**F.12.**	894,119	754,458	727,042
Financial liabilities	**F.13.**	570,955	531,287	490,717
Other liabilities	**F.12.**	269,382	285,475	271,014
Liabilities from construction contracts	**E.1.**	230,750	126,256	146,793
Income tax liabilities		53,141	57,969	72,079
Liabilities directly associated with assets held for sale	**F.8.**	38,524	763	-
Current liabilities		**2,303,791**	**1,996,638**	**1,902,837**
Liabilities		**3,731,664**	**3,469,157**	**2,876,636**
Total equity and liabilities		**5,727,412**	**5,435,103**	**4,714,692**

Consolidated statement of cash flows

Consolidated statement of cash flows	Note	2017 TEUR	2016 TEUR	2015 TEUR
Cash flow from operating activities				
Net income (including earnings share of minority interests)		587,220	567,160	710,650
Adjustments for				
Depreciation on intangible assets and property, plant and equipment		211,479	165,659	170,484
Reversal of impairment on inventories		(8,823)	24,138	(1,007)
Reversal of impairment on trade accounts receivable		(902)	(1,556)	1,905
Profit (loss) on sale of property, plant and equipment		(645)	(11,450)	1,162
Other non-cash expenses and income		38,567	23,078	32,381
Interest income		14,765	9,469	7,461
Investment result		579	(2,641)	(815)
Income tax expense		251,687	267,788	329,178
Income tax payments		(254,389)	(280,299)	(310,954)
Changes of				
inventories, trade accounts receivable and other assets, which cannot be allocated to investment or financing activities		(201,556)	49,519	33,779
Trade accounts payable trade, which cannot be allocated to investment or financing activities		87,230	(95,810)	3,849
Provisions		(45,326)	54,123	(18,590)
Cash flow from operating activities	**G.1.**	**679,886**	**769,178**	**959,483**
Cash flow from investing activities				
Proceeds from the sale of intangible assets		-	68	538
Disbursements from the sale of intangible assets		(45,200)	(45,991)	(31,482)
Proceeds from the sale of fixed assets		19,269	37,282	20,693
Disbursements for investments in property, plant and equipment		(184,685)	(200,320)	(204,806)
Proceeds from the sale of investments		28,326	5,516	1,324
Disbursements for financial investments		(8,701)	(86,820)	(6,057)
Disbursements for the acquisition of consolidated companies and other business units		(96,513)	(160,083)	(104,020)
Interest received		16,717	8,309	26,612
Disbursements for investments in plan assets (pensions)		(9,047)	(6,162)	(5,442)
Cash flow from investing activities	**G.2.**	**(279,833)**	**(448,201)**	**(302,640)**
Cash flow from financing activities				
Proceeds from equity contributions by minority shareholders		151	2,428	-
Proceeds from borrowings		2,983	498,738	17,616
Disbursements from the repayment of borrowings		(18,272)	(41,172)	(10,842)
Disbursements for finance lease liabilities		(5,332)	(3,343)	(2,956)
Interest paid		(20,152)	(16,259)	(20,938)
Dividends paid to parent company shareholders		(385,073)	(384,899)	(332,957)
Dividends paid to minority shareholders		(48,017)	(43,796)	(63,012)
Net proceeds from factoring		13,645	29,474	6,950
Cash flow from financing activities	**G.3.**	**(460,067)**	**41,171**	**(406,139)**
Cash flow changes		**(60,014)**	**362,148**	**250,704**
Change in cash funds resulting from exchange rate and valuation-related movements		(72,147)	9,532	21,406
Net increase/decrease in cash and cash equivalents		**(132,161)**	**371,680**	**272,110**
Cash and cash equivalents at the beginning of the period		1,710,991	1,339,311	1,067,201
Cash and cash equivalents at the end of the period	**G.4.**	**1,578,829**	**1,710,991**	**1,339,311**
Cash and cash equivalents are comprised as follows:				
Cash and cash equivalents		1,600,033	1,720,827	1,360,548
Short-term marketable securities		51	51	11
Short-term bank debt (less than 3 months)		(21,255)	(9,887)	(21,248)

Consolidated statement of changes in equity

Consolidated statement of changes in equity	Note	Subscribed capital TEUR	Capital reserves TEUR	Retained earnings TEUR	Group earnings TEUR	Other components of equity: Currency translation TEUR	Other components of equity: Equity instruments recognized directly in equity TEUR	Other components of equity: Actuarial gains and losses TEUR	Equity attributable to the shareholders of Knorr-Bremse AG TEUR	Equity attributable to non-controlling interests TEUR	Total equity TEUR
As at 1/1/2017		**67,600**	**1,860**	**94,856**	**1,703,990**	**12,585**	**1,326**	**(68,845)**	**1,813,372**	**152,575**	**1,965,946**
Dividend payment					(385,073)				(385,073)	(48,017)	(433,090)
Net income					535,504				535,504	51,716	587,220
Other comprehensive income after taxes						(110,449)	(22,629)	14,377	(118,701)	(8,606)	(127,307)
Comprehensive income		**-**	**-**	**-**	**535,504**	**(110,449)**	**(22,629)**	**14,377**	**416,804**	**43,110**	**459,914**
Allocation to retained earnings				12,100	(12,100)				-		-
Equity-settled share-based payment			(550)						(550)		(550)
Realized losses from financial assets measured at fair value through OCI					(7,228)		7,228		-		-
Other changes					3,245				3,245	283	3,528
As at 12/31/2017	**F.9.**	**67,600**	**1,310**	**106,956**	**1,838,338**	**(97,864)**	**(14,075)**	**(54,468)**	**1,847,798**	**147,951**	**1,995,748**
As at 1/1/2016		**67,600**	**1,860**	**81,184**	**1,579,179**	**(5,837)**	**-**	**(39,998)**	**1,683,988**	**154,068**	**1,838,056**
Dividend payment					(384,900)				(384,900)	(43,796)	(428,696)
Net income					526,330				526,330	40,830	567,160
Other comprehensive income after taxes						18,422	1,326	(28,847)	(9,099)	2,859	(6,240)
Comprehensive income		**-**	**-**	**-**	**526,330**	**18,422**	**1,326**	**(28,847)**	**517,231**	**43,689**	**560,919**
Allocation to retained earnings				13,672	(13,672)				-		-
Other changes					(2,947)				(2,947)	(1,386)	(4,333)
As at 12/31/2016	**F.9.**	**67,600**	**1,860**	**94,856**	**1,703,990**	**12,585**	**1,326**	**(68,845)**	**1,813,372**	**152,575**	**1,965,946**
As at 1/1/2015		**67,600**	**1,860**	**57,597**	**1,286,120**	**(42,005)**	**-**	**(47,070)**	**1,324,102**	**143,927**	**1,468,030**
Dividend payment					(332,957)				(332,957)	(63,012)	(395,969)
Net income					652,768				652,768	57,883	710,650
Other comprehensive income after taxes						36,167	-	7,072	43,240	7,534	50,773
Comprehensive income		**-**	**-**	**-**	**652,768**	**36,167**	**-**	**7,072**	**696,007**	**65,417**	**761,424**
Allocation to retained earnings				23,587	(23,587)				**-**		**-**
Other changes					(3,164)				(3,164)	7,736	4,572
As at 12/31/2015	**F.9.**	**67,600**	**1,860**	**81,184**	**1,579,179**	**(5,837)**	**-**	**(39,998)**	**1,683,988**	**154,068**	**1,838,056**

Notes to the consolidated financial statements of Knorr-Bremse AG

A. Basis of preparation

A.1. About the Company

Knorr-Bremse AG (“Company”) is a joint stock company domiciled in Germany. The Company’s registered office and headquarters are located in Moosacher Str. 80, 80809, Munich, Germany. The Company is registered in the City of Munich commercial register under HRB 42031. The consolidated financial statements include the Company and its subsidiaries (jointly referred to as the “Group” or “Knorr-Bremse”). The Group is a global manufacturer of brake systems for rail and commercial vehicles. The division of rail vehicle systems also includes the product fields of platform screen doors, entry systems, power supply systems, driver assistance systems, air-conditioning systems, control systems, friction material, windscreen wipers, simulators and control components. The product portfolio of the division of commercial vehicle systems also includes driver assistance systems, steering systems, torsional vibration dampers and solutions relating to the drive train and transmission controls to improve efficiency and save fuel.

A.2. Accounting principles

The Company’s consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS), as they adopted in the European Union (EU), as well as the supplementary provisions of chapter 315e (3) of the German Commercial Code (HGB in the version of July 10, 2018). All mandatory standards applicable on the reporting date were implemented. IFRS 9 Financial Instruments was also applied ahead of schedule. The consolidated statement of income is prepared based on the total cost method.

A.3. Measurement bases

The Group consistently applied the following accounting methods to all periods presented in this consolidated financial statements.

The consolidated financial statements were prepared according to historical purchase and production costs with the exception of the following balance sheet items with different measurement bases on the respective reporting dates.

Measurement bases	
Asset	**Method**
Derivative financial instruments	Fair value
Non-derivative financial instruments, measured at fair value through profit or loss	Fair value
Non-derivative financial instruments, measured at fair value through OCI	Fair value
Contingent consideration in a business combination	Fair value
Net debt (asset) from defined benefit plans	Present value of the defined benefit obligation less the fair value of the plan assets

A.4. Functional and presentation currency

The consolidated financial statements are presented in euro, the Company’s functional currency. All financial information presented in euro is rounded to thousands of euros (TEUR), unless otherwise indicated. This may result in rounding differences.

A.5. Use of discretionary decisions and estimates

The preparation of the consolidated financial statements require a certain amount of discretionary decisions, estimates and assumptions by the management board, which affect the application of the accounting methods and the stated amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are constantly reviewed. Revisions of estimates are reported prospectively.

Discretionary decisions on the application of accounting methods primarily influence the amounts reported in the consolidated financial statements during the consolidation (Chapter C.1. et seq.).

Material effects on the consolidated financial statements as a result of assumptions and estimation uncertainty particularly occur in the measurement of defined benefit obligations (Chapter D.14. and F.10.), impairment tests (Chapter D.17. and D.18.) and the recognition and measurement of other accrued liabilities with respect to litigation and warranties (Chapter D.15. and F.11.). The measurement of the warranty provisions is based on estimates regarding expected warranty claims. An important factor affecting these estimates are the expected number of future warranty claims to be incurred. In this regard, there is a significant estimation uncertainty resulting from the large range of numbers of potential warranty claims.

The consolidated financial statements were approved for publication by the management board on August 22, 2018.

B. Accounting standards

B.1. First application of, as well as early adoption of financial reporting standards issued by the IASB

These consolidated financial statements are prepared by the Group in accordance with the IFRS regulations. All IFRS accounting standards mandatorily applicable in the European Union as of December 31, 2017 are applied. The following accounting policies of significance for the Group are applied for the first time:

Financial reporting pronouncements issued by the IASB and applied for the first time		
Standard	New or revised standards and interpretations	Date of mandatory application EU
IAS 12	Changes to IAS 12: Recognition of deferred tax assets for unrealized losses	January 1, 2017
IAS 7	Changes to IAS 7: Disclosure initiative - statement of cash flows	January 1, 2017
IFRS 12	Annual improvements	January 1, 2017

Changes to IAS 12

Recognition of deferred tax assets for unrealized losses:
The changes clarify the recognition of deferred tax assets for unrealized losses regarding debt instruments measured at fair value.

The changes apply for the first time in the first reporting period of a fiscal year commencing on or after January 1, 2017.

Knorr-Bremse already correctly applied the respective accounting rules in the prior periods, hence no changes result to the consolidated financial statements as of December 31, 2017 with respect to the clarification of the standards.

Other changes

The following new or amended standards are not expected to have any or any material effects on the consolidated financial statements.

- Changes to IAS 7: Disclosure initiative - statements of cash flows
- Annual improvements 2014 - 2016: Changes to IFRS 12

The following accounting rules of significance for the Group have been applied early:

Financial reporting pronouncements issued by the IASB and early dated		
Standard	**New or revised standards and interpretations**	**Date of mandatory application EU**
IFRS 9	IFRS 9: Financial instruments	January 1, 2018

B.2. Standards issued by the IASB, which have not yet been applied

The following table presents the standards issued by the IASB, of significance for the group, which have not yet been applied.

Financial reporting pronouncements issued by the IASB and not yet adopted		
Standard	**New or revised standards and interpretations**	**Date of mandatory application EU**
IFRS 2	Changes to IFRS 2: Classification and measurement of share-based Payments	January 1, 2018
IFRS 15	IFRS 15: Revenue from contracts with customers	January 1, 2018
IAS 19	Changes to IAS 19: Plan changes, reductions or settlements	January 1, 2019
IAS 28	Investments in Associates and Joint Ventures	January 1, 2019
IFRS 9	IFRS 9: Prepayment with negative compensation	January 1, 2019
IFRS 16	IFRS 16: Leases	January 1, 2019
IFRIC 23	IFRIC 23: Uncertainty over Income Tax Treatments	January 1, 2019
IFRS 10 und IAS 28	Changes to IFRS 10 and IAS 28: Sale or deposit of assets between an investor and an associate or joint venture	Still open

Changes to IFRS 15

IFRS 15 replaces the following standards: IAS 11, IAS 18, IFRIC 13, IFRIC 15, IFRIC 18, and SIC 31.

The standard requires revenue from contracts with customers for contractual obligations to be reported. Contractual obligations are obligations towards the customer to transfer an identified service or an identified good, which can be separately distinguished. The standard contains detailed regulations for the first time on the issue of whether such obligations can be separately distinguished. This requires an analysis of the contracts with regard to whether and if so which individual contractual obligations exist in a contract with a customer. Moreover, among other conditions require contractual obligations that are largely the same to be combined into one contractual obligation.

In accordance with IFRS 15, revenue may only be recognized once contractual obligations will have been fulfilled. Fulfillment exists once the control of the performance transfers to the customer. This transfer of control may occur over a period or on a certain date. A transfer over a period is comparable with the *percentage of completion* method as defined in IAS 11.

IFRS 15 also contains in particular new rules for the assessment of contract assets (under IAS 11: receivables from construction contracts), to determine the transaction price and to capitalize the costs to fulfill a contract.

In addition, IFRS 15 results in changes of presentation of the balance sheet items.

With respect to the transition to IFRS 15, the Group applies the modified retrospective transition method as of January 1, 2018. Consequently, changes resulting from the first-time application of IFRS 15 are determined retrospectively and recognized cumulatively as of January 1, 2018. The following table gives an overview of expected changes.

Effects as of 1/1/2018 from the first-time application of IFRS 15

Subject	Description	Subsequent accounting
Construction contracts	Presentation change to provision for onerous contracts losses on construction contracts: Elimination of offsetting with related balance sheet item	No offsetting will take place in the future.
	Application of the impairment rules of IFRS 9 to contract assets according to IFRS 15	Calculation of an expected credit loss on contract assets and write-down of the contract assets in the appropriate amount.
	Financing components as a portion of the transaction price	Significant financing components are to be considered as a portion of the transaction price and therefore of revenue. Corresponding interest-effects are to be recognized in interest income or interest expenses.
Costs to fulfill performance obligations and cost reimbursements from the customer	Capitalisation of costs	Costs to fulfil the contract are to be capitalised and amortised over the term of the contract.
	Recognition of cost reimbursements received as liabilities	Reimbursements of the customer for costs to fulfill the contract represent a portion of the transaction price and are to spread over the term of the contract.
Volume bonuses	Change in presentation	Presentation of the accrued volume bonuses as liabilities.
Payments to customers for the appointment as a supplier	Capitalisation of the payments made	Recognition of such payments as assets, treatment as a portion of the transaction price and deduction from revenue over the term of the contract.

Overall, a positive effect on total equity before tax in a low double-digit million range is expected from the transition.

Changes to IAS 19

Plan changes, reductions or settlements:

According to the amendment to IAS 19, if a defined benefit plan is amended, reduced or settled, the current service cost and the net interest for the remaining financial year must be recalculated using the current actuarial assumptions previously used to revalue the net liability (asset). The changes must initially be applied in the first reporting period of a fiscal year starting on or after January 1, 2019, whereby early application is permitted.

The Group is currently assessing the potential impact of the changes on its consolidated financial statements. The Group currently does not expect any material impact.

IFRS 16 Leases

IFRS 16 introduces a standard accounting model according to which leases in general must be reported in the lessee's balance sheet. A lessee recognizes a right-of-use asset, which reflects the right to use the underlying asset, as well as a debt from the lease, which reflects the obligation to make lease payments. Exceptions exist for short-term leases and leases for low-value assets. The accounting for the lessor is similar to the current standard, i.e. the lessor lease is still classified as a finance or operating lease.

IFRS 16 replaces the existing guidelines on leases, including IAS 17 Leases, IFRIC 4 determining whether an arrangement contains a lease, SIC-15 Operating leases - Incentives, and SIC-27 Evaluating the substance of transactions involving the legal form of a lease.

The standard initially applies in the first reporting period of a fiscal year commencing on or after January 1, 2019. Early application is permissible for companies that apply IFRS 15 Revenue from contracts with customers at the time of the initial application of IFRS 16 or before.

The Group has not yet quantified the effects of the application of IFRS 16 on its reported assets and liabilities. The quantitative effects depend among other on the selected transition method, the extent to which the practical simplification rules and exceptions are applied for the recognition and for all additional leases that the Group will enter into. The Group assumes that the selected transition approach and the quantitative information will be provided before the initial application.

Other changes

The following new or amended standards are not expected to have any or any material effects on the consolidated financial statements.

- Changes to IAS 40: Transfer of investment property
- Changes to IFRS 4: Application of IFRS 4 in combination with IFRS 9 Financial Instruments
- Annual improvements 2014 - 2016: Changes to IAS 28 and IFRS 1
- Changes to IFRIC 22: Foreign Currency Transactions and Advance Consideration
- Annual improvements 2015 - 2017: Changes to IAS 12, IAS 23, IFRS 3 and IFRS 11
- IFRS 17: Insurance contracts

The standards issued by the IASB, which have not yet been applied, are expected to be initially applied in accordance with their first time application requirement.

C. Consolidation

C.1. Principles of consolidation

The consolidated financial statements include the financial statements of the Company and all material affiliated companies. Subsidiaries controlled by the Group are fully consolidated. The Group controls a company, if it is exposed to fluctuating returns or is entitled to receive these returns and has the ability to influence these returns using its power of control over the company. The financial statements of subsidiaries are contained in the consolidated financial statements from the date on which the control starts and up to the date on which the control ends.

The Group recognizes business combinations based on the acquisition method. As part of the capital consolidation, the acquisition costs of the acquired shares are offset against the equity of the subsidiaries assigned to the group. The acquired, identifiable net assets and the consideration transferred are basicly recognized at fair value. A positive difference that arises between the acquisition costs of the acquired shares and the identifiable net assets upon initial consolidation is recognized as goodwill. Each goodwill is reviewed annually for impairment. A negative difference is reported directly in profit and loss.

The consideration transferred does not contain any amounts associated with the fulfillment of previously existing relationships. Such amounts are fundamentally reported in profit and loss.

Any conditional obligation to provide consideration is reported at the fair value at the time of acquisition. If the contingent consideration is classified as equity, it is not reassessed and a settlement is recognized in equity. Otherwise, other contingent considerations are assessed at fair value on each reporting date and subsequent changes to the fair value of the contingent considerations are reported in profit and loss.

Non-controlling interests are recognized with their corresponding share of the identifiable net assets of the acquired company at the date of acquisition.

Associated companies are companies in which the Group has significant influence, but no control or joint control in relation to finance and business policy. A joint venture is an agreement over which the Group exercises joint control, whereby the Group has rights to the net assets of the agreement rather than rights to its assets and obligations for its liabilities.

Shares in associated companies and joint ventures are reported based on the equity method. They are initially recognized at the acquisition costs, which also include transaction costs. After the initial recognition, the consolidated financial statements contain the group's share in the comprehensive income, less distributions received, of the investments reported based on the equity method up to the date on which the significant influence or joint control ends.

All intragroup receivables and payables as well as expenses and income are eliminated within the scope of the debt consolidation as well as the consolidation of expense and income. Unrealized gains from transactions with companies that are recognized based on the equity method are derecognized against the investment in the amount of the group's interest in the associated company. Unrealized losses are eliminated in the same manner as unrealized gains, but only if there is no indication of an impairment.

C.2. Foreign currency translation

Foreign currency receivables and payables of the companies included in the consolidated financial statements are reported at the spot exchange rate on the date of the transaction. These items are translated at the spot rate on the reporting date.

Annual financial statements of consolidated group companies prepared in a foreign currency are translated using the modified reporting date method. Accordingly, assets and liabilities from foreign group companies are translated at the spot rate on the reporting date, while income and expenses from foreign group companies are translated at the average rate for the respective fiscal year. The resulting currency translation differences are reported in other comprehensive income and recognized in the line item currency translation if the currency translation difference is not assigned to the non-controlling interests.

The exchange rates on which the foreign currency translation is based, and which have a material effect on the consolidated financial statements are listed below:

Currency exchange rates							
		December 31, 2017		December 31, 2016		December 31, 2015	
		Spot rate	Average rate	Spot rate	Average rate	Spot rate	Average rate
USA	USD	0.83382	0.88097	0.94868	0.90667	0.91525	0.90606
China	CNY	0.12813	0.13058	0.13661	0.13614	0.14102	0.14396
Hungary	HUF	0.00322	0.00323	0.00322	0.00321	0.00319	0.00323
Czech Republic	CZK	0.03916	0.03805	0.03701	0.03698	0.03700	0.03665
United Kingdom	GBP	1.12710	1.14078	1.16798	1.21976	1.35503	1.38229
India	INR	0.01305	0.01356	0.01397	0.01346	0.01379	0.01410
Japan	JPY	0.00741	0.00786	0.00810	0.00832	0.00760	0.00749
Hong Kong	HKD	0.10670	0.11303	0.12232	0.11682	0.11808	0.11688
South Africa	ZAR	0.06754	0.06679	0.06917	0.06221	0.05923	0.07080
Brazil	BRL	0.25171	0.27549	0.29150	0.26327	0.23480	0.27401

C.3. Changes to the Group

C.3.1. Business combinations

With regard to the accounting methods for business combinations, we refer to the information under chapter C.1.

The following companies were acquired, founded or initially included in the Group of consolidated companies in the 2015, 2016 and 2017 fiscal years:

2015

- Knorr-Bremse DETC Commercial Vehicle Braking Technology Co., Ltd., Shiyan/China
- Knorr-Bremse DETC Commercial Vehicle Braking Systems (Shiyan) Co., Ltd., Shiyan/China (consolidated at equity)
- Knorr-Bremse Systems for Rail Vehicles Kazakhstan LLP, Astana/Republic of Kazakhstan
- Selectron Systems AG, Lyss/Switzerland
- Selectron Systems Pvt. Limited, Gurgaon/India
- Selectron Systems (Beijing) Co. Ltd., Beijing/China

No companies were acquired or founded in 2015, which were not included in the Group of consolidated companies.

Notes on the significant business combination in 2015:

Acquisition of the Selectron Group

On January 1, 2015, the Group acquired 100% of the shares and voting rights in Selectron Systems AG, Lyss/Switzerland, as well as its subsidiaries, Selectron Systems Pvt. Limited, Gurgaon/India, and Selectron Systems (Beijing) Co. Ltd., Beijing/China, and gained control over the Selectron Group.

The acquisition allowed the Group to extend its product portfolio of components and solutions for the automation, networking, and control of rail vehicles. Besides reliable components with long service lives and appropriate costs, increased safety standards are decisive. The constantly increasing data volume that is exchanged between the individual systems requires higher bandwidths to transmit the data. The Selectron Group has been meeting these requirements for years. The integration into the Group results in an enhanced range of products and services, which facilitates supplier management for the vehicle manufacturer and operator. Moreover, the Selectron Group can better service its customers also at an international level by using the group's global sales and service network.

In the 2015 fiscal year, the Selectron Group contributed revenues of TEUR 45,260 and profit of TEUR 779 to the consolidated result before income taxes. The contribution to profit also includes the depreciation and amortization of hidden reserves as part of the purchase price allocation.

a) Consideration transferred

The following provides a summary of the fair values of each main group of considerations at the acquisition date:

	TEUR
Funds	102,165
Conditional consideration	4,029
Total consideration transferred	**106,194**

The contingent consideration amounts to 21.42% of the total earnings before interest, tax, depreciation and amortization (EBITDA) of the Selectron Group in 2015 and 2016. In this case, the total EBITDA must amount to at least TEUR 12,365; no contingent considerations arise below this threshold. The contingent consideration is limited to a maximum of TEUR 4,158. The Group has taken a liability of TEUR 4,029 into account, which corresponds to the fair value of the conditional consideration on the acquisition date.

As at December 31, 2015, the fair value of the contingent consideration amounted to TEUR 4,073; as at December 31, 2016, the fair value amounted to TEUR 4,046.

b) Costs associated with the business combination

Costs of TEUR 727 for due diligence, legal and notary fees arose in the Group in relation to the business combination. These costs are reported in other operating expenses.

c) Identifiable assets acquired and liabilities assumed

The following table indicates the fair value of the assets acquired and liabilities assumed on the acquisition date:

	TEUR
Technology	10,197
Order backlog	1,533
Customer relationship	21,092
Other intangible assets	120
Property, plant and equipment	2,988
Financial assets	152
Inventories	6,197
Trade accounts receivables	5,392
Other assets	874
Funds	4,176
Provisions	(12,250)
Financial debt	(7,192)
Deferred taxes	(6,240)
Trade accounts payables and other liabilities	(1,787)
Total identifiable net assets acquired	**25,252**

Trade accounts receivable include gross amounts of contractual receivables of TEUR 5,456, of which TEUR 64 are probably considered to be uncollectible and therefore impaired at the acquisition date.

d) Goodwill

Goodwill as a result of the acquisition was reported as follows:

	TEUR
Consideration transferred	106,194
Fair value of the identifiable net assets	(25,252)
Goodwill	**80,942**

Goodwill primarily results from the future potential for development of the existing technologies, the expected expansion of the product and customer base, as well as the know-how of the workforce. The recorded goodwill is not tax-deductible.

2016

- Aldona Seals Ltd., Peterlee/United Kingdom
- Alpha Process Controls (International) Ltd., Peterlee/United Kingdom
- G.T. Group Ltd., Peterlee/United Kingdom
- GT Emission Systems Ltd., Peterlee/United Kingdom
- GT Project Engineering Ltd., Consett/United Kingdom
- Guangdong Knorr-Bremse Guo Tong Railway Vehicle Systems Equipment Co., Ltd., Jiangmen, Guangdong/China
- Icer Rail S.L., Pamplona/Spain (formerly at-equity)
- Semiconductor Solutions (Pty.) Ltd., Pretoria/South Africa

- tedrive Steering Systems GmbH, Wülfrath/Germany
- tedrive Yönlendirme Sistemleri Sanayi ve Tic. Ltd. Şti., Istanbul/Turkey
- Zelisko Elektrik Sanayi ve Ticaret Limited Şirketi, Istanbul/Turkey

The following companies were acquired or founded in the 2016 fiscal year, but were not included in the group of consolidated companies:

- Knorr-Bremse Services Europe s.r.o., Stráž nad Nisou/Czech Republic
- RBL-Technologie Ltd., Nabereschnyje Tschelny/Russia
- tedrive Steering Systems Inc., Wixom, Michigan/USA

Notes on the significant business combinations in 2016:

Acquisition of the GT Group

On July 5, 2016, the Group acquired 100% of the shares and voting rights in GT Group Ltd., Peterlee/United Kingdom, as well as its subsidiaries GT Emission Systems Ltd., Peterlee/United Kingdom, GT Project Engineering Ltd., Consett/United Kingdom, Aldona Seals Ltd., Peterlee/United Kingdom, as well as Alpha Process Controls (International) Ltd., Peterlee/United Kingdom, and obtained control over the GT Group.

The GT Group primarily develops and produces exhaust gas recirculation valves and exhaust gas brake flaps for diesel engines in the commercial vehicle sector. The acquisition allows the Group to access new technologies, which complement the existing product portfolio in Asia. At the same time, the intention is to expand the existing market position in Europe, and to develop new markets.

In the 2016 fiscal year, the GT Group contributed revenues of TEUR 26,238 and profit of TEUR 664 to the consolidated result before income taxes. The contribution to profit also includes the depreciation and amortization of hidden reserves as part of the purchase price allocation.

a) Consideration transferred

The consideration includes cash, whose fair value as at the acquisition date amounts to TEUR 107,693.

b) Costs associated with the business combination

Costs of TEUR 726 for due diligence, legal and notary fees arose in the Group in relation to the business combination. These costs are reported in other operating expenses.

c) Identifiable assets acquired and liabilities assumed

The following table indicates the fair value of the assets acquired and liabilities assumed on the acquisition date:

	TEUR
Technology	7,012
Customer relationship	11,767
Property, plant and equipment	4,055
Inventories	4,413
Trade accounts receivables	9,243
Other assets	6,201
Funds	5,010
Deferred taxes	(3,808)
Trade accounts payables and other liabilities	(10,371)
Total identifiable net assets acquired	**33,522**

The trade accounts receivable essentially include gross amounts of contractual receivables of TEUR 9,302, of which TEUR 59 were considered to be uncollectible and therefore impaired at the acquisition date.

d) Goodwill

Goodwill as a result of the acquisition was reported as follows:

	TEUR
Consideration transferred	107,693
Fair value of the identifiable net assets	(33,522)
Goodwill	**74,171**

Goodwill primarily resulted from the integration of the technology into the group's product portfolio, the expansion of existing and development of new markets, as well as the existing workforce. The recorded goodwill is not tax-deductible.

If the corporate acquisition had taken place at the start of the year, group revenues would have increased by another TEUR 30,743 to TEUR 56,981 and group earnings before tax would have risen by another TEUR 2,355 to TEUR 3,019. When calculating the amounts, the management board assumed that the fair values from the purchase price allocation at the respective acquisition date would also have been valid in the event of an acquisition on January 1, 2016.

Acquisition of the tedrive Group

As at September 8, 2016, the Group acquired 100% of the shares and voting rights in tedrive Steering Systems GmbH, Wülfrath/Germany, as well as its subsidiaries tedrive Yönlendirme Sistemleri Sanayi ye Tic. Ltd. Sti., Istanbul/Turkey, tedrive Steering Systems Inc., Wixom, Michigan/USA, and RBL-Technologie Ltd., Nabereschnyie Tschelny/Russia.

tedrive Steering Systems GmbH and tedrive Yönlendirme Sistemleri Sanayi ye Tic Ltd. were therefore included in the Group of consolidated companies as at September 1, 2016.

tedrive is a leading manufacturer and development specialist of steering systems for passenger cars and trucks, and primarily sells mechanical and electronic/hydraulic steering systems. The acquisition allows the Company to expand its product portfolio with components and solutions for steering systems.

In the 2016 fiscal year, the tedrive Group contributed revenues of TEUR 28,854 and earnings before taxes of TEUR 1,020 to the consolidated result before income taxes.

a) Consideration transferred

The purchase price for the tedrive Group amounted to TEUR 33,819.

b) Costs associated with the business combination

Costs of TEUR 499 for due diligence, legal and notary fees arose in the Group in relation to the business combination. These costs are reported in other operating expenses.

c) Identifiable assets acquired and liabilities assumed

The following table indicates the fair value of the assets acquired and liabilities assumed on the acquisition date:

	TEUR
Technology	2,255
Customer relationship	9,674
Other intangible assets	681
Property, plant and equipment	8,115
Financial assets	20
Inventories	8,959
Trade accounts receivables	7,872
Other assets	1,407
Funds	10,478
Provisions	(6,160)
Trade accounts payables and other liabilities	(17,027)
Total identifiable net assets acquired	**26,274**

The trade accounts receivable include gross amounts of contractual receivables of TEUR 7,982, of which TEUR 110 were considered to be uncollectible at the acquisition date.

d) Goodwill

Goodwill as a result of the acquisition was reported as follows:

	TEUR
Consideration transferred	33,819
Fair value of the identifiable net assets	(26,274)
Goodwill	**7,545**

Goodwill primarily resulted from the future potential for development of the existing technologies. The recorded goodwill is not tax-deductible.

If all corporate acquisitions had taken place at the beginning of fiscal year 2016, group revenues would have increased by another TEUR 54,888 to TEUR 83,742 and group earnings before tax would have risen by another TEUR 1,789 to TEUR 2,809. When calculating the amounts, the management board assumed that the fair values from the purchase price allocation at the respective acquisition date would also have been valid in the event of an acquisition on January 1, 2016.

Acquisition of ICER Rail

Until November 20, 2016 the Group held 50% of the shares and voting rights in Icer Rail S.L., Pamplona/Spain, which is a leading manufacturer and development specialist of brake blocks and brake pads. The Company was consolidated up to that date using the at-equity method, with the most recent book value of the investment amounting to TEUR 7,695. On November 21, 2016, the Group acquired the remaining 50% of the shares and voting rights in Icer Rail S.L. and accordingly now owns 100% of the shares and voting rights. This resulted in a transition from the at-equity accounting to full consolidation as at November 21, 2016.

a) Consideration of the new shares

The purchase price for the remaining 50% of the shares and voting rights in Icer Rail S.L. amounted to TEUR 22,100. This includes a control premium of TEUR 4,177 (18.9%).

b) Revaluation of old shares

The revaluation of the old shares (at-equity investment) at the time of the business combination resulted in a profit of TEUR 10,229. In this connection, deferred taxes in the amount of TEUR 2,550 were recorded as liabilities. The determined goodwill from the total transaction amounts to TEUR 24,634.

The result of the current financial year attributable to the old shares amounts to TEUR 1,893.

c) Costs associated with the business combination

Costs of TEUR 197 for due diligence, legal and notary fees arose in the Group in relation to the business combination. These costs are reported in other operating expenses.

d) Identifiable assets acquired and liabilities assumed

The following table indicates the fair value of the assets acquired and liabilities assumed on the acquisition date.

	TEUR
Other intangible assets	156
Property, plant and equipment	14,805
Financial assets	483
Inventories	2,747
Trade accounts receivables	2,605
Other assets	308
Funds	3,568
Trade accounts payables and other liabilities	(9,283)
Total identifiable net assets acquired	**15,389**

The trade accounts receivable include gross amounts of contractual receivables of TEUR 2,658, of which TEUR 53 were considered to be uncollectible and therefore impaired at the acquisition date.

In the 2016 fiscal year, Icer Rail contributed revenues of TEUR 148 and earnings before taxes of TEUR 130 to the consolidated result before income taxes.

e) Goodwill

Goodwill as a result of the acquisition was reported as follows:

	TEUR
Consideration transferred (50% new shares)	22,100
thereof control premium 18,9%	*4,177*
Fair Value 50% old shares (Equity)	17,923
Fair value of the identifiable net assets (100%)	(15,389)
Goodwill	**24,634**

Goodwill primarily resulted from the future potential for development of the existing technologies. The recorded goodwill is not expected to be tax-deductible.

The profit from the revaluation of the old shares (50%) is as follows:

	TEUR
Fair Value 50% old shares (Equity)	17,923
Book value 50% old shares (Equity)	(7,694)
Income from old shares	**10,229**

If the company had been acquired at the beginning of 2016, consolidated revenues would have increased by a further TEUR 3,332 to TEUR 3,480 and consolidated result before income taxes by a further TEUR 2,630 to TEUR 2,760. When calculating the amounts, the management board assumed that the fair values from the purchase price allocation at the respective acquisition date would also have been valid in the event of an acquisition on January 1, 2016.

2017

The following companies were acquired or founded in the 2017 fiscal year, or were included for the first time in the Group of consolidated companies:

- APS electronic AG, Niederbuchsiten/Switzerland
- Kiepe Electric Ges. m. b. H., Vienna/Austria
- Kiepe Electric GmbH, Düsseldorf/Germany
- Kiepe Electric Inc., Alpharetta, Georgia/USA
- Kiepe Electric Ltd., Birmingham/United Kingdom
- Kiepe Electric UK Limited, Birmingham/United Kingdom
- Knorr-Bremse Services Europe s.r.o., Stráž nad Nisou/Czech Republic

The following companies were acquired or founded in the 2017 fiscal year, but were not included in the group of consolidated companies:

- Dyno-Inno Test Center for Brake Equipment (Suzhou) Ltd., Suzhou/China
- Freios Bre Coahuila, S.A. de C.V., Cd. Acuña, Coah/Mexico
- Heiterblick Projektgesellschaft mbH, Leipzig/Germany
- Kiepe Electric Corporation, Vancouver/Canada
- Kiepe Electric d.o.o., Niš/Serbia
- Kiepe Electric (Pty) Ltd. South Africa, Woodstock/South Africa
- Kiepe Electric S.r.l., Cernusco sul Navigilio/Italy
- Knorr-Bremse Systems for Rail Vehicles Enterprise Management (Beijing) Co., Ltd. Peking/China
- Sichuan Knorr-Bremse Guo Tong Railway Transportation Equipment Co., Ltd. Chengdu/China
- Sydac Simulation Technologies India Private Limited, Pune/India

Notes on the significant business combinations in 2017:

Acquisition of the business segment Electrical Systems (Vossloh Kiepe)

With effect from February 1, 2017, the Group acquired 100% of the shares and voting rights in Vossloh Kiepe GmbH, Düsseldorf/Germany, Vossloh Kiepe, Inc., Alpharetta/USA, and Vossloh Kiepe Southern Africa (Pty) Ltd., Cape Town/South Africa, including its subsidiaries, and obtained control over the companies. The companies and their subsidiaries and investments were renamed as "Kiepe Electric" after the acquisition.

Kiepe Electric develops and produces electrical systems and equipment for rail vehicles in local public transport, as well as electric traction systems for trolleybuses, hybrid vehicles, fuel cell buses, and locomotives. Other Vossloh Kiepe products include heating, air-conditioning and ventilation systems. Kiepe Electric products and services are used by transport companies, state and private railways, as well as their supplier industry. The acquired group expands the Group's systems portfolio for rail vehicles, as well as, in part, the offer for commercial vehicles. As part of the increasing electrification and networking of railways and commercial vehicles, as a system supplier, Kiepe Electric opens up new application possibilities and growth opportunities.

In the 2017 fiscal year, Kiepe Electric contributed revenues of TEUR 180,466 and a loss before taxes of TEUR 26,395 to the consolidated result before income taxes.

a) Consideration transferred

The following provides a summary of the fair values of each main group of considerations at the acquisition date:

	TEUR
Funds	48,351
Contingent consideration (present value)	25,268
Total consideration transferred	**73,619**

The contingent consideration is dependent on the total actual costs of a Kiepe Electric turnkey project, which is currently expected to run until 2021. If the actual costs for the project fall below the previously defined amount, 92.08% of this deviation (deviation limited to TEUR 60,000) will fall due for payment as contingent consideration. If the actual costs for the project are above the target cost amount (negative deviation), the Group will receive 92.08% of the exceeded costs (deviation limited to TEUR 60,000) as a reimbursement of purchase price (indemnification). Based on costings estimations at the acquisition date, the Group calculated a positive cost deviation including discount effects, which was recognized as contingent consideration. In fiscal year 2017, Knorr-Bremse paid in advance an amount of TEUR 25,448, which differed from the fair value of the contingent consideration.

b) Costs associated with the business combination

Costs of TEUR 1,272 for due diligence, legal and notary fees arose in the Group in relation to the business combination in the 2017 fiscal year. These costs are reported in other operating expenses.

c) Identifiable assets acquired and liabilities assumed

The following table indicates the reported amounts of the assets acquired and liabilities assumed on the acquisition date:

	TEUR
Technology	2,452
Order backlog	4,410
Customer relationship	11,713
Other intangible assets	2,957
Property, plant and equipment	35,678
Financial assets	2,447
Inventories	99,680
Trade accounts receivables	26,763
Receivables from construction contracts	25,340
Other assets	8,167
Funds	44,407
Provisions	(32,544)
Financial debt	(3)
Trade accounts payables	(14,440)
Liabilities from construction contracts	(92,905)
Advance payments	(11,088)
Deferred Taxes	(15,831)
Other liabilities	(27,905)
Total identifiable net assets acquired	**69,298**

The trade accounts receivable include gross amounts of contractual receivables of TEUR 29,767, of which TEUR 3,004 were considered to be uncollectible and therefore impaired adjusted at the acquisition date.

d) Goodwill

Goodwill as a result of the acquisition was reported as follows:

	TEUR
Consideration transferred	73,619
Fair value of the identifiable net assets	(69,298)
Goodwill	**4,321**

Goodwill primarily resulted from the new application possibilities of the Kiepe Electric products in the Group as well as the know-how of the workforce. The recorded goodwill is not tax-deductible.

If the corporate acquisition had taken place at the beginning of the year, group revenues would have increased by another TEUR 12,308 to TEUR 192,774 and group earnings before tax would have fallen by another TEUR 1,429 to TEUR 27,824. When calculating the amounts, the management board assumed that the fair values from the purchase price allocation at the respective acquisition date would also have been valid in the event of an acquisition on January 1, 2017.

Acquisition of the assets of the Bosch Transmission Systems Division (TRS) in Musashi/Japan as an asset deal

Effective March 31, 2017, Knorr-Bremse Commercial Vehicle Systems Japan Ltd. and Bosch Corporation, Japan, completed the acquisition of all assets of the Bosch Transmission Systems Division (TRS) in Musashi/Japan as an asset deal. The purchase price agreement was signed by both parties on June 22, 2016. The company develops, produces and sells systems and components for manual and automated transmissions for on-highway commercial vehicles in Asia.

a) Consideration transferred

The purchase price amounted to TEUR 64,749 and was paid in full.

b) Costs associated with the business combination

Costs of TEUR 790 for due diligence, legal and notary fees arose in the Group in relation to the business combination in the 2017 fiscal year. These costs are reported in other operating expenses.

c) Identifiable assets acquired and liabilities assumed

As a result of the asset deal, the Group assumed the following assets and liabilities at the time of acquisition:

	TEUR
Customer relationships	32,700
Property, plant and equipment	2,293
Inventories	4,455
Trade accounts payables and other liabilities	(953)
Total identifiable net assets acquired	**38,495**

d) Goodwill

Goodwill as a result of the acquisition was reported as follows:

	TEUR
Consideration transferred	64,749
Fair value of the identifiable net assets	(38,495)
Goodwill	**26,254**

The goodwill results primarily from the integration of the technology in the transmission control business area and the expected expansion of the customer base in the Asia region. The recorded goodwill is not tax-deductible.

C.3.2. Divestments - disposals of consolidated companies

In the 2017 fiscal year, the following companies were merged, liquidated or sold:

- Microelettrica Power Devices (Pty.) Ltd., Johannesburg/South Africa
- Swedtrac Trafik AB, Solna/Sweden
- SWT Swedtrac Svets & Smide AB, Solna/Sweden
- Transtechnik Asia Pacific Pty. Ltd., Sydney/Australia

C.3.3. Changes of company names

The following companies were renamed in fiscal year 2017:

- Black River Logistics Company LLC, Watertown, New York/USA
  (previously Black River Air Logistics Company LLC, Watertown, New York/USA)
- Knorr-Bremse Services GmbH, München/Deutschland
  (previously Knorr-Bremse IT-Services GmbH, München/Deutschland)
- Knorr-Bremse SteeringSystems GmbH, Wülfrath/Deutschland
  (previously tedrive Steering Systems GmbH, Wülfrath/Deutschland)
- Knorr-Bremse Systems for Commercial Vehicles (Chongqing) Ltd., Chongqing/China
  (previously Knorr-Bremse CAFF Systems for Commercial Vehicles Chongqing Ltd., Chongqing/China)

C.4. Composition of the Group

Composition of the Group

Number of fully consolidated subsidiaries	2017 Domestic	2017 International	2016 Domestic	2016 International	2015 Domestic	2015 International
Status January 1	**27**	**116**	**26**	**107**	**26**	**107**
Additions	1	6	1	9	0	5
Disposals	0	4	0	1	0	4
Reclassifications	0	0	0	1	0	-1
Status December 31	**28**	**118**	**27**	**116**	**26**	**107**

Number of associated companies	2017 Domestic	2017 International	2016 Domestic	2016 International	2015 Domestic	2015 International
Status January 1	**2**	**2**	**3**	**3**	**3**	**1**
Additions	0	0	0	0	0	1
Disposals	0	0	1	0	0	0
Reclassifications	0	0	0	-1	0	1
Status December 31	**2**	**2**	**2**	**2**	**3**	**3**

Non-consolidated subsidiaries	2017 Domestic	2017 International	2016 Domestic	2016 International	2015 Domestic	2015 International
Status January 1	**1**	**8**	**1**	**5**	**1**	**7**
Additions	1	8	0	3	0	0
Disposals	0	0	0	0	0	2
Reclassifications	0	0	0	0	0	0
Status December 31.	**2**	**16**	**1**	**8**	**1**	**5**

Investments	2017 Domestic	2017 International	2016 Domestic	2016 International	2015 Domestic	2015 International
Status January 1	**4**	**3**	**4**	**3**	**4**	**3**
Additions	0	0	0	0	0	0
Disposals	0	1	0	0	0	0
Status December 31	**4**	**2**	**4**	**3**	**4**	**3**

For details on the group of consolidated companies, refer to the list of shareholdings under H.12.

C.5. Significant non-controlling interests

Non-controlling interests

Name	Registered Office/Country of foundation	Ownership shares constituting non-controlling interests		
		12/31/2017 %	12/31/2016 %	12/31/2015 %
Knorr Brake Holding Corporation	Watertown, New York/USA	10,7	10,7	10,7
Knorr Bremse CARS LD Co. Ltd	Daxing/China	50	50	50

The following summarized financial information is presented for the Knorr Brake Holding Corporation subgroup and for Knorr-Bremse CARS LD Co Ltd, prepared in accordance with IFRS and modified for adjustments to fair value at acquisition date and for differences in the Group's accounting policies. This is information before eliminations, which is carried out with other group companies.

The voting rights of Knorr Bremse CARS LD Co Ltd. amount to 50% while no voting rights exist in Knorr Brake Holding Corporation.

The remaining non-controlling interests are not significant, individually or in total.

Knorr Brake Holding Corporation subgroup	2017 TEUR	2016 TEUR	2015 TEUR
Revenues	1,347,070	1,194,812	1,459,672
Profit	119,736	95,747	138,947
Profit attributable to non-controlling interests	17,113	13,912	22,880
Other income	(33,092)	11,165	15,782
Comprehensive income	253,941	201,749	241,144
Total comprehensive income attributable to non-controlling interests	11,809	15,559	25,934

Knorr Brake Holding Corporation subgroup	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Current assets	361,814	355,391	389,348
Non-current assets	776,943	804,755	791,693
Current liabilities	(287,014)	(257,785)	(278,500)
Non-current liabilities	(66,689)	(97,414)	(146,423)
Net assets	785,394	805,295	756,383
Net assets attributable to non-controlling interests	95,711	100,542	96,327

Knorr Brake Holding Corporation subgroup	2017 TEUR	2016 TEUR	2015 TEUR
Cash flows from operating activities	156,347	114,376	120,424
Cash flows from investing activities	125,668	53,444	40,329
Cash flows from financing activities	(284,264)	(155,504)	(143,851)
Net increase in cash and cash equivalents	(2,249)	12,316	16,902

Knorr Brake Holding Corporation subgroup	2017 TEUR	2016 TEUR	2015 TEUR
Dividends paid during the year to non-controlling interests	18,705	17,027	14,678

Knorr Bremse CARS LD Co. Ltd	2017 TEUR	2016 TEUR	2015 TEUR
Revenues	191,568	226,559	316,993
Profit	37,736	42,855	54,552
Profit attributable to non-controlling interests	18,868	21,428	27,276
Other income	(4,519)	(2,481)	4,865
Comprehensive income	33,217	40,374	59,417
Total comprehensive income attributable to non-controlling interests	16,608	20,187	29,708

Knorr Bremse CARS LD Co. Ltd	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Current Assets	149,059	133,456	180,835
Non-current assets	5,248	6,725	8,360
Current liabilities	(81,929)	(54,070)	(77,113)
Non-current liabilities	(5,331)	(12,715)	(33,182)
Net assets	67,047	73,396	78,900
Net assets attributable to non-controlling interests	33,523	36,698	39,450

Knorr Bremse CARS LD Co. Ltd	2017 TEUR	2016 TEUR	2015 TEUR
Cash flows from operating activities	34,120	61,063	65,095
Cash flows from investing activities	614	244	(1,012)
Cash flows from financing activities	(39,566)	(45,878)	(51,336)
Net increase in cash and cash equivalents	(4,831)	15,428	12,747

Knorr Bremse CARS LD Co. Ltd	2017 TEUR	2016 TEUR	2015 TEUR
Dividends paid during the year to non-controlling interests	19,783	22,939	25,266

D. Notes on the accounting and measurement methods

D.1. Revenue

Revenue is reported as soon as the significant risks and opportunities associated with the ownership are transferred to the buyer, the receipt of payment is probable, the associated costs and possible returns can be reliably estimated, no further right over the goods exist, and the revenue amount can be reliably calculated. Revenue is reported less returns, price reductions, and quantity discounts. Revenue is measured at the contractually agreed price.

Commercial Vehicle Systems Division

The Commercial Vehicle Systems Division sells complete and subsystems of a braking system for commercial vehicles. This relates to business in the original equipment market as well as the aftermarket sector, in which large quantities of various products are dispatched to customers on a daily basis. Framework agreements exist with the original equipment and aftermarket customers, which regulate the prices for a high percentage of the products. Production is just in time. The significant risks and opportunities are transferred upon delivery of the goods. Revenues in the commercial vehicles segment are recognized at the time of delivery of the goods.

Rail Vehicle Systems Division

The Rail Vehicle Systems Division operates the original equipment business as a project business. The aftermarket business involves the sale of spare parts as well as the implementation of the project business.

The original equipment project business is based on individual project contracts. The Company's services primarily involve the delivery of brake, door, and air-conditioning systems for rail vehicles. The contracts provide for a delivery of different numbers of identical trains.

The project business in the aftermarket concerns the general overhaul of entire trains for the brake, door and air conditioning systems sectors.

The project business generally consists in production orders pursuant to IAS 11. The revenue is calculated using the percentage-of-completion (PoC) method. The progress is measured based on the cost-to-cost method. The revenue is calculated based on the accrued manufacturing costs of the orders plus the attributable profit according to the degree of completion achieved at the reporting date. Contract revenue is measured at the fair value of the payment received or outstanding payment. Anticipated losses from production orders are fully recognized at the time of their detection in profit and loss.

The spare parts business in the aftermarket segment is regulated in separate contracts. Revenue from the spare parts business are recognized at the time the spare parts are delivered to the customers.

D.2. Government grants

Government grants are recognized, if adequate certainty exists that the conditions associated with the grant will be met and the grants will be provided.

These can be divided into grants for assets and performance-related grants.

IAS 20.23 provides for an accounting option.

Grants for assets must either be deducted from the book value of the corresponding asset or reported as deferred income, which must be released to income over the useful life of the asset. The Company deducts grants for assets from the book value of the asset.

According to IAS 20.29, a right to choose exists between accounting in other operating income or offsetting of the corresponding expense with the income from the grants for performance-related grants. The company exercises the first option.

D.3. Earnings before interests and taxes (EBIT)

The operating income is the result from the group's main activity as well as other income and expenses from business activities. The earnings before interests and taxes (EBIT) do not include interest income and interest expense, as well as the other financial result, and taxes on income.

D.4. EBITDA

EBITDA corresponds to earnings before depreciation and amortization as reported in the income statement.

D.5. Net-working capital

Net working capital corresponds to inventories, trade accounts receivable and receivables from construction contracts less trade accounts payable, liabilities from construction contracts and advance payments received (see chapter F.12.).

D.6. Financial income and financing expenses

Interest income and expenses are recognized in profit or loss based on the effective interest method. Dividend income is recognized in profit or loss at the time at which the Group's legal entitlement to payment arises.

D.7. Borrowing costs

Borrowing costs are capitalized if they are directly attributable to the acquisition or production of a qualifying asset for which a longer period of time is required to bring it to its intended usable or saleable condition. All other borrowing costs are expensed as incurred. The Group did not capitalize any borrowing costs in the reporting periods.

D.8. Income taxes

Current taxes are the expected tax debt or tax claim in relation to the taxable income or tax loss for the fiscal year based on the tax rates that apply on the reporting date, or which will be in place shortly, as well as all adjustments to the tax debt in previous years. The expected tax debt or tax claim reflects the amount that represents the best estimate under consideration of tax uncertainties, where applicable. Current tax debts also include all tax debts, which arise as a result of dividends.

Current tax claims and liabilities are only netted under certain conditions.

Deferred taxes are recognized with regard to temporary differences between the book values of the assets and liabilities for group accounting purposes and the amounts used for tax purposes. Deferred taxes are not recognized for:

- temporary differences in the event of the initial reporting of assets or debts for a transaction, which does not relate to a business combination and which does not influence the accounting earnings before taxes or the taxable earnings

- temporary differences in connection with shares in subsidiaries, associates and jointly controlled entities, if the Group is able to manage the timing of the reversal of the temporary differences and it is likely that they will not be reversed in the foreseeable future
- taxable temporary differences in the event of the initial reporting of goodwill.

A deferred tax claim is recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is likely that future taxable earnings will be available for which they can be used. Future taxable profits are determined on the basis of the individual business plans of the subsidiaries, taking into account the reversal of temporary differences. Unrecognized deferred tax claims are reassessed on every reporting date and recognized in the amount likely to be permitted by the realization of future taxable earnings.

Deferred tax liabilities are additionally recognized for temporary differences arising from future dividend distributions.

Deferred tax claims are reviewed on every reporting date and reduced to the extent to which it is no longer likely that the associated tax benefit will be realized; write-ups are reported, if the probability of future taxable earnings improves.

Unrecognized deferred tax claims are reassessed on every reporting date and recognized in the amount likely to be permitted by the realization of future taxable earnings.

Deferred taxes are measured based on the tax rates, which are expected to be applied to temporary differences, as soon as they reverse, namely, using tax rates that apply or have been announced on the reporting date.

The measurement of deferred taxes reflects the tax consequences that arise from the Group's expectation with regard to the manner of recognition of the book values of its assets and the settlement of its debts as at the reporting date.

Deferred tax claims and deferred tax debts are netted if certain conditions are met.

D.9. Intangible assets

Intangible assets, which were not acquired as part of a business combination, with a determinable useful life, are recognized at the acquisition or production costs less cumulative depreciation and amortization and cumulative impairments.

The goodwill resulting from a business combination is recognized with the acquisition costs, less any necessary impairment.

Expenditure for research activities is recognized in profit or loss in the period in which it arises.

Development projects are capitalized at acquisition or production costs, including development-related overheads, if the development costs can be reliably measured, the product or process is technically and commercially appropriate, a future commercial benefit is probable, and the Group intends and has adequate resources to complete the development and use or sell the asset.

Development projects are measured at the acquisition or production costs, less cumulative amortization and cumulative impairment expenses.

Intangible assets with a determinable useful life are subject to linear and amortization over their estimated useful lives. The amortization is fundamentally recognized in profit and loss. Goodwill as well as intangible assets without a determinable useful life are not subject to regular and amortization. All capitalized intangible assets, with the exception of goodwill, have a limited useful life.

The estimated useful lives amount to:

- Licenses and acquired rights: 1 - 20 years
- Brand and customer relationships: 3 - 20 years
- Internally generated intangible assets: 3 -10 years

Amortization methods, useful lives, and residual values are reviewed on every reporting date and adjusted where necessary.

Goodwill is tested annually for impairment.

Please refer to chapter D.18. for information on the fair value of non-financial assets.

D.10. Property, plant and equipment

Property, plant and equipment (PPE) are measured at acquisition or production costs, less cumulative depreciation and cumulative impairment expenses.

Depreciation and amortization is calculated on a scheduled, linear basis over the estimated useful life. Depreciation is fundamentally recognized in profit and loss.

If indications of an impairment of individual items of PPE exist, and the recoverable amount is lower than the book value, an impairment test is performed for this asset. The recoverable amount is the higher of the fair value less the costs of sale and the useful value. If the recoverable amount is below the book value, the difference is recognized in profit and loss and the basis for the regular depreciation is reassessed.

Assets held under finance leases, for which there is no adequate certainty that ownership will transfer to the Group at the end of the lease, are depreciated over the shorter of the term of the lease or the useful life.

Land is not subject to regular depreciation.

The estimated useful lives for the current year and comparison years of PPE amount to:

- Buildings: 3 - 50 years
- Technical equipment and machinery: 3 - 25 years
- Other equipment, plant and office equipment: 1 - 25 years

Depreciation methods, useful lives, and residual values are reviewed on every reporting date and adjusted where necessary.

D.11. Leases

For every agreement, the Group checks whether the agreement is or contains a lease.

For agreements that contain a lease, the Group separates the payments required from this type of agreement and other remuneration into those for the lease and those for other items based on their relative fair value.

If, as part of a lease relating to PPE, all of the fundamental risks and opportunities are transferred to the group, the lease is classified as a financing lease. If, for a finance lease, the Group cannot reliably separate the payments into those for the lease and those for other items, an asset and a debt are recognized based on the fair value of the underlying asset. The debt is subsequently reduced by applying the group’s incremental borrowing rate, if payments have occurred and the financing costs added to the debt have been reported. The leasing object is initially recognized at the lower of the fair value and the present value of the minimum lease payments. The subsequent measurement takes place in accordance with the accounting methods applicable for this asset. The minimum lease payments made as part of financing leases are divided into financing expense and the repayment portion of the residual debt. The distribution of the financing expense across the term of the lease is based on a constant interest rate for the remaining residual debt. Other leases are classified as operating leases. The corresponding assets are not reported in the group's balance sheet.

The payments made as part of operating leases are recognized in profit and loss on a linear basis over the term of the lease. If leasing incentives are agreed, these are recognized over the term of the lease as part of the total leasing expenses.

For leases with regard to a plant, a property, and/or a building, which legally exist in the form of a lease (sale and lease-back transaction), but not economicially, any sales proceeds that exceed the book value are accrued and reported in profit and loss over the term of the lease.

D.12. Inventories

Inventories are essentially valued at the lower of the acquisition or production costs and the net realizable value. Unfinished and finished products include manufacturing costs that can be attributed directly to the production process as well as an adequate share of production overheads. Production-related administration costs are also capitalized.

The net realizable value is calculated based on the proceeds that can be realized on the market in the normal course of business, less the costs for manufacturing the product and sales costs.

D.13. Assets held for sale or disposal groups

Non-current assets held for sale or disposal groups are classified as "Assets held for sale and discontinued operations", if it is highly probable that the associated book value will largely be realized by a sale transaction and not by continued utilization.

Non-current assets, respectively non-current and current assets included in disposal groups, are recognized at their book value or the lower fair value less costs of disposal. Intangible assets and PPE are no longer subject to regular depreciation and amortization, and any associated company recognized using the equity method is no longer recognized using the equity method as soon as it is classified as held for sale or held for distribution.

D.14. Employee benefits

The Group recognizes defined contribution as well as defined benefit plans.

Obligations for contributions to defined contribution plans are reported as an expense once the associated work performance has been provided. Prepaid benefits are reported as an asset if a right to the reimbursement or reduction of future payments exists.

The group's net obligation with regard to defined benefit plans is calculated separately for every plan in that the future benefits, which the employees earned in the current period and earlier periods, are estimated. This amount is discounted and the fair value of any plan asset is deducted from this amount.

The calculation of defined benefit obligations is based on actuarial reports on the basis of the projected unit credit method.

Revaluations of net debt from defined benefit plans are reported directly in the other comprehensive income. The revaluation includes actuarial profits and losses, the income from plan assets (not including interest) and the impact of any asset cap (not including interest).

D.15. Other provisions

Provisions are recognized for legal or constructive obligations in relation to third parties, which are caused by events from the past, which are likely to lead to the outflow of resources and their amount can be reliably estimated. The maturity and/or amount of provisions are uncertain.

The amount of provisions is calculated based on the best estimate of the amount of the expected outflow of resources. If the provisions are expected to be utilized within the normal business cycle, they are classified as short-term. Long-term provisions with a term of more than one year are discounted on the reporting date using the corresponding interest rates.

Warranties:

Provisions for warranty obligations are established for the expected warranty obligations from the sale of products and services. The national law on sales contracts and individual agreements are taken into account. The provisions are based on the best estimates with regard to the fulfillment of the obligations in consideration of empirical values for claims from the past. They also include provisions for claims already raised by customers.

Restructuring measures:

An accrued liability for restructuring measures is reported as soon as the Group has approved a detailed and formal restructuring plan, and the restructuring measures have either started or have been publicly announced by the affected parties. Future operating losses are not taken into account.

Contract accruals:

Contract accruals are established for existing contracts based on the imminent obligation excess of unavoidable costs over proceeds. The accrued liability is valued at the present value of the expected excess obligation from the continuation of the contract. Before an accrued liability is established for an onerous contract, the Group reports a value reduction on the assets associated with this contract.

Sundry other provisions:

Sundry other provisions are recognized as of the closing date at the present value of the required settlement amount based on reasonable judgment.

Provisions for taxes:

The Group reports all risks and obligations arising from tax matters under tax liabilities.

D.16. Financial instruments

In accordance with IAS 32.11, all contracts, which lead to a financial asset for a company and to a financial debt or equity instrument for another company, are considered financial instruments. Financial instruments are initially recognized at fair value on the trading day, taking into account attributable transaction prices.

Classification of financial instruments:

Financial assets from debt instruments

Financial assets are classified in the following measurement categories: “at amortized cost”, “at fair value through equity”, and “at fair value through profit and loss”. A classification into the three categories takes place based on the group’s business model for managing the financial assets as well as the characteristics of the contractual payment flows of the assessed financial assets.

The “at amortized cost” category contains all financial assets whose business model is associated with the aim of collecting the contractually agreed payment flows (business model: “hold”). Likewise, the contractual terms and conditions of the financial asset must be such that cash flows occur at fixed dates that exclusively represent repayments and interest payments on the outstanding capital amount (SPPI - criterion "cash flow condition").

Measurement at fair value not recognized in profit or loss is to be applied to financial assets with the aim of realizing cash flows both through the receipt of contractual payments and through sale ("holding and selling" business model). At the same time, the contractual conditions of the financial asset must also be structured so that payment flows, which exclusively represent principal and interest payments on the outstanding nominal amount, are generated on defined dates (criterion: cash flow condition).

Financial assets at fair value through profit or loss are those that are either held for trading or managed on the basis of their fair value or whose cash flows are maximized through sales. If financial instruments are classified at fair value through equity, transaction costs are reported in profit and loss directly in the period in which they arise. This relates to a residual category, which contains all financial assets that cannot be assigned to the “hold” or “hold and sell” business model (business model: “trade/other”), as well as assets for which the SPPI criterion does not result in a positive decision. Financial assets for which the “fair value option” is exercised for the initial recognition are also classified as “at fair value through profit and loss”.

At the initial application date in accordance with the IFRS, an assessment of the business model to be applied was made for the financial instruments held by the Group so that an appropriate classification in the IFRS 9 measurement categories could take place. The business models are validated on a regular basis to ensure the correct classification of the financial assets.

Financial assets in the “at amortized cost” category particularly include trade accounts receivable (not including factoring), cash and cash equivalents and other receivables.

Cash equivalents are short-term, extremely liquid financial investments, which can be converted to cash at any time, and which are only subject to insignificant risks of changes in value.

Financial assets in the category "at fair value through equity" existed in the Group in the form of trade accounts receivable for which factoring with disposals is applied.

Financial assets in the category "at fair value through profit or loss" take the form of freestanding derivatives and equity investments. Financial assets that fall under the “fair value option” do not exist.

Reclassifications between the measurement categories did not occur between 2015 and 2017.

Financial liabilities

Financial liabilities are classified in the “at amortized cost” category. The Knorr-Bremse Group only recognizes financial liabilities from derivatives with negative fair values at fair value. If the “fair value option” is exercised for the initial recognition, they are classified as “at fair value through profit and loss”. There are no financial liabilities which fall under "fair value option".

Financial liabilities in the category "at amortized cost" are mainly bonds issued, liabilities to banks and trade payables.

Financial liabilities in the category "at fair value through profit or loss" in the Group are exclusively freestanding derivatives with a negative market value.

Equity instruments

Equity instruments under IFRS 9 are essentially classified at fair value through profit and loss. For the initial recognition of a financial investment in an equity instrument, which is held as a long-term strategic investment, rather than for trading purposes, IFRS 9 provides for an irrevocable option to report the changes to fair value in the other operating income (“FVOCI option”). In this case, the classification takes place in the “at fair value through equity” category. In one case, an equity investment was classified as “at fair value through equity” at initial recognition. Dividends are recognized in the income statement. Furthermore, the fair value changes recognized in equity are not reclassified to the income statement upon disposal of the equity instrument.

The fair value corresponds to the prices quoted on an active market, where applicable. If such a market does not exist, the fair value is calculated based on measurement models using current market parameters.

Derecognitions and modifications

Financial assets are derecognized, if the contractual rights to payments, which arise from the instrument, expire or, alternatively, the financial assets are transferred with all material risks and opportunities. Financial liabilities are derecognized, if the contractual obligations are settled, canceled, or expire. In the event of adjustments to loan conditions or extensions of terms, the Group validates whether this involves substantial modifications within the meaning of IFRS 9. The assessment as to whether a modification is substantial is made on basis of qualitative and quantitative criteria, the criteria used by the Group for financial assets correspond to the criteria for financial liabilities. If there is a substantial modification, the existing financial instrument is derecognized and the substantially modified financial instrument is rebooked. If there is a non-substantial modification, the book value of the financial instrument is adjusted through profit or loss.

Derivative financial instruments

Within the group, financial derivatives must be recognized as financial assets or financial liabilities at fair value, irrespective of the purpose. The fair value of derivatives is calculated by discounting the future payment flows at the market interest rate and using other established actuarial methods, such as option price models. Derivatives are recognized on the trading day. The fair value of unconditional derivatives is zero at initial recognition under market conditions. Options are initially recognized at fair value (equal to the premium paid or received). Counterparty-specific credit risks are taken into account as part of the measurement of financial derivatives.

The Group uses financial derivatives in the form of forward exchange transactions and foreign exchange options, interest rate swaps, cross-currency interest rate swaps, as well as commodity derivatives to hedge against currency, interest rate and commodity risks. While currency risks primarily arise due to sales in foreign currencies, interest rate risks are predominantly caused by variable-rate liabilities, while commodity price risks arise as a result of the procurement of metals in the production process. Hedge accounting is not applied to derivative financial instruments held to economically hedge market price risks.

Impairments

IFRS 9 requires expected losses to be reported for all assets within the scope of the impairment regulations. The loss reported as well as the interest collected are calculated based on the assignment of the instrument to the categories listed below.

According to the general impairment model (“general approach”), the change in value is determined based on the following three levels:

Level 1: All relevant instruments are initially assigned to level 1. The present value of the expected losses from possible default events within the next twelve months (“12-month expected credit loss”) after the reporting date must be reported and recognized as an expense. Interest is recognized on the basis of the gross book value. Consequently, the effective interest method is applied on the basis of the book value before risk provisioning is taken into account.

Level 2: This includes all instruments, which have undergone a significant increase in the default risk since their initial reporting. The monitoring for a significant Increase in the default risk as of the closing date is carried out in connection with a screening process of the relevant changes in ratings, respectively CDS spreads, of the business partner. Generally, a significant increase in the default risk is assumed in the event of an amount overdue in excess of 30 days. If the business partner for the financial instruments is showing an investment-grade rating, an assessment of a significant increase in the credit risk is not made. The impairment corresponds to the present value of the expected losses from possible default events over the remaining term of the instrument (“lifetime expected credit loss”). The interest is reported analogous to level 1.

Level 3: If, in addition to an increased risk of default, there is objective evidence of an impairment of an instrument, the impairment is also measured based on the present value of the expected losses from possible default events over the remaining term. The reporting of the interest in the following periods must be adjusted so that the interest income is calculated based on the net book value and therefore based on the book value after taking account of the loan loss provision.

At each balance sheet date, the Group tests whether there is objective evidence of impairment for financial instruments carried at "acquisition costs" or "at fair value through equity". Criteria for impairment include default on payments or default of debtors, indications of imminent insolvency or the disappearance of an active market for a security due to financial difficulties.

A default event exists when it is considered probable that a debtor cannot or will not be able to meet his payment obligations or meet them in full. Where a default event exists, the gross carrying amounts of the financial assets (fully or partially) are written off so that the gross carrying amount after write-off represents the expected recoverable amount. In addition, a default event is assumed in the event of significant payment delays. For financial instruments within the scope of the "general approach", a default event is assumed in connection with an amount overdue by more than 90 days.

For the group, in particular, cash and cash equivalents are subject to the impairment requirements in accordance with the “general approach”.

For trade accounts receivable and leasing receivables, IFRS 9 provides for a simplified approach to impairment (“simplified approach”) under which an impairment in the amount of the expected losses must be reported over the remaining term for all instruments, irrespective of the credit quality. Consequently, no distinction is made for these financial instruments between allocation to level 1 or level 2 of the impairment model under IFRS 9. A transfer to level 3 takes place if there is objective evidence of impairment. With respect to trade accounts receivable, a default event is assumed in the case that there are delays in payment in excess of 12 months. A default also exists if it considered probable that a debtor cannot meet or cannot entirely meet its payment obligations.

Trade accounts receivable of business partners are divided into three groups:

Group 1: the probability of default can be determined using the public issuer rating

Group 2: the probability of default can be determined via an information agency

Group 3: Benchmark default probability

Rating and default probability data are updated annually.

For the group, in particular, trade accounts receivable are subject to the impairment requirements in accordance with the “simplified approach".

Leasing receivables as well as any financial guarantees or loan commitments, which would fall under the impairment provisions, did not exist for the Company.

D.17. Fair value - financial instruments (financial assets)

Measurement of fair value:
In the Knorr-Bremse group, financial instruments classified as "at fair value through profit or loss" and "at fair value through equity" (in particular derivatives and equity instruments) are measured at fair value. In addition, the fair value of financial instruments that are not measured at fair value is disclosed in the notes to the consolidated financial statements.

The fair value is the price that would be received in an orderly transaction between market participants on the assessment date for the sale of an asset or that would be paid for the transfer of a liability. When measuring the fair value, it is assumed that the transaction is concluded on the principal market for the asset or liability, or on the most favorable market for the asset or liability, if no principal market is available.

The Group must have access to the principal market or to the most favorable market. The fair value of an asset or liability is measured based on the assumptions, which the market participants would use as a basis for the pricing in their best commercial interest.

The Group uses measurement techniques that are appropriate under the circumstances and for which adequate data to measure the fair value is available. In this respect, the use of material input factors which can be observed must be as high as possible, while the use of input factors that cannot be observed must be kept to a minimum.

All financial assets and liabilities measured at fair value or whose fair value is disclosed in the notes are classified in the fair value hierarchies described below based on the input parameter of the lowest level, which is material for the overall measurement at fair value.

Level 1: (Unadjusted) prices listed in active markets

Level 2: Assessment methods in which key market parameters for assessment can be observed directly or indirectly

Level 3: Assessment methods in which significant parameters for valuation are not observable on the market

The assessment procedures and the input parameters used are reviewed regularly. The aim of the reviews is to use observable input factors in determining fair value as far as possible. Rearrangements in the hierarchy level are made at the end of the period in which the change occurred.

D.18. Fair value - non-financial assets

The book values of the group’s non-financial assets are reviewed on every reporting date in order to determine whether there is any indication of an impairment. If this is the case, the recoverable amount of the asset is estimated. Goodwill is reviewed annually for impairment.

To check whether an impairment exists, assets are combined into the smallest group of assets, which generate cash inflows from continued use, which are largely independent of the cash inflows of other assets or cash-generating units (CGUs). Goodwill that was acquired as part of a business combination is assigned to one or more groups of CGUs from which a benefit from the use of the synergies of the business combination is expected.

The recoverable amount of an asset or a CGU is the higher of the amounts from the value in use and the fair value less costs to sell. When assessing the value in use, the estimated future cash flows are discounted to their present value, whereby a weighted average cost of capital (WACC) before tax is used, which reflects the current market valuations of the interest effect and the specific risks of an asset or a CGU.

An impairment expense is reported if the book value of an asset or a CGU exceeds its recoverable amount.

Impairment expenses are reported in profit and loss.

An impairment expense with regard to the goodwill is not reversed. For other assets, an impairment expense is only reversed to the extent that the book value of the asset does not exceed the book value that would have been calculated, less the depreciation or amortization, if no impairment expense had been reported.

D.19. Share-based payment

The Group applies solely in relation to its South African subsidiary, Knorr-Bremse S.A. (Pty.) Ltd, Kempton Park/South Africa, IFRS 2 "Share-based Payment" on its share-based payment transactions due to local legal requirements in the context of "Black Economic Empowerment". According to IFRS 2, plans, which lead to share-based payments, must be treated as equity-settled transactions, if the premiums paid relate to equity instruments of the receiving company or the receiving company has no obligation to perform a settlement. In the case of equity-settled share-based payments, remuneration to beneficiaries in accordance with IFRS 2 must be recognized as an expense and a corresponding increase in the capital reserve. Since in the case of share-based payment transactions in connection with the "Black Economic Empowerment", these do not deal with compensation granted to employees but rather to external beneficiaries, the presentation of the related expenses is made in other operating expenses. In the case of equity-settled share-based payments, the fair value is measured at the grant date and reported as an expense over the vesting period. The group's share-based payments are exclusively equity-settled.

E. Notes on the consolidated statement of profit or loss

E.1. Revenues

The revenues are comprised as follows:

Revenues	**2017 TEUR**	**2016 TEUR**	**2015 TEUR**
Revenue from the sale of goods	4,840,244	4,416,875	4,510,202
Revenue from construction contracts	1,313,299	1,054,381	1,313,306
	6,153,543	**5,471,256**	**5,823,508**

Group revenues increase by 11.6% in 2015 and by TEUR 606,549 from TEUR 5,216,959 to TEUR 5,823,508. After a decline in 2016 of 6.0%, sales revenue increased by 12.5% or TEUR 682,287 from TEUR 5,471,256 to TEUR 6,153,543 in the reporting period. This includes sales of TEUR 180,466 from the acquisition of the Kiepe Group. The increase in the Rail Vehicles division is also due to rising rail transportation and rising service business. In the Commercial Vehicles Division, the increase resulted primarily from higher truck production. In the previous year's reporting period, sales revenue declined by TEUR 352,252. The decline concerns the Rail Vehicles Division with declining high-speed, locomotive and freight business.

The following additional information is available for the group’s current construction contracts:

Current construction contracts:	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Accumulated contract costs plus recognized profits less recognized losses	4,735,587	4,849,943	3,679,980
Advance payments	725,130	759,260	643,543
Construction contracts with a positive balance	116,171	123,822	101,895
Construction contracts with a negative balance	230,750	126,256	146,793

With a slight increase of TEUR 278 from TEUR 101,617 to TEUR 101,895 in 2015, the gross amount due from construction contracts with a positive balance remains almost constant. After an increase in 2016, the level of construction contracts with a positive balance decreased by TEUR 7,651 from TEUR 123,822 to TEUR 116,171.

On the other hand, the gross amount due to construction contracts with a negative balance in 2015 decreased by TEUR 5,791 from TEUR 152,584 to TEUR 146,793. After a further reduction in 2016, the construction contracts with a negative balance increased significantly in the reporting period by TEUR 104,494 from TEUR 126,256 to TEUR 230,750, especially due to the acquisition of the Kiepe Group.

E.2. Change in inventory and other own work capitalized

Change in inventory and other own work capitalized	2017 TEUR	2016 TEUR	2015 TEUR
Change in inventory of finished and unfinished goods	38,754	(11,075)	(7,104)
Other own work capitalized	31,768	21,075	19,207

The change in inventory reflects the change in finished and unfinished products. The development of finished and unfinished products is covered in chapter F.6. Inventories.

The other own work capitalized results from the capitalization of development projects.

E.3. Other operating income

Other operating income	2017 TEUR	2016 TEUR	2015 TEUR
Income from the disposals of prototypes and scrap sales	14,535	11,031	9,305
Income from other services	13,534	14,558	18,536
Income from the disposal of land and buildings	7,737	15,763	-
Rental income	5,140	4,524	5,181
Income from government grants	4,434	2,782	3,468
Income from the reimbursement of advisory services	3,347	-	-
Insurance compensation and compensation payments	2,073	4,212	17,514
Proceeds from the disposal of intangible and other tangible assets	1,016	1,859	3,066
Other income	29,354	28,551	32,059
	81,171	**83,280**	**89,129**

Other operating income consists mainly of income from the disposal of prototypes, income from other services and gains from the disposal of land and buildings. Other services mainly relate to development and testing services to third parties.

Income from the disposal of land and buildings declined in 2017 by TEUR 8,026. In 2016 it resulted from the sale of land in Berlin-Marzahn that is no longer in use and in 2017 from the sale of part of the company facility in Munich.

Due to the violation of a customer's purchase obligations, a compensation payment in the amount of EUR 15.0 million was received in 2015.

E.4. Cost of materials

Cost of materials	2017 TEUR	2016 TEUR	2015 TEUR
Expenses for raw materials, consumables and supplies and for purchased goods	(2,779,759)	(2,389,179)	(2,579,929)
Expenses for purchased services	(229,836)	(182,228)	(167,413)
	(3,009,595)	**(2,571,407)**	**(2,747,342)**

The cost of materials is comprised of the expenditure on materials, supplies, and purchased goods as well as on services purchased. The development can be considered proportionally to the development of revenues (2017: TEUR 6,153,543; 2016: TEUR 5,471,256; 2015: TEUR 5,823,508).

In spite of the increase in the cost of materials in 2017, the material cost ratio as a percentage of revenues amounted to 48.9% in 2017 compared to 47.0% in 2016 and 47.2% in 2015.

In the reporting period, inventories in the amount of TEUR 2,779,759 (2016: TEUR 2,389,179; 2015: TEUR 2,579,929) were recognized in expense.

Please refer to chapter F.6 for more information on the changes to inventories.

E.5. Personnel expenses

Personnel expenses	2017 TEUR	2016 TEUR	2015 TEUR
Wages and salaries	(1,084,128)	(967,944)	(941,814)
Social security contributions	(212,101)	(183,304)	(194,697)
Expenses for personnel leasing	(116,260)	(97,459)	(104,274)
Termination benefits	(16,051)	(16,072)	(23,928)
Expenses in connection with defined benefit plans	(10,331)	(7,343)	(7,480)
	(1,438,871)	**(1,272,122)**	**(1,272,193)**

The personnel expenses primarily include wages and salaries, as well as social security contributions.

The increase in wages and salaries by approximately 12.0% in 2017 is based on the increase in the average number of employees from 2016 (24,664) to 2017 (26,910). The increase is due, on the one hand, to the expansion of the scope of consolidation due to business combinations and, on the other hand, the general build-up of new employees, especially in the area of the personnel-intensive service business as well as research and development. Personnel adjustment measures due to severance payments that did not result from restructuring measures affected personnel expenses in fiscal year 2017 by TEUR 16,051 in a comparable amount to 2016 (TEUR 16,072).

E.6. Other operating expenses

Other operating expenses	2017 TEUR	2016 TEUR	2015 TEUR
Order-related expenses	(110,652)	(124,061)	(119,213)
Maintenance expenses	(104,745)	(83,934)	(80,979)
Personnel expenses	(99,139)	(100,912)	(110,132)
Legal, consulting and audit costs	(92,374)	(83,114)	(51,341)
Rents and leases	(85,090)	(61,829)	(59,963)
Other services	(70,143)	(67,825)	(78,035)
External research and development costs	(38,229)	(46,689)	(38,433)
Administrative expenses	(30,225)	(29,133)	(28,554)
Other taxes	(19,712)	(22,239)	(29,090)
Losses from the disposal of land and buildings	(4,783)	(5,715)	(5,210)
Donations	(3,976)	(2,216)	(2,328)
Other expenses	(82,192)	(41,234)	(32,886)
	(741,261)	**(668,902)**	**(636,165)**

The order-related expenses primarily consist of warranty expenses, freight costs and commissions. The personnel-related expenses predominantly involved travel expenses and training costs. Other services include services such as logistics, security services and cleaning. Other expenses primarily consist of communication and administration costs as well as reversals from provisions, which had an opposite effect. Moreover, the fees for societies, associations, and chambers, insurance costs, as well as costs for marketing are included in other expenses.

The increase in other operating expenses relates primarily to increased rental and leasing expenses, maintenance expenses and legal, consulting and audit costs in connection with the attempted takeover of Haldex AB and the conversion of the financial reporting to IFRS.

E.7. Depreciation and amortization

Depreciation and amortization is comprised as follows:

Depreciation and amortization	2017 TEUR	2016 TEUR	2015 TEUR
Depreciation and amortization of intangible assets	**(43,353)**	**(31,781)**	**(30,008)**
thereof regular depreciation and amortization of intangible assets	*(43,353)*	*(31,781)*	*(30,008)*
Depreciation and amortization of property, plant and equipment	**(142,758)**	**(133,878)**	**(140,477)**
thereof impairments of property, plant and equipment	-	*(7,185)*	*(13,652)*
thereof regular depreciation and amortization of property, plant and equipment	*(142,758)*	*(126,693)*	*(126,825)*
Depreciation and amortization on disposal groups	**(25,368)**	-	-
	(211,479)	**(165,659)**	**(170,484)**

Depreciation and amortization increase by 35.7% in 2015 and by TEUR 44,817 from TEUR 125,667 to TEUR 170,484. After a slight decline in 2016, depreciation and amortization increased by 27.7% or TEUR 45,820 from TEUR 165,659 to TEUR 211,479 in the reporting period.

The continuous increase in intangible assets resulted in a rise in the amortization of intangible assets. No impairment losses on goodwill or any amortization of intangible assets were necessary in the reporting years.

Impairments of PPE of TEUR 13,652 in 2015 and TEUR 7,185 in 2016 mainly result from impairment losses on logistics assets not required for operations, which are no longer used. In accordance with IAS 36, impairment tests were carried out for such assets of the American subsidiary Black River Air Logistics Company LLC as of December 31, 2015 and December 31, 2016. The recoverable amount was calculated internally in consideration of the third-level input parameters (non-observable input parameters) and the assumptions made. After deduction of net financial liabilities, this amounted to TEUR 25,122 as of December 31, 2016 and TEUR 31,490 as of December 31, 2015. The resulting value adjustment requirement of TEUR 7,185 in 2016 and TEUR 13,652 in 2015 was recognized in the income statement.

The write-downs of disposal groups in the amount of TEUR 25,368 relate to the disposal groups Blueprint and Sydac (see chapter F.8.1.).

E.8. Financial result

Financial result	2017 TEUR	2016 TEUR	2015 TEUR
Interest income from financial instruments, thereof	**6,605**	**4,625**	**7,305**
a) Financial instruments (AC)	*5,333*	*4,625*	*6,373*
b) Financial instruments (FVTPL)	*1,272*	*-*	*933*
Interest income from defined benefit plans	5,965	7,465	7,259
Other	11,466	7,121	7,134
Interest income	**24,036**	**19,212**	**21,698**
Interest expenses from financial investments, thereof	**(16,264)**	**(4,608)**	**(5,366)**
a) Financial instruments (AC)	*(16,264)*	*(4,559)*	*(5,366)*
b) Financial instruments (FVTPL)	*-*	*(49)*	*-*
Interest expenses from defined benefit plans	(11,222)	(12,798)	(15,144)
Compounding of provisions	(4,922)	(5,427)	(5,641)
Other	(6,393)	(5,848)	(3,007)
Interest expenses	**(38,801)**	**(28,681)**	**(29,159)**
Currency translation differences, thereof	**67,348**	**61,086**	**121,822**
a) Financial instruments (FVOCI)	*680*	*171*	*17*
b) Financial instruments (FVTPL)	*66,667*	*60,915*	*121,805*
Income from disposals of financial instruments	1,400	309	3,024
Income from the revaluation of financial instruments (FVTPL)	-	171	176
Profit and loss contribution from at-equity investments, after taxes	(953)	2,641	802
Income from the revaluation of existing shares as part of a step acquisition	-	10,229	-
Other	374	26	13
Other financial income	**68,169**	**74,460**	**125,837**
Currency translation differences, thereof	**(89,997)**	**(69,837)**	**(136,337)**
a) Financial instruments (AC)	*(26,904)*	*(12,754)*	*(33,577)*
b) Financial instruments (FVOCI)	*(540)*	*(222)*	*(504)*
c) Financial instruments (FVTPL)	*(62,552)*	*(56,861)*	*(102,255)*
Losses from disposals of financial instruments	(1,930)	(199)	(1,700)
Expenses from the revaluation of financial instruments (FVTPL)	(567)	-	-
Expenses resulting from options for minority interests	(12,472)	(40,125)	(30,865)
Other financial expenses	**(104,966)**	**(110,161)**	**(168,902)**
Other Financial result from other financial income and other financial expenses	**(36,797)**	**(35,701)**	**(43,065)**
Financial result	**(51,562)**	**(45,170)**	**(50,526)**

The foreign currency results of financial instruments carried at amortized cost (AC) mainly result from the currency translation differences of trade receivables and payables as well as cash and cash equivalents at the closing rate; these foreign currency results are netted.

The currency results from financial instruments recognized at fair value through profit or loss (FVTPL) result from the realized results from currency derivatives and the valuation effects from existing currency derivatives.

In 2016, the share in profits of companies accounted for using the equity method mainly arise from the share in the result of Icer Rail S.L. until 21 November 2016. The previous 50 % minority interests were acquired effective from November 21, 2016, with the result that the group's equity share rose to 100 % with a corresponding transition from at-equity accounting to full consolidation (see chapter C.3.1.).

Interest income and expenses from financial instruments measured at fair value (FVTPL) are attributable to the fair value measurement of the interest rate swaps. Interest income and expense from financial instruments (AC) carried at amortized cost represent the total interest expense and income of these assets and liabilities determined using the effective interest method.

For further information on interest income and interest expenses from defined benefit plans, please refer to chapter F.10. Employee benefits

The development of the provisions is dealt with in chapter F.11 Other Provisions.

E.9. Taxes on income

E.9.1. Taxes reported in profit and loss

The tax expenses include current and deferred taxes. Current taxes and deferred taxes are reported in profit and loss, except for the extent to which they are associated with a business combination or with items reported directly in equity or in the other operating income.

Taxes reported in profit and loss	2017 TEUR	2016 TEUR	2015 TEUR
Current year	(251,322)	(262,022)	(321,768)
Previous year	(365)	(5,766)	(7,410)
Current tax expense	**(251,687)**	**(267,788)**	**(329,178)**
Recognition /reversal of temporary differences current year	(18,836)	(7,249)	(8,458)
Temporary differences from previous years	4,208	1,369	(881)
Tax losses / tax credits	1,067	(447)	1,137
Deferred tax expenses	**(13,561)**	**(6,327)**	**(8,202)**
Tax expenses	**(265,248)**	**(274,115)**	**(337,381)**

The deferred tax increase from previous years mainly relates to prior-year adjustments to temporary differences. The change to the temporary differences in the current year results to a large part from consolidation entries.

E.9.2. Taxes reported in other comprehensive income

Taxes reported in other comprehensive income

	2017		
	Before tax TEUR	Deferred tax -claims (-) / -liabilities (+) TEUR	After tax TEUR
Revaluation of net debt from defined benefit plans	125,354	(21,859)	103,496
Revaluation of net debt from pension plan assets	(51,139)	2,111	(49,028)
Currency translation differences	97,865	-	97,865
Revaluation of equity instruments	14,075	-	14,075
Total	**186,155**	**(19,748)**	**166,407**

	2016		
	Before tax TEUR	Deferred tax -claims (-) / -liabilities (+) TEUR	After tax TEUR
Revaluation of net debt from defined benefit plans	111,860	(23,241)	88,620
Revaluation of net debt from pension plan assets	(22,079)	2,305	(19,774)
Currency translation differences	(7,274)	-	(7,274)
Revaluation of equity instruments	(1,326)	-	(1,326)
Total	**81,182**	**(20,936)**	**60,246**

	2015		
	Before tax TEUR	Deferred tax -claims (-) / -liabilities (+) TEUR	After tax TEUR
Revaluation of net debt from defined benefit plans	58,775	(14,738)	44,037
Revaluation of net debt from pension plan assets	(6,381)	2,342	(4,039)
Currency translation differences	5,837	-	5,837
Total	**58,232**	**(12,396)**	**45,835**

E.9.3. Taxes reported directly in equity

In the years 2015, 2016 and 2017 no taxes were reported directly in equity.

E.9.4. Reconciliation of the effective tax rate

Reconciliation of the effective tax rate

	12/31/2017		12/31/2016		12/31/2015	
	%	TEUR	%	TEUR	%	TEUR
Earnings before taxes		852,469		841,274		1,048,031
Expected taxes	32.8%	279,610	32.8%	275,938	32.8%	343,754
Differences between the local and hypothetical tax rate at the top level	-7.3%	(62,572)	0.1%	(60,583)	0.1%	(62,840)
Changes to the tax rate	0.5%	4,640	0.1%	968	0.1%	1,045
Effect from at-equity investments	0.0%	(77)	0.0%	168	0.0%	(106)
Effects from permanent differences due to different accounting under IFRS and tax return	-0.3%	(2,166)	-0.4%	(3,294)	-0.1%	(1,535)
Increase in tax due to non-tax deductible expenses	3.7%	31,419	4.2%	34,932	2.6%	26,975
Tax-exempt income	-2.7%	(23,354)	-0.6%	(4,637)	-0.5%	(5,158)
Non-recognition of losses in the current year	6.6%	56,336	3.0%	25,106	2.6%	26,890
Change/adjustment of (unrecognized) tax loss carry-forwards	-0.9%	(7,393)	-0.9%	(7,393)	-1.0%	(10,383)
Change/adjustment of unrecognized temporary differences	-0.2%	(1,428)	0.0%	325	0.4%	3,906
Taxes from previous years	-0.5%	(3,843)	0.5%	4,397	0.8%	8,291
Other	-0.7%	(5,925)	1.0%	8,187	0.6%	6,541
Effective taxes	**31.1%**	**265,248**	**32.6%**	**274,115**	**32.2%**	**337,381**

The difference between the effective and expected tax expenses in all years mainly results from lower local tax rates compared to the hypothetical tax rate at group level. Additional significant effects are the deviations due to permanent effects from tax adjustments (non-deductible operating expenses in connection with investments) and the non-recognition of deferred tax assets on current losses, respectively loss carryforwards, which are not considered to be recoverable.

In December 2017, a change in the tax law in the USA was adopted. As a result, the corporation tax rate was reduced, effective January 1, 2018, from 35 to 21 percent. The impacts thereof are in effect included in tax rate changes, which result primarily from the write-down of existing deferred tax assets in the USA.

E.9.5. Change in deferred taxes

Change in deferred taxes in the balance sheet during the year

							As of 12/31	
2017 fiscal year	**Net at 1/1** TEUR	**In profit/loss** TEUR	**In other income** TEUR	**Others** TEUR	**Net currency translation differences** TEUR	**Net** TEUR	**Deferred tax assets** TEUR	**Deferred tax liabilities** TEUR
Intangible assets	(13,326)	(8,116)	-	(5,572)	(1,551)	(28,566)	25,224	(53,789)
Property, plant and equipment	(40,241)	(7,448)	-	2,782	(293)	(45,200)	2,338	(47,538)
Investments	(29,548)	14,318	-	10,217	2,796	(2,217)	2,323	(4,539)
Inventories	16,720	2,877	-	223	3,058	22,878	35,359	(12,481)
Other assets	(48,538)	(1,859)	-	(1,899)	(6,670)	(58,965)	1,216	(60,181)
Tax loss carry-forwards	13,599	1,067	-	-	150	14,816	14,816	n/a
Pension obligations	64,622	(9,157)	(1,188)	(3,305)	(6,972)	44,000	49,558	(5,558)
Other provisions	66,067	1,283	-	(4,957)	(2,854)	59,539	59,539	n/a
Liabilities	60,307	(2,135)	-	(1,880)	(4,832)	51,459	76,830	(25,371)
Tax assets (liabilities) before netting	**89,662**	**(9,170)**	**(1,188)**	**(4,391)**	**(17,166)**	**57,746**	**267,204**	**(209,458)**
Netting of taxes							(182,195)	182,195
Net tax assets (liabilities)	**89,662**	**(9,170)**	**(1,188)**	**(4,391)**	**(17,166)**	**57,746**	**85,009**	**(27,262)**
2016 fiscal year								
Intangible assets	3,158	(13,907)	-	(10)	(2,567)	(13,326)	35,709	(49,035)
Property, plant and equipment	(59,308)	11,298	-	3,143	4,625	(40,241)	421	(40,662)
Investments	(19,686)	(9,362)	-	72	(571)	(29,548)	1,314	(30,861)
Inventories	23,898	(6,641)	-	494	(1,031)	16,720	32,369	(15,649)
Other assets	(40,341)	(24,141)	-	1,497	14,448	(48,538)	12,870	(61,408)
Tax loss carry-forwards	22,549	8,673	-	(209)	(17,415)	13,599	13,599	n/a
Pension obligations	30,877	28,445	8,540	(2,660)	(580)	64,622	73,836	(9,214)
Other provisions	80,912	(10,837)	-	(1,767)	(2,241)	66,067	66,067	n/a
Liabilities	55,643	10,297	-	(713)	(4,920)	60,307	105,739	(45,432)
Tax assets (liabilities) before netting	**97,701**	**(6,175)**	**8,540**	**(153)**	**(10,251)**	**89,662**	**341,924**	**(252,262)**
Netting of taxes							(226,279)	226,279
Net tax assets (liabilities)	**97,701**	**(6,175)**	**8,540**	**(153)**	**(10,251)**	**89,662**	**115,645**	**(25,983)**
2015 fiscal year								
Intangible assets	(19,644)	22,978	-	10	(187)	3,158	35,952	(32,794)
Property, plant and equipment	(48,455)	(10,537)	-	1,415	(1,731)	(59,308)	1,023	(60,331)
Investments	(4,944)	(16,234)	-	-	1,493	(19,686)	940	(20,626)
Inventories	22,443	2,958	-	(919)	(585)	23,898	41,376	(17,477)
Other assets	(38,069)	(10,092)	-	1,290	6,530	(40,341)	28,895	(69,236)
Tax loss carry-forwards	13,658	17,900	-	(287)	(8,722)	22,549	22,549	n/a
Pension obligations	54,651	(22,558)	(3,620)	(982)	3,385	30,877	42,694	(11,818)
Other provisions	75,808	(582)	-	(277)	5,963	80,912	80,912	n/a
Liabilities	57,252	8,587	-	(872)	(9,324)	55,643	106,307	(50,665)
Tax assets (liabilities) before netting	**112,701**	**(7,579)**	**(3,620)**	**(623)**	**(3,178)**	**97,701**	**360,648**	**(262,947)**
Netting of taxes							(223,590)	223,590
Net tax assets (liabilities)	**112,701**	**(7,579)**	**(3,620)**	**(623)**	**(3,178)**	**97,701**	**137,058**	**(39,357)**

The allocation and development of deferred tax positions shows a steadily decreasing asset surplus. The changes in other comprehensive income relate to pension obligations; changes in tax rates and effects from the previous year are reported under "Other".

E.9.6. Unrecognized deferred tax assets

Deferred tax assets were not reported with regard to the following items, as it is not likely that taxable income, against which the Company can settle deferred tax assets, will be available in the future.

Unrecognized deferred tax assets	12/31/2017		12/31/2016		12/31/2015	
	Gross TEUR	Tax effect TEUR	Gross TEUR	Tax effect TEUR	Gross TEUR	Tax effect TEUR
from deductible temporary differences	10,335	3,390	16,822	5,518	18,410	6,039
from tax losses	107,762	35,346	83,024	27,232	106,570	34,955
	118,097	**38,736**	**99,846**	**32,749**	**124,980**	**40,993**

The non-recognized tax loss carry-forwards expire as follows:

Non-capitalized tax loss carry-forwards	12/31/2017		12/31/2016		12/31/2015	
	TEUR	Expiration date	TEUR	Expiration date	TEUR	Expiration date
Expirable	14,109	1-10 years	88	2-11 years	18,934	3-12 years
Non-expirable	93,653	-	82,936	-	87,636	-
	107,762		**83,024**		**106,570**	

E.9.7. Non-recognized deferred tax liabilities

As of December 31, 2017, the Group parent company recorded deferred tax liabilities In the amount of EUR 8.3 million (2016: EUR 0.6 million, 2015: EUR 0 million) for temporary differences on future dividend payments. No other deferred tax liabilities in connection with temporary differences in the amount of EUR 12.7 million (2016: EUR 35.0 million, 2015: EUR 53.2 million) in connection with investments in subsidiaries, associated companies or jointly controlled companies were reported as of the reporting date.

The Group is the opinion that the tax liabilities formed are adequate for the years where the tax audit is not closed in consideration of all available information, including the interpretation of tax law and previous experience.

E.10. Earnings per share

EBITA of the Group increases by 19.7% in 2015 namely by TEUR 209,167 from TEUR 1,059,874 to TEUR 1,269,041. After a decline in 2016, EBITA increases by 6.0% namely by TEUR 63,407 from TEUR 1,052,103 to TEUR 1,115,510 in the reporting period.

Earnings before interests and taxes (EBIT) of the Group also increase by 17.6% in 2015 namely by TEUR 164,350 from TEUR 934,207 to TEUR 1,098,557. After a decline in 2016, Earnings before interests and taxes (EBIT) increase by 2.0% or TEUR 17,587 from TEUR 886,444 to TEUR 904,031 in the reporting period.

The group's net income also follows this trend and increased in 2015 by 6.6% or TEUR 44,245 from TEUR 666,405 to TEUR 710,650. After the decline in 2016, the group's net income also rose again in the reporting period and was 3.5% or TEUR 20,060 higher than the previous year's figure of TEUR 567,160 at TEUR 587,220.

Basic earnings per share are calculated in accordance with IAS 33 from the earnings attributable to Knorr-Bremse Aktiengesellschaft shareholders and the weighted average number of shares outstanding during the year.

Earnings per share	2017	2016	2015
Earnings after taxes from continuing operations (attributable to Knorr-Bremse shareholders) (in TEUR)	535,504	526,330	652,768
Weighted average outstanding shares (in thous. pieces)	161,200	161,200	161,200
Earnings per share in EUR (undiluted)	3.32	3.27	4.05
Earnings per share in EUR (diluted)	3.32	3.27	4.05

The number of shares for the years 2015 to 2017 remains unchanged at 2,600,000. As a result of a share split and a capital increase from corporate funds in 2018, the number of shares changed as follows.

	in thous. pieces	Nominal amount in EUR	Subscribed capital in TEUR
Shares January 1, 2018	2,600	26.00	67,600
Share split (reduction of par value to EUR 1) June 21, 2018	67,600	1.00	67,600
Capital increase from corporate funds, June 21, 2018	93,600	1.00	93,600
Shares June 21, 2018	161,200	1.00	161,200

As a result of the share split and the capital increase from corporate funds, earnings per share are calculated on the basis of a retrospective adjustment to the number of shares. The number of shares in circulation thus amounts to 161,200,000 and also corresponds to the weighted average.

Diluted earnings per share correspond to basic earnings per share.

For further information on the share split and capital increase, see chapter H.2 Events after the balance sheet date.

F. Notes to the consolidated statements of financial position

F.1. Intangible assets

Intangible assets	Goodwill	Licenses and acquired rights	Brands and customer relations	Internally generated intangible assets	Advance payments on intangible assets	Other assets	Total
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
Acquisition and production costs							
As at January 1, 2015	**97,439**	**308,353**	**8,329**	**48,289**	**1,526**	**6,245**	**470,181**
Currency translation differences	1,142	19,675	36	1,307	373	574	23,107
Additions	-	9,623	5	19,174	2,705	(25)	31,482
Disposals	-	(24,266)	(14)	(1)	-	-	(24,281)
Acquisitions classifying as business combinations	80,942	-	22,626	-	-	10,317	113,885
Reclassification in assets held for sale	-	-	-	-	-	-	-
Reclassifications	-	1,672	-	7	(1,679)	-	-
As at December 31, 2015	**179,523**	**315,056**	**30,981**	**68,776**	**2,925**	**17,112**	**614,373**
As at January 1, 2016	**179,523**	**315,056**	**30,981**	**68,776**	**2,925**	**17,112**	**614,373**
Currency translation differences	180	4,366	773	617	616	(4,335)	2,217
Additions	-	15,395	6,732	21,163	2,701	-	45,991
Disposals	-	(2,182)	(1)	(111)	2	-	(2,291)
Acquisitions classifying as business combinations	106,350	120	21,351	-	-	9,948	137,769
Reclassification in assets held for sale	-	-	-	-	-	-	-
Reclassifications	-	3,354	-	39	(3,393)	-	-
As at December 31, 2016	**286,053**	**336,109**	**59,836**	**90,485**	**2,850**	**22,725**	**798,057**
As at January 1, 2017	**286,053**	**336,109**	**59,836**	**90,485**	**2,850**	**22,725**	**798,057**
Currency translation differences	(16,890)	(20,446)	(6,189)	(2,721)	58	(1,364)	(47,551)
Additions	-	9,591	-	30,788	4,821	-	45,200
Disposals	-	(7,418)	-	(630)	(173)	(7,890)	(16,111)
Acquisitions classifying as business combinations	30,575	2,656	44,413	-	-	7,162	84,805
Reclassification in assets held for sale	-	-	-	-	-	-	-
Reclassifications	-	(1,445)	-	-	(2,420)	-	(3,865)
As at December 31, 2017	**299,737**	**319,047**	**98,060**	**117,921**	**5,136**	**20,633**	**860,535**
Accumulated amortization and impairment expenses							
As at January 1, 2015	**-**	**(253,050)**	**(1,863)**	**(3,482)**	**-**	**(1,428)**	**(259,823)**
Currency translation differences	-	(13,888)	(138)	(42)	-	(517)	(14,585)
Additions	-	(15,368)	(6,568)	(5,899)	-	(2,172)	(30,008)
Disposals	-	23,878	14	(163)	-	-	23,728
Reclassification in assets held for sale	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-
Reversal of impairment	-	-	-	-	-	-	-
As at December 31, 2015	**-**	**(258,429)**	**(8,555)**	**(9,587)**	**-**	**(4,117)**	**(280,688)**
As at January 1, 2016	**-**	**(258,429)**	**(8,555)**	**(9,587)**	**-**	**(4,117)**	**(280,688)**
Currency translation differences		(4,648)	(89)	3	-	1,372	(3,363)
Additions		(14,700)	(7,976)	(6,842)	63	(2,326)	(31,781)
Disposals	-	2,142	14	92	-	-	2,248
Reclassification in assets held for sale	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-
Reversal of impairment	-	-	-	-	-	-	-
As at December 31, 2016		**(275,635)**	**(16,606)**	**(16,335)**	**63**	**(5,071)**	**(313,584)**
As at January 1, 2017		**(275,635)**	**(16,606)**	**(16,335)**	**63**	**(5,071)**	**(313,584)**
Currency translation differences	-	17,725	1,167	619	-	426	19,937
Additions	-	(15,148)	(13,645)	(10,369)	-	(4,191)	(43,353)
Disposals	-	7,559	-	128	-	7,985	15,672
Reclassification in assets held for sale	-	-	-	-	-	-	-
Reclassifications	-	1,289	-	-	-	-	1,289
Reversal of impairment	-	-	-	-	-	-	-
As at December 31, 2017	**-**	**(264,211)**	**(29,084)**	**(25,957)**	**63**	**(850)**	**(320,039)**
Book value as at January 1, 2015	**97,439**	**55,303**	**6,466**	**44,807**	**1,526**	**4,817**	**210,358**
Book value as at December 31, 2015	**179,523**	**56,628**	**22,426**	**59,189**	**2,925**	**12,995**	**333,685**
Book value as at December 31, 2016	**286,053**	**60,474**	**43,230**	**74,150**	**2,913**	**17,654**	**484,473**
Book value as at December 31, 2017	**299,737**	**54,836**	**68,976**	**91,965**	**5,198**	**19,783**	**540,495**

To explain the development of goodwill, please refer to chapter C.3.1 Business combinations as well as F.2. Goodwill. The net currency translation difference from the acquisition of the assets of Bosch Transmission Systems Division (TRS) in Musashi/Japan in 2017 amounted to TEUR 3,037.

Additions to intangible assets increased in 2015 by 2.1% or TEUR 636 from TEUR 30,846 to TEUR 31,482. After a further increase in 2016, additions to intangible assets in the reporting period decreased by 1.7% or TEUR 791 from TEUR 45,991 to TEUR 45,200.

Additions to brands and customer relationships in 2015, 2016 and 2017 in particular resulted from business combinations in these years. For more detailed information, please refer to chapter C.3.1. Business combinations. Acquired brands and customer relationships are amortized according to their useful life.

The intangible assets internally generated relate primarily to the capitalized costs of the Group's development activities. Development costs are capitalized if the requirements defined in IAS 38 are met. Intangible assets internally generated are amortized according to their useful life.

The rise in other intangible assets in 2015 and 2016 is largely due to the assets acquired as part of business combinations. Please refer to chapter C.3.1. Business combinations for more information.

The consolidated statement of income is prepared based on the total cost method. Hence, expenditures assigned to the function research and development which were recognized as expense cannot be directly determined. The research and development costs recognized in the income statement as expense are retroactively determined on a simplified basis as presented in the following table:

Research and development costs recognized as expense

	2017 TEUR	2016 TEUR	2015 TEUR
Research and development expenses according to HGB	(358,827)	(328,449)	(347,341)
Other own work capitalized	31,768	21,075	19,207
Revenues-related expenditures for research and development	291,751	277,593	251,303
	(35,308)	**(29,781)**	**(76,831)**

F.2. Goodwill

According to IFRS, goodwill essentially has an unlimited useful life. Goodwill is divided between the group's cash-generating units and the value is assessed annually.

As a group of cash-generating units, Knorr-Bremse has identified regions within the divisions until fiscal 2016. These were Rail Vehicle Systems Europe/Africa, Rail Vehicle Systems North America, Rail Vehicle Systems South America, Rail Vehicle Systems Asia-Pacific[1], Commercial Vehicle Systems Europe/Africa, Commercial Vehicle Systems North America, Commercial Vehicle systems South America, Commercial Vehicle Systems Asia-Pacific. Due to the realignment of corporate management according to divisions, only the groups of cash-generating units, Rail Vehicle Systems (RVS) and Commercial Vehicle Systems, (CVS) will be defined from the 2017 financial year.

[1] Asia-Pacific contains Australia, China, Japan and South Korea

For the purpose of impairment testing, the following goodwill is allocated to the groups of cash-generating units of the Group as follows:

Goodwill	31/12/2017
	TEUR
Rail Vehicle Systems	**181,521**
Commercial Vehicle Systems	**118,216**
	299,737

Goodwill	12/31/2016	12/31/2015
	TEUR	TEUR
Europe/Africa	169,219	153,017
North America	8,362	8,149
South America	-	-
Asia-Pacific	8,622	-
Rail Vehicle Systems	**186,203**	**161,167**
Europe/Africa	93,996	12,667
North America	5,854	5,690
South America	-	-
Asia-Pacific	-	-
Commercial Vehicle Systems	**99,850**	**18,356**
	286,053	**179,523**

The calculation is based on cash flow forecasts based on projections for a period of five years. Knorr-Bremse uses a weighted average cost of capital (WACC) after tax. Cash flows after the five-year period are extrapolated using a growth rate based on the long-term growth rate of the segments.

The following table shows the valuation parameters used to determine the recoverable amount of the cash-generating units.

Assumptions from January 1, 2017 - all groups of cash-generating units (CGU group)	
Figures in percent	**12/31/2017**
CGU Group Rail Vehicle Systems	
Weighted average cost of capital (WACC)	8.2
Compound annual growth rate (CAGR) detailed planning period	3.7
Average EBITDA-margin detailed planning period	18.1
Compound annual growth rate - long-term planning period (CAGR)	2.0
Sustainable growth rate	1.0
CGU Group Commercial Vehicle Systems	
Weighted average cost of capital (WACC)	8.4
Compound annual growth rate (CAGR) detailed planning period	4.3
Average EBITDA-margin detailed planning period	17.1
Compound annual growth rate - long-term planning period (CAGR)	1.8
Sustainable growth rate	1.0

Assumptions until December 31, 2016 - all groups of cash-generating units (CGU group)		
Figures in percent	**12/31/2016**	**12/31/2015**
CGU Group Rail Vehicle Systems Europe/Africa		
Weighted average cost of capital (WACC)	8.2	8.8
Compound annual growth rate - detailed planning period (CAGR)	4.8	5.0
Average EBITDA-margin detailed planning period	14.3	14.7
Compound annual growth rate - long-term planning period (CAGR)	2.0	2.0
Sustainable growth rate	1.0	1.0
CGU Group Rail Vehicle Systems North America		
Weighted average cost of capital (WACC)	8.1	8.0
Compound annual growth rate - detailed planning period (CAGR)	5.1	4.5
Average EBITDA-margin detailed planning period	15.6	16.9
Compound annual growth rate - long-term planning period (CAGR)	2.0	1.0
Sustainable growth rate	1.5	1.5
CGU Group Rail Vehicle Systems Asia-Pacific		
Weighted average cost of capital (WACC)	9.1	n/a
Compound annual growth rate - detailed planning period (CAGR)	4.5	n/a
Average EBITDA-margin detailed planning period	23.8	n/a
Compound annual growth rate - long-term planning period (CAGR)	2.0	n/a
Sustainable growth rate	1.0	n/a
CGU Group Commercial Vehicle Systems Europe/Africa		
Weighted average cost of capital (WACC)	8.5	9.1
Compound annual growth rate - detailed planning period (CAGR)	3.9	2.4
Average EBITDA-margin detailed planning period	15.7	14.4
Compound Annual growth rate - long-term planning period (CAGR)	1.8	1.8
Sustainable growth rate	1.0	1.0
CGU Group Commercial Vehicle Systems North America		
Weighted average cost of capital (WACC)	9.9	9.8
Compound annual growth rate - detailed planning period (CAGR)	8.4	7.3
Average EBITDA-margin detailed planning period	18.8	20.3
Compound annual growth rate - long-term planning period (CAGR)	1.8	1.8
Sustainable growth rate	1.5	1.5

The determination of the recoverable amount for the respective group of cash-generating units is based in each case on the fair value less the costs of disposal, which was estimated by discounted future cash flows of the cash-generating unit. The measurements at fair value were classified as fair values in level 3 based on the input factors of the valuation technique used (see chapter A.5.).

The key assumptions used to estimate the recoverable amount are defined below. The values assigned to the key assumptions represent the management board's assessment of the future developments in the relevant industries and are based on historical values from external and internal sources.

The discount rate used was the historically calculated weighted average cost of capital (WACC) after company taxes based on a peer group.

The cash flow forecasts contained specific estimates for each group of cash-generating units for three years, a subsequent rough planning period of two years and a sustainable growth rate for the period thereafter. The sustainable growth rate was calculated based on the estimate of long-term inflation expectations by the management board and is based on the assumptions that a market participant would make.

The EBITDA forecast in the detailed planning phase takes account of past experiences and current data from the specific contracted order backlog.

Knorr-Bremse reviews the book value of goodwill at the end of each fiscal year for impairment.

The impairments tests did not indicate any need for impairment.

F.3. Property, plant and equipment

Property, plant and equipment

	Land, land rights and buildings, including buildings on land owned by others	Technical equipment and machinery	Other equipment, factory and office equipment	Advance payments and plant under construction	Total
	TEUR	TEUR	TEUR	TEUR	TEUR
Acquisition and production costs					
As at January 1, 2015	**520,535**	**675,384**	**565,029**	**103,841**	**1,864,788**
Currency translation differences	1,718	14,732	20,988	3,130	40,568
Additions	7,267	59,037	40,718	100,739	207,762
Disposals	(4,496)	(47,930)	(8,688)	(5,642)	(66,755)
Acquisitions classifying as business combinations	2,987	-	-	-	2,987
Reclassification in assets held for sale	(4,137)	-	-	-	(4,137)
Reclassifications	3,270	22,991	14,289	(40,550)	-
As at December 31, 2015	**527,145**	**724,214**	**632,338**	**161,518**	**2,045,214**
As at January 1, 2016	**527,145**	**724,214**	**632,338**	**161,518**	**2,045,214**
Currency translation differences	7,261	9,005	6,125	3,694	26,085
Additions	26,024	56,704	54,583	65,647	202,958
Disposals	(4,473)	(29,393)	(14,436)	(8,294)	(56,596)
Acquisitions classifying as business combinations	6,213	18,228	2,039	522	27,003
Reclassification in assets held for sale	(4,561)	-	-	-	(4,561)
Reclassifications	46,017	30,409	17,130	(93,556)	-
As at December 31, 2016	**603,626**	**809,167**	**697,779**	**129,531**	**2,240,102**
As at January 1, 2017	**603,626**	**809,167**	**697,779**	**129,531**	**2,240,102**
Currency translation differences	(16,135)	(31,276)	(38,724)	(7,451)	(93,586)
Additions	29,531	49,701	43,029	67,755	190,017
Disposals	(17,194)	(25,976)	(50,597)	(12,584)	(106,350)
Acquisitions classifying as business combinations	18,702	2,426	17,321	571	39,021
Reclassification in assets held for sale	(2,611)	(3,661)	(25,271)	-	(31,543)
Reclassifications	3,554	45,373	16,315	(61,376)	3,865
As at December 31, 2017	**619,473**	**845,754**	**659,852**	**116,446**	**2,241,526**
Accumulated depreciation and impairment expenses					
As at January 1, 2015	**(142,979)**	**(392,214)**	**(373,419)**	**(7,287)**	**(915,899)**
Currency translation differences	(2,486)	(6,506)	(12,545)	(90)	(21,627)
Additions	(17,402)	(61,879)	(60,821)	(374)	(140,477)
Disposals	4,583	33,564	7,894	1,688	47,729
Reclassification in assets held for sale	-	-	-	-	-
Reclassifications	-	-	-	-	-
Reversal of impairment	-	-	-	-	-
As at December 31, 2015	**(158,284)**	**(427,036)**	**(438,891)**	**(6,064)**	**(1,030,274)**
As at January 1, 2016	**(158,284)**	**(427,036)**	**(438,891)**	**(6,064)**	**(1,030,274)**
Currency translation differences	(878)	(5,700)	(6,048)	193	(12,433)
Additions	(15,658)	(54,996)	(62,643)	(581)	(133,878)
Disposals	1,086	22,287	12,522	-	35,896
Reclassification in assets held for sale	-	-	-	-	-
Reclassifications	(149)	(466)	616	-	-
Reversal of impairment	-	(186)	186	-	-
As at December 31, 2016	**(173,883)**	**(466,097)**	**(494,259)**	**(6,451)**	**(1,140,690)**
As at January 1, 2017	**(173,883)**	**(466,097)**	**(494,259)**	**(6,451)**	**(1,140,690)**
Currency translation differences	4,276	17,500	28,356	176	50,308
Additions	(17,944)	(63,361)	(61,274)	(180)	(142,758)
Disposals	13,334	21,443	50,502	3,836	89,115
Reclassification in assets held for sale	415	1,218	18,552	-	20,185
Reclassifications	11	10,020	(11,320)	-	(1,289)
Reversal of impairment	-	-	-	-	-
As at December 31, 2017	**(173,791)**	**(479,276)**	**(469,443)**	**(2,619)**	**(1,125,128)**
Book value as at January 1, 2015	**377,555**	**283,170**	**191,610**	**96,554**	**948,889**
Book value as at December 31, 2015	**368,861**	**297,178**	**193,447**	**155,454**	**1,014,940**
Book value as at December 31, 2016	**429,742**	**343,070**	**203,520**	**123,080**	**1,099,413**
Book value as at December 31, 2017	**445,683**	**366,478**	**190,410**	**113,828**	**1,116,398**

Additions to PPE increased in 2015 by 28.9% or TEUR 46,585 from TEUR 161,177 to TEUR 207,762 and reached a peak. In the following years, investments in property, plant and equipment decreased continuously and decreased in the reporting periods by 6.4% or TEUR 12,941 from TEUR 202,958 to TEUR 190,017.

The advance payments and construction in progress amounted to TEUR 155,454 as at December 31, 2015, which corresponds to an increase of TEUR 58,900 from the previous year. TEUR 23,279 of this resulted from the construction of the new research and development center TCK3, commenced in the previous year, which was completed in 2016.

In fiscal year 2017, property, plant and equipment with a total book value of TEUR 11,358 was reclassified as assets held for sale (see chapter F.8. Assets held for sale).

Other changes to PPE resulted from business combinations. Please refer to chapter C.3.1. Business combinations for more information.

The PPE item is subject to annual scheduled depreciation and amortization. Additions to depreciation and amortization include impairment losses of TEUR 7,185 as of December 31, 2016 and TEUR 13,652 as of December 31, 2015 (see chapter E.7. Depreciation and amortization).

As of December 31, 2017 land of the leasing companies K&D Progetto, MORCAR and Sanctor are encumbered by land charges. The land charge regarding K&D Progetto amounts to TEUR, 13,450, MORCAR amounts to TEUR 55,000 and Sanctor amounts to TEUR 28,924. The land charge of Megalith in the amount of TEUR 6,768 was deleted from the land register in 2018.

The carrying amounts of the land and buildings, as well as the values of the land charges, have developed as follows:

	2017		2016		2015	
	Carrying amount TEUR	Value land charge TEUR	Carrying amount TEUR	Value land charge TEUR	Carrying amount TEUR	Value land charge TEUR
K&D Progetto	8,828	8,829	9,326	9,327	9,800	9,800
Megalith	-	-	2,536	2,234	2,802	2,511
MORCAR	50,089	43,821	51,186	45,146	52,305	46,446
Sanctor	26,195	27,396	27,028	27,398	27.860	27,407
	85,112	**80,046**	**90,076**	**84,105**	**92,767**	**86,164**

F.4. Other financial assets

Other financial assets	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Derivatives	17,401	7,491	2,337
Equity instruments	56,467	88,686	2,574
Securities and other debt securities	2	51	11
Purchase price receivables from disposal of land	27,735	-	-
Other financial assets	4,015	4,359	4,121
	105,620	**100,587**	**9,043**
Current	12,518	6,425	1,757
Non-current	93,102	94,161	7,286

F.5. Trade accounts receivable and other assets

Trade accounts receivable	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Accounts receivable due from associated companies and related companies and parties	54,531	32,641	22,431
Trade accounts receivable	1,093,348	938,806	924,873
Current	1,147,879	971,447	947,304
Non-current	-	-	-

Trade accounts receivable increase by TEUR 42,985 from TEUR 904,319 to TEUR 947,304 in 2015. This trend continued unchanged in the 2016 fiscal year. Trade accounts receivable increased again in the reporting period by a further TEUR 176,432 to TEUR 1,147,879.

The increase in trade accounts receivable is mainly due to an increase in sales, which resulted in part from business combinations. Changes in impairments and a breakdown of trade accounts receivable by industry can be found in chapter F.14.2.

Other current and non-current assets	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Non-current			
Deposits	2,727	3,028	2,819
Other	2,432	1,402	1,014
Prepaid expenses	1,474	1,234	1,323
Tax receivables	4,906	-	-
Other non-current assets	**11,539**	**5,663**	**5,157**
Current			
Receivables from other taxes	58,935	58,396	58,594
Advance payments	5,817	15,807	5,918
Prepaid expenses	27,115	28,349	29,254
Deposits	5,288	3,396	3,268
Advance payments to third parties	3,754	2,805	3,465
Advanced on wages	1,114	1,812	2,947
Creditors with debit balances	2,176	1,417	2,038
Advance on travel expenses	170	289	228
Securities	-	74	82
Other	27,747	34,112	28,851
Other current assets	**132,118**	**146,458**	**134,646**
Other assets	**143,657**	**152,121**	**139,803**

F.6. Inventories

Inventories	Materials and supplies	Unfinished goods	Finished goods	Merchandise	Goods in transit	Advance payments	Total
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
Gross inventory as at December 31, 2015	**336,151**	**83,653**	**101,684**	**90,010**	**48,591**	**3,590**	**663,678**
Impairment to net realizable value	(21,959)	(585)	(8,015)	(7,622)	-	-	(38,181)
Currency translation differences	215	15	351	(557)	-	-	24
As at December 31, 2015	**314,406**	**83,083**	**94,020**	**81,831**	**48,591**	**3,590**	**625,520**
Gross inventory as at December 31, 2016	**339,987**	**86,627**	**97,404**	**101,210**	**45,242**	**3,557**	**674,027**
Impairment to net realizable value	(35,305)	(2,552)	(15,451)	(9,010)	-	-	(62,319)
Currency translation differences	(124)	(15)	(440)	-		-	(578)
As at December 31, 2016	**304,558**	**84,060**	**81,512**	**92,201**	**45,242**	**3,557**	**611,130**
Gross inventory as at December 31, 2017	**371,994**	**107,398**	**115,620**	**99,642**	**63,893**	**45,765**	**804,312**
Impairment to net realizable value	(26,664)	(4,752)	(13,940)	(8,140)	-	-	(53,496)
Currency translation differences	(1,438)	(417)	(442)	305	-	-	(1,993)
As at December 31, 2017	**343,891**	**102,228**	**101,238**	**91,807**	**63,893**	**45,765**	**748,823**

Inventories amounted to TEUR 748,823 as of December 31, 2017. Compared to the end of 2016, this represents an increase of TEUR 137,693 or 22.5%. The reason for this is the general increase in inventories in all areas, with raw materials and supplies in particular increasing by TEUR 39,333. As of December 31, 2016, inventories totaled TEUR 611,130, a decrease of TEUR 14,390 compared to 2015. The decrease of TEUR 12,508 is mainly due to a decrease in finished goods. In addition, the TEUR 13,346 higher impairments for raw materials and supplies compared to the previous year 2015 lead to a decrease in inventories. The increase of TEUR 10,370 in merchandise had the opposite effect In the 2016 fiscal year. As of December 31, 2015, inventories totaled TEUR 625,520, a decrease of TEUR 54,426.

F.7. Cash and cash equivalents

Cash and cash equivalents	12/31/2017	12/31/2016	12/31/2015
	TEUR	TEUR	TEUR
Cash and cash equivalents	**1,600,033**	**1,720,827**	**1,360,548**

On all balance sheet dates, there were no cash and cash equivalents of the categories "fair value through profit and loss" or "recognition of remeasurement gains or losses in OCI".

Cash and cash equivalents include cash on hand and, primarily, at-call bank balances.

The cash and cash equivalents are measured at acquisition cost and adapted by an adjustment for the probability of default in relation to the banks (“expected credit loss”) based on a public issuer rating for core and principal commercial banks. For the small percentage of liquid funds outside the core and principal banks, these balances are adjusted based on the average values of the probabilities of default of the core and principal commercial banks. Further information on the rating is provided in chapter H.1.4 Credit risks.

F.8. Assets held for sale or disposal groups

Assets held for sale or disposal groups	12/31/2017	12/31/2016	12/31/2015
	TEUR	TEUR	TEUR
Assets from disposal groups	28,624	1,077	-
Assets held for sale	3,492	4,561	4,137
Total	**32,116**	**5,638**	**4,137**
Liabilities directly related to assets from disposal groups	38,524	763	-

F.8.1. Assets or disposal groups held for sale

As at December 31, 2017, the two disposal groups “Sydac” and “Blueprint” were classified as held for sale.

Sydac

On September 30, 2015, the management board submited to sell the simulation business in the Rail Vehicles segment. The disposal plan was specified by preparing a sales prospectus and establishing initial talks with potential buyers in July 2017. Since the sale of the existing simulation business does not pertain to a separate segment, this continues to be presented as a component of the segment Rail Vehicles until a sale occurs.

The simulation business is comprised of Sydac Australia, including the subsidiary Sydac UK. The Sydac disposal group also includes the assets belonging to the simulation business, which are owned by Train Dynamic Systems in the USA and Knorr-Bremse Technology Center India in India as at Sunday, December 31, 2017. The assets will be released to a new company as soon as a buyer is identified.

Regarding the status of the negotiations about the sale see chapter H.2.

The assets and liabilities are recognized at the book values as at December 31, 2017. A fair value measurement on the basis of existing non-binding purchase price offers resulted in an impairment of the assets in the amount of TEUR 5,322. The need for write-downs was recorded under depreciation and write-downs.

The Sydac disposal group includes the following assets and liabilities, measured at fair value less costs to sell:

Sydac	12/31/2017 TEUR
Inventories	35
Other financial assets	354
Trade accounts receivable and other assets	2,123
Income tax assets	568
Assets held for sale	**3,080**
	TEUR
Other provisions	1,202
Trade accounts payable and other liabilities	2,435
Income tax liabilities	75
Liabilities directly related to assets from disposal groups	**3,712**

Blueprint

On February 24, 2017, the management board resolved to sell the vehicle maintenance business in the Rail Vehicles segment. The vehicle maintenance business bundled in the "Blueprint" disposal group comprises Kiepe Electric UK Holding Ltd. including Kiepe UK Ltd., Knorr-Bremse RailService UK Ltd. and Swedtrac RailService AB Sweden. Following the preparation of the sales prospectus, initial contacts and discussions with potential buyers took place at the end of July 2017. Since the sale of the existing vehicle maintenance business does not pertain to a separate segment, this continues to be presented as a component of the segment Rail Vehicles until a sale occurs.

The Swedish part of the vehicle maintenance business as part of the Blueprint disposal group was sold to the purchaser Stadler Service Sweden AB on January 12, 2018. A sales price of TEUR 6,261 was achieved for Swedtrac RailService AB Sweden.

With regard to the status of the negotiation about sale of the remaining vehicle maintenance business based in the United Kingdom (Kiepe Electric UK Holding Ltd. including Kiepe UK Ltd. and Knorr-Bremse RailService UK Ltd.) see chapter H.2.

The assets and liabilities are recognized at the book values as at December 31, 2017. A fair value measurement on the basis of existing, non-binding purchase price offers resulted in a write-down requirement of TEUR 20,046 for the assets, which was recorded under other operating expenses.

The Blueprint disposal group includes the following assets and liabilities, measured at fair value less costs to sell:

Blueprint	12/31/2017 TEUR
Property, plant and equipment	1,162
Inventories	7,293
Other financial assets	945
Trade accounts receivable and other assets	15,804
Income tax assets	340
Assets held for sale	**25,544**
	TEUR
Provisions for pensions	183
Other provisions	1,095
Other financial liabilities	285
Trade accounts payable and other liabilities	33,249
Liabilities directly related to assets from disposal groups	**34,812**

F.8.2. Assets held for sale

Assets held for sale	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Land	-	4,561	4,137
Property, plant and equipment	3,492	-	-
Assets held for sale	**3,492**	**4,561**	**4,137**

In December 2017, the ,management board decided to dispose of logistics assets not required for operations.
The sale took place on February 9, 2018.

In the 2015, and 2016 fiscal years, the Group sold properties that were not used in the operating business. The properties identified as assets held for sale on the respective cut-off dates were all sold in the following year.

F.9. Equity

F.9.1. Subscribed capital

The Company's share capital of TEUR 67,600 is divided into 2,600,000 fully voting bearer shares with a par value of EUR 26.00 each and fully paid up. Stella Vermögensverwaltungs-GmbH, Grünwald/Germany, TIB Vermögens- und Beteiligungsholding GmbH, Grünwald/Germany, and KB Holding GmbH, Grünwald/Germany, have informed the Company that they hold a majority interest in the Company, either directly or indirectly. According to the management board, the shares of Stella are mainly held by Mr. Heinz Hermann Thiele since July 6, 2017.

With regard to the Company's residual assets, all shares have the same rank.

F.9.2. Capital reserves

The Company's capital reserves as at December 31, 2017 amount to TEUR 1,310 (December 31, 2016: TEUR 1,860; December 31, 2015: TEUR 1,860).

In 1988, TDM 6,725 was transferred to the capital reserve, which was achieved in excess of the nominal amount in the capital increase in connection with the merger with Carl Hasse & Wrede GmbH, Berlin. In 1989, an amount of TDM 6,425 from the capital reserves was converted to capital stock pursuant to the resolution of the Annual Shareholders' Meeting of April 27, 1989. As at December 31, 1989, capital reserves amounted to TDM 300, which translates to TEUR 153.

In addition, an amount of TEUR 1,707 was transferred as of January 1, 2014 to capital reserves as part of a share-based payment with compensation through equity instruments in connection with the issue of shares in two "Black Empowerment Companies".

In 2017 changes were made to the shareholding structure according to which the shares of a "Black Empowerment Entity" were repurchased for a price of TEUR 550. The capital reserve decreased as of December 31, 2017 by this amount to TEUR 1,310 (see Note H.11.).

F.9.3. Retained earnings

Retained earnings contain the legal reserve as well as the accumulated earnings of the companies included in the consolidated financial statements, if they have not been distributed. Moreover, this item reflects all group influences on equity.

Retained earnings	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Legal reserves	6,607	6,607	6,607
Other retained earnings	100,349	88,249	74,577
	106,956	**94,856**	**81,184**

F.9.4. Other equity components

Other equity components contain the changes in equity with no effect on profit and loss. This includes currency translation differences as a result of the translation of annual financial statements of foreign businesses, changes in the measurement of financial assets whose changes in valuation are optionally recognized in OCI, the actuarial gains and losses from the measurement of benefits to employees reported in the fiscal year, as well as taxes recognized directly in equity.

F.9.5. Dividends

In the fiscal years, Knorr-Bremse AG declared and paid the dividends summarized in the following table:

Dividends	2017 TEUR	2016 TEUR	2015 TEUR
140 EUR per bearer share (2016: 140 EUR, 2015: 120 EUR)	**364,000**	**364,000**	**312,000**

The dividends relate in all cases to the prior year. For the 2017 fiscal year, in the 2018 fiscal year a dividend of 327 EUR per bearer share was declared and therefore paid in the total amount of TEUR 850,200.

F.9.6. Capital management

The group's objective is to maintain a strong capital base and ensure the sustainable development of the Company.

To this end, the Group prepares short-term and long-term liquidity planning. Short-term liquidity planning covers a three-month planning horizon with precise expected cash flows including currency changes. Long-term liquidity planning is carried out twice a year with a planning horizon of three years.

To manage free cash flow, the Group has established a net working capital management and investment process. Demand-oriented investments, which serve to maintain and further develop the Company, can be made within the annual target of around 3.5% to

4.5% of annual sales. The goal of 40 to 50 days for net working capital is achieved by closely monitoring the divisions' working capital positions and liquidity management programs such as factoring and the Supplier Early Payment Program.

In addition, Knorr-Bremse makes targeted use of retained earnings to maintain a stable equity ratio. In future, the Group plans to distribute between 40% and 50% of consolidated net income as dividends and to retain the remaining profit. This serves to strengthen the equity ratio with a target figure of between 20% and 30%. The Group defines the equity ratio as the ratio of equity to total assets.

F.10. Employee benefits

In various countries Knorr-Bremse makes pension commitments to its employees based on defined benefit plans, the benefits of which depend either on the employee's pensionable remuneration or contain other guarantees. Pension commitments are measured based on actuarial principles using the projected unit credit method. The pension plan accruals reported in the balance sheet correspond to the present value of the defined benefit obligation in consideration of future salary and pension increases as at the reporting date, less the fair value of the plan assets. An excess of plan assets beyond the present value of the defined benefit obligation is limited to the present value of the benefit attributable to the Company, from the reimbursement of contributions or the reduction of future contribution payments.

The defined benefit plans in Germany and United Kingdom represent the majority of the total gross obligation at approximately 85%. Pension obligations from defined benefit pension schemes also exist in France, India, Italy, Japan, Mexico, Austria, Sweden, Switzerland, South Korea, Turkey and the USA. In Germany, United Kingdom, Japan, South Korea, Austria (in some cases), and the USA, the benefits are granted on a voluntary basis, while, in the other countries, the benefits are based on statutory regulations.

Germany:

Employees benefits are granted from pension schemes for which the benefits in old age, in the event of disability or death are calculated depending on the period of employment, the salary at the time of commencement of the annuity, and the relevant assessment ceiling in the statutory pension insurance scheme (BBG), as well as a defined benchmark figure. The benefits are paid in the form of a pension. The plan was closed to new admissions with effect from January 1, 2003. Plan participants primarily include beneficiaries. Moreover, individual plans also exist, especially amongst managers, which were concluded on an individual contractual basis.

The obligations in Germany are largely completely unfunded, which means that no plan assets exist, which are solely intended to meet pension commitments – with the exception of one company for which a pledged reinsurance policy exists.

In Germany, the interest rate risk as well as the life expectancy of the plant participants play a major role as part of a risk consideration, as the benefits are primarily paid in the form of an annuity. However, the risk was reduced by closing the pension plan to new admissions.

United Kingdom:

In United Kingdom, the employees and managers benefit from defined benefit plans, which are closed to new admissions; in addition, existing plan participants are no longer entitled to any increase in entitlements, with the exception of a few special cases for which the benefits continue to increase together with the salary. At the time, the plan was introduced on a voluntary basis. The plan provides for benefits upon retirement and death, which depend on the salary and period of employment up to the closure of the plan in 2012. Payment essentially occurs in the form of an annuity, whereby part of the benefit can also be paid out as a one-off capital payment at the request of the plan participant.

In the United Kingdom, a board of trustees, which is comprised of company and employee representatives, is responsible for asset management. The investment strategy targets long-term earnings with low volatility.

The pension schemes in the United Kingdom are exposed to the interest rate risk, due to the payment as a lifelong pension, as well as the risk of a higher life expectancy than assumed so that the pensions will have to be paid out for longer than planned. However, the risks were reduced by closing the pension plan. Moreover, an investment risk also exists, in that the plan assets may not develop as expected and that the plan assets may therefore only be able to partially offset changes to the scope of obligations.

Employee benefits	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Assets from employee benefits	**21,625**	**13,799**	**7,637**
Provisions for pensions	(310,234)	(316,654)	(284,764)
Other personnel related provisions	(43,639)	(42,087)	(43,781)
Provisions for employee benefits	**(353,873)**	**(358,741)**	**(328,545)**
Non-current	(338,667)	(345,235)	(313,575)
Current	(15,206)	(13,506)	(14,970)

Please refer to chapter E.5. with regard to expenses in connection with defined benefit plans.

F.10.1. Change in net debt

Change in net debt

	Defined benefit obligation			Fair value of plan asset			Net debt (net assets) from defined benefit plans		
	2017 TEUR	2016 TEUR	2015 TEUR	2017 TEUR	2016 TEUR	2015 TEUR	2017 TEUR	2016 TEUR	2015 TEUR
As at January 1	**(548,323)**	**(495,096)**	**(470,433)**	**245,468**	**217,968**	**175,542**	**(302,855)**	**(277,128)**	**(294,891)**
Current service costs	(10,031)	(7,343)	(7,480)				(10,031)	(7,343)	(7,480)
Past service costs	(301)	-	1,861				(301)	-	1,861
Interest income				5,965	7,465	7,259	5,965	7,465	7,259
Interest expense	(11,222)	(12,798)	(15,144)				(11,222)	(12,798)	(15,144)
Net cash flow	7,342	5,033	9,605	1,447	8,557	9,328	8,789	13,590	18,932
Remeasurements	**10,763**	**(75,188)**	**16,918**	**4,884**	**37,826**	**(6,210)**	**15,647**	**(37,363)**	**10,708**
a) Return on plan assets				4,884	37,826	(6,210)	4,884	37,826	(6,210)
b) Actuarial gains / losses (change in demographic assumptions)	1,182	834	460				1,182	834	460
c) Actuarial gains / losses (change in financial assumptions)	13,073	(75,531)	22,173				13,073	(75,531)	22,173
d) Effect of experience adjustments	(3,493)	(491)	(5,715)				(3,493)	(491)	(5,715)
Effect of changes in foreign exchange rates	11,771	27,642	(15,747)	(10,517)	(28,598)	12,864	1,253	(956)	(2,883)
Employer contributions	12,345	13,037	12,426	-	-	-	12,345	13,037	12,426
Participant contributions	(846)	(745)	(562)	846	745	562	-	-	-
Increase / decrease due to effect of business combinations / divestitures	(16,620)	(2,865)	(26,538)	8,419	1,505	18,623	(8,200)	(1,360)	(7,915)
As at December 31	**(545,122)**	**(548,323)**	**(495,096)**	**256,513**	**245,468**	**217,968**	**(288,609)**	**(302,855)**	**(277,128)**
thereof									
Germany	(254,955)	(256,550)	(231,267)	1,575	1,534	-	(253,380)	(255,017)	(231,267)
United Kingdom	(193,742)	(206,669)	(187,791)	215,145	214,933	193,536	21,403	8,263	5,745
Other countries	(96,425)	(85,104)	(76,038)	39,793	29,002	24,432	(56,632)	(56,102)	(51,606)

F.10.2. Plan assets

Some of pension obligations are secured by assets that correspond to the definition of plan assets in accordance with IAS 19. For these pension obligations, the net debt is reported from the defined benefit obligation and the fair value of the plan assets.

For plans with a positive excess of the fair value of plan assets over the present value of the related obligation, the resulting asset is tested for impairment and, if necessary, limited to the present value of the economic benefits that the Group can derive from refunds or reductions in future contributions.

The plan assets primarily contain debt securities, equity instruments, and qualifying insurance policies, which are largely held by long-term, external carriers (funds). Plan assets are mainly held in the United Kingdom and Switzerland.

In order to reduce asset and liability risks (Asset-Liability-Matching, ALM), Knorr-Bremse has developed a risk minimization program in cooperation with trustees. The investment strategy is transferred to a qualified actuary who implements the investment strategy in relation to the pension plans and carries out the investment strategy.

The assets controlled as part of this transfer are allocated to an "Growth" or "Liability Hedging" portfolio. The allocation ratio is agreed at regular intervals.

The "Growth" portfolio comprises a combination of equities, fixed-income securities and other available funds that are available in the manager's portfolio. The fund manager determines the investment mix.

The liability hedging portfolio comprises LDI funds (Liability Driven Investment), fixed-income securities, index-linked funds and other available funds that are available in the manager's portfolio. The fund manager determines the investment mix.

The objectives of the risk minimization strategy are to minimize the risk from the pension plans by increasing the allocation of assets to the liability hedging portfolio. Such reallocation must take place if agreed key figures are exceeded in order to make it possible to align assets with liabilities.

The pension obligations in Switzerland are largely covered by legally independent pension schemes. Any return of funds to the employer is precluded. The contracts meet the requirements for qualifying insurance policies pursuant to IAS 19.8.

The plan assets include:

Plan assets	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Cash and cash equivalents	1,866	273	1,054
Equity instruments	39,496	42,985	48,486
Debt instruments	139,622	133,715	112,674
Real estate	-	-	4,175
Assets held by insurance companies	36,425	29,723	23,778
Other	39,105	38,772	27,802
Fair value of plan assets	**256,513**	**245,468**	**217,968**
thereof			
United Kingdom	215,145	214,933	193,536
Other countries	41,368	30,536	24,432
Return on plan assets (incl. interest income)	**10,849**	**45,291**	**1,048**
thereof			
United Kingdom	8,599	44,626	979
Other countries	2,250	665	70

Debt securities include government bonds, which are essentially linked to an inflation index, and government bonds with a savings target, which is achieved through interest payments.

F.10.3. Actuarial assumptions

The following lists the key actuarial assumptions (in the form of weighted averages in %) used on the reporting date.

Actuarial assumptions	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Defined benefit obligation			
Discount rate	2.15%	2.09%	2.97%
Salary increase rate	3.06%	3.12%	3.04%
Pension increases	1.97%	2.11%	2.05%
Immediate trend rate	n/a	8.10%	8.40%
Ultimate trend rate	n/a	3.89%	3.89%

The most important defined benefit plans exist in Germany and the United Kingdom. In Germany, the generation-dependent RT 2005 G mortality tables by Prof. Dr. Klaus Heubeck are used as the biometric basis for measuring these obligations, while the S2PA mortality tables with forecast CMI 2014 are used in the United Kingdom. Age-dependent turnover tables are also taken into account.

Starting in 2017, the consideration of current and long-term growth trends no longer has relevance for the Group, since all recipients of the US "Post-Retirement Medical Plan" receive solely benefits which are independent of growth trends.

F.10.4. Future cash flows

In the following fiscal year, employer payments into the plan assets are expected to amount to TEUR 9,302. As of December 31, 2017, average annual benefit payments from pension plans in the amount of TEUR 21,360 (2016: TEUR 19,290 and 2015: TEUR 18,815) are expected for the next ten years.

As of December 31, 2017, the weighted average term of the defined benefit obligation was 16.19 years (2016: 16.59 years and 2015: 15.20 years).

F.10.5. Sensitivity analysis

The following sensitivity analysis presents the effects of reasonable changes of individual factors on the defined benefit obligation as at the reporting date.

Sensitivity analysis	12/31/2017 TEUR		12/31/2016 TEUR		12/31/2015 TEUR	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
Present value of defined benefit obligation						
Change in discount rate 0.5%	(42.914)	45.021	(40.634)	50.870	(34.740)	41.423
Change in salary increase rate 0.5%	4.553	(7.655)	7.546	(2.991)	5.451	(3.245)
Change in future pension increases 0.5%	25.998	(24.490)	30.337	(21.108)	24.514	(18.276)
Average duration of defined benefit obligation (in years)						
Change in discount rate 0.5%	15,75	16,55	16,19	17,00	14,84	15,55

Although the analysis does not take account of the complete distribution of the expected cash flows according to the plan, it provides an approximate value of the sensitivity of the presented assumptions.

F.11. Other provisions

Other provisions	Warranty provisions	Contractual provisions	Other provisions	Total
	TEUR	TEUR	TEUR	TEUR
As at January 1, 2015	**337,599**	**33,259**	**88,905**	**459,763**
Currency translation differences	14,005	259	(64)	14,200
Additions	113,917	11,552	32,929	158,397
Disposals	(222)	-	(581)	(803)
Utilization	(88,660)	(10,210)	(46,817)	(145,687)
Reclassifications	(1,744)	-	(79)	(1,824)
Reversals	(28,670)	(18,137)	(4,094)	(50,901)
Compounding	5,487	4	150	5,641
As at December 31, 2015	**351,712**	**16,727**	**70,349**	**438,788**
thereof current	153,493	10,006	16,724	180,223
thereof non-current	198,219	6,721	53,625	258,565
As at January 1, 2016	**351,712**	**16,727**	**70,349**	**438,788**
Currency translation differences	(3,821)	(14)	(67)	(3,903)
Additions	203,806	8,465	80,960	293,231
Disposals	215	-	-	215
Utilization	(151,155)	(6,555)	(54,959)	(212,669)
Reclassifications	-	-	(21)	(21)
Reversals	(39,219)	(6,170)	(2,453)	(47,842)
Compounding	5,324	-	103	5,427
As at December 31, 2016	**366,861**	**12,453**	**93,911**	**473,225**
thereof current	187,403	8,065	31,457	226,925
thereof non-current	179,458	4,388	62,454	246,301
As at January 1, 2017	**366,861**	**12,453**	**93,911**	**473,225**
Currency translation differences	(13,464)	(69)	10	(13,524)
Additions	256,078	33,369	63,157	352,604
Disposals	(1,095)	-	18	(1,077)
Utilization	(227,778)	(7,143)	(50,352)	(285,273)
Reversals	(48,402)	(7,146)	(9,468)	(65,016)
Compounding	3,782	10	1,130	4,922
As at December 31, 2017	**335,981**	**31,475**	**98,406**	**465,862**
thereof current	189,396	9,480	32,839	231,714
thereof non-current	146,585	21,995	65,568	234,148

The provisions for warranty obligations cover obligations from cases that have already occurred as well as future obligations that are based on empirical values. The latter are essentially directly related to the development of revenues. The provisions are based on estimates of historical warranty data of similar products and services.

Contract accruals contain onerous contract provisions (2017: TEUR 26,218; 2016: TEUR 4,593; 2015: TEUR 7,749) as well as provisions based on agreed contractual penalties (2017: TEUR 5,257; 2016: TEUR 7,860; 2015: TEUR 8,978). The increase in provisions for onerous contracts is mainly due to additions to provisions for onerous rental contracts.

Other provisions relate to individual identifiable risks and obligations, especially environmental protection obligations and process risks.

Expenses of TEUR 4,922 in 2017, TEUR 5,427 in 2016, and TEUR 5,641 in 2015 have been recognized in the income statement from compounding provisions.

F.12. Trade accounts payable and other liabilities

Trade accounts payable	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Trade accounts payable	**(894,119)**	**(754,458)**	**(727,042)**
Current	(894,119)	(754,458)	(727,042)
Non-current	-	-	-

Other liabilities	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Advance payments received	(14,454)	(10,409)	(10,315)
Deferred income	-	(5,962)	(6,844)
Other	(2,892)	(9,567)	(8,967)
Non-current	**(17,346)**	**(25,938)**	**(26,125)**
Advance payments received	(91,536)	(95,953)	(80,915)
Liabilities from other taxes	(44,831)	(42,901)	(53,838)
Outstanding invoices	(33,817)	(34,062)	(34,822)
Deferred income	(19,077)	(18,184)	(15,914)
Social security liabilities	(16,023)	(15,842)	(14,852)
Debtors with credit balances	(4,606)	(1,585)	(3,513)
Other	(59,492)	(76,947)	(67,160)
Current	**(269,382)**	**(285,475)**	**(271,014)**
Other liabilities	**(286,729)**	**(311,413)**	**(297,139)**

Trade accounts payable increase by TEUR 47,478 from TEUR 679,564 to TEUR 727,042 in 2015. This trend continued unchanged in the 2016 fiscal year. Trade accounts payable increased again in the reporting period by a further TEUR 139,661 to TEUR 894,119.

Both a significant increase in sales in the years 2015 and 2017 and the business combinations in 2015, 2016 and 2017 lead to an increase in trade accounts payable.

Advance payments received decreased by TEUR 14,584 in 2015 from TEUR 105,814 to TEUR 91,230. In 2016, advance payments received increased once again with an amount of TEUR 106,362 to a similar level and remained in the reporting period with TEUR 105,990 relatively constant.

Other liabilities are valued as described in chapter D.19.

F.13. Financial liabilities

Financial liabilities	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Derivates	(7,308)	(23,660)	(22,291)
Bank loans	(230,567)	(227,303)	(245,149)
Bonds and debt instruments	(497,390)	(496,701)	-
Liabilities resulting from options for minority interests	(379,616)	(367,143)	(327,019)
Lease liabilities	(35,977)	(27,448)	(21,478)
Other financial liabilities	(158,843)	(145,301)	(136,721)
	(1,309,701)	**(1,287,556)**	**(752,658)**
Current	(570,955)	(531,287)	(490,717)
Non-current	(738,746)	(756,269)	(261,941)

Effective December 8, 2016, Knorr-Bremse AG issued a bond with a volume of EUR 500 million, a term of five years (final maturity) and a nominal interest rate of 0.5% p.a. on the EURO MTF stock exchange in Luxembourg. The proceeds of the bond will be used to finance the growth of the Knorr-Bremse Group. In addition, the existing Debt Issuance Program from 2016 was extended for another year in fiscal 2017. This opens up the possibility for the Group to issue new bonds with a total volume of up to EUR 1 billion on the Euro MTF exchange in Luxembourg in 2018 on the basis of standardized documentation.

	Liabilities				Derivative financial Instruments (assets) / liabilities	Equity		
	Liabilities to credit institutions	Bonds and debt instruments	Liabilities resulting from options for minority interests	Lease liabilities	Interest rate swaps - liabilities	Retained earnings	Non-controlling interests	Total
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
Balance as of January 1, 2017	**227,303**	**496,701**	**367,143**	**27,448**	**7,505**	**94,856**	**152,574**	**1,373,531**
Change in cash flow from financing activities								
Proceeds from the equity contributions by minority shareholders	-	-	-	-	-	-	151	151
Proceeds from borrowings	2,983	-	-	-	-	-	-	2,983
Disbursements from the repayment of borrowings	(18,272)	-	-	-	-	-	-	(18,272)
Disbursements for finance lease liabilities	-	-	-	(5,332)	-	-	-	(5,332)
Interest paid	(16,145)	(2,500)	-	(1,507)	-	-	-	(20,152)
Dividends paid to parent company shareholders	-	-	-	-	-	(385,073)	-	(385,073)
Dividends paid to minority shareholders	-	-	-	-	-	-	(48,017)	(48,017)
Net proceeds from factoring	13,645	-	-	-	-	-	-	13,645
Cash flow from financing activities	**(17,789)**	**(2,500)**	-	**(6,839)**	-	**(385,073)**	**(47,866)**	**(460,067)**
Changes arising from obtaining or losing control of subsidiaries or other businesses	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**3**
Effects in foreign exchange rates	**(486)**	**-**	**-**	**(631)**	**-**	**-**	**-**	**(1,116)**
Other changes relating to liabilities								
Other non-cash expenses and income	5,272	-	12,472	-	-	-	-	17,744
Interest income	-	-	-	-	(1,272)	-	-	(1,272)
Interest expense	16,264	3,189	-	1,507	-	-	-	20,960
New finance leases	-	-	-	14,491	-	-	-	14.491
Total other changes, relating to liabilities	**21,535**	**3,189**	**12,472**	**15,998**	**(1,272)**			**51,923**
Total other changes, relating to equity						**397,173**	**43,242**	**440,415**
Balance as of December 31, 2017	**230,567**	**497,390**	**379,616**	**35,977**	**6,233**	**106,956**	**147,951**	**1,404,689**

F.14. Financial instruments

F.14.1. Financial instruments

The following table presents the non-netted book values and the fair values of the financial assets and liabilities as well as the categorization of the individual items. For the classification (hierarchy levels) of the fair value pursuant to IFRS 13, please refer to the chapter on the accounting and measurement methods.

Information in accordance with IFRS 9

	12/31/2017							
	Book value TEUR				Fair value TEUR			
Category	FVTPL	FVOCI	At amortized cost	Total	Level 1	Level 2	Level 3	Total
Financial assets	**34,026**	**46,084**	**2,773,422**	**2,853,532**	**46,765**	**17,401**	**9,702**	**73,868**
Derivative financial instruments	17,401	-	-	17,401	-	17,401	-	17,401
Equity instruments	16,625	39,842	-	56,467	46,765	-	9,702	56,467
Securities and debt instruments	-	-	2	2	-	-	-	-
Receivables*	-	6,242	1,141,637	1,147,879	-	-	-	-
Purchase price receivables from sale of land	-	-	27,735	27,735	-	-	-	-
Other financial receivables*	-	-	4,015	4,015	-	-	-	-
Cash and cash equivalents*	-	-	1,600,033	1,600,033	-	-	-	-
Financial liabilities	**(7,308)**	**-**	**(2,196,512)**	**(2,203,820)**	**(505,700)**	**(245,203)**	**(379,616)**	**(1,130,519)**
Derivative financial instruments	(7,308)	-	-	(7,308)	-	(7,308)	-	(7,308)
Bank loans	-	-	(230,567)	(230,567)	-	(237,895)	-	(237,895)
Liabilities resulting from options for minority interests	-	-	(379,616)	(379,616)	-	-	(379,616)	(379,616)
Bonds and debt instruments	-	-	(497,390)	(497,390)	(505,700)	-	-	(505,700)
Lease liabilities	-	-	(35,977)	(35,977)	-	-	-	-
Other financial liabilities*	-	-	(158,843)	(158,843)	-	-	-	-
Trade accounts payable*	-	-	(894,119)	(894,119)	-	-	-	-

*without information on fair value based on the fact that net book value approximately equals fair value

	12/31/2016							
	Book value TEUR				Fair value TEUR			
Category	FVTPL	FVOCI	At amortized cost	Total	Level 1	Level 2	Level 3	Total
Financial assets	**15,746**	**88,830**	**2,688,284**	**2,792,860**	**88,051**	**7,491**	**635**	**96,177**
Derivative financial instruments	7,491	-	-	7,491	-	7,491	-	7,491
Equity instruments	8,255	80,431	-	88,686	88,051	-	635	88,686
Securities and debt instruments	-	-	51	51	-	-	-	-
Receivables*	-	8,399	963,048	971,447	-	-	-	-
Purchase price receivables from sale of land	-	-	-	-	-	-	-	-
Other financial receivables*	-	-	4,359	4,359	-	-	-	-
Cash and cash equivalents*	-	-	1,720,827	1,720,827	-	-	-	-
Financial liabilities	**(23,660)**	**-**	**(2,018,354)**	**(2,042,015)**	**(505,300)**	**(258,606)**	**(367,143)**	**(1,131,050)**
Derivative financial instruments	(23,660)	-	-	(23,660)	-	(23,660)	-	(23,660)
Bank loans	-	-	(227,303)	(227,303)	-	(234,946)	-	(234,946)
Liabilites resulting from options for minority interests	-	-	(367,143)	(367,143)	-	-	(367,143)	(367,143)
Bonds and debt instruments	-	-	(496,701)	(496,701)	(505,300)	-	-	(505,300)
Lease liabilities	-	-	(27,448)	(27,448)	-	-	-	-
Other financial liabilities*	-	-	(145,301)	(145,301)	-	-	-	-
Trade accounts payable*	-	-	(754,458)	(754,458)	-	-	-	-

*without information on fair value based on the fact that net book value approximately equals fair value

	12/31/2015							
	Book value TEUR				Fair value TEUR			
Category	**FVTPL**	**FVOCI**	**At amortized cost**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets	**4,911**	**6,116**	**2,305,868**	**2,316,894**	**1,966**	**2,337**	**608**	**4,911**
Derivative financial instruments	2,337	-	-	2,337	-	2,337	-	2,337
Equity instruments	2,574	-	-	2,574	1,966	-	608	2,574
Securities and debt instruments	-	-	11	11	-	-	-	-
Receivables*	-	6,116	941,188	947,304	-	-	-	-
Purchase price receivables from sale of land	-	-	-	-	-	-	-	-
Other financial receivables*	-	-	4,121	4,121	-	-	-	-
Cash and cash equivalents*	-	-	1,360,548	1,360,548	-	-	-	-
Financial liabilities	**(22,291)**	**-**	**(1,457,409)**	**(1,479,700)**	**-**	**(276,337)**	**(327,019)**	**(603,356)**
Derivative financial instruments	(22,291)	-	-	(22,291)	-	(22,291)	-	(22,291)
Bank loans	-	-	(245,149)	(245,149)	-	(254,046)	-	(254,046)
Liabilities resulting from options for minority interests	-	-	(327,019)	(327,019)	-	-	(327,019)	(327,019)
Bonds and debt instruments	-	-	-	-	-	-	-	-
Lease liabilities	-	-	(21,478)	(21,478)	-	-	-	-
Other financial liabilities*	-	-	(136,721)	(136,721)	-	-	-	-
Trade accounts payable*	-	-	(727,042)	(727,042)	-	-	-	-

*without information on fair value based on the fact that net book value approximately equals fair value

The market value of financial derivatives is the price at which a party would take over the rights and/or obligations from another party. The market values are calculated based on the market information available at the reporting date using recognized measurement methods:

Forward exchange contracts and interest rate hedging contracts are valued on the basis of reference rates, taking forward premiums and discounts into account. Net present value calculations are performed using yield curves.

Commodity contracts are valued on the basis of quoted prices on active stock exchanges.

Options are measured using recognized option pricing models (incl. Black-Scholes). The bank valuation as at the reporting date is used for structured products. The valuation reflects the Bank's assessment of the value of the financial instrument concerned under prevailing market conditions and is derived either from the mid-market price or, if expressed as bid and ask prices, from the indicative price at which the Bank would have terminated and bought back or repurchased and sold the financial instrument at the close of business or at another time agreed with Knorr-Bremse at the relevant financial center on the valuation date indicated above.

In addition, default risks are taken into account when measuring derivatives at fair value (“credit value adjustments”). The calculation basis for the probabilities of default are the credit default spreads per counterparty and for the Company.

The Group measures long-term receivables/loans based on parameters such as interest rates, certain country-specific risk factors, creditworthiness of the individual customers, and the risk characteristics of the financed project.

The fair values of the group's interest-bearing loans are calculated using the discounted cash flow method. This is based on a weighted average cost of capital (WACC), which reflects the issuer’s borrowing rate at the end of the reporting period. In line with Knorr-Bremse's rating, the Company's own default risk was classified as low over the entire period.

The financial liability from a put option on minority interests gives minority shareholders the option of tendering their shares to Knorr-Bremse if contractually defined conditions are met. These are carried at amortized cost in accordance with IFRS 9. The fair value stated is based on unobservable input parameters and is therefore assigned to level 3 of the fair value hierarchy.

The determination of the purchase price is defined in the contract and is calculated using a multiplier method based on the results of the Knorr-Bremse companies. The multiplier is defined in the contract and only changes if reference multiples are subject to strong changes, the result variables have a direct influence on the fair value of the liability. Historical EBIT figures of the relevant Knorr-Bremse companies were used as result figures.

For two newly-founded companies, as of the December 31, 2017 balance sheet date no fair value was determined. Kiepe Corporation, Canada and Freios Bre Coahuila, Mexico, are included at acquisition cost in the amount of TEUR 1,914 respectively TEUR 6,254 in the financial statements. The companies have not yet started operations and consist primarily of newly acquired land and machines, so that the acquisition costs represent the fair value. No significant effects arise regarding the net assets, financial position or results of operations of the Group. The remaining equity instruments measured at the fair value level 3 are individually and in total considered to be immaterial for the net assets, financial position and results of operations of the Group, so that also for these no further disclosures are made.

Offsetting

The table "Offsetting financial assets and financial liabilities" shows the extent to which financial assets and financial liabilities were offset in the balance sheet as well as the possible effects from the offsetting of instruments, which are subject to a legally enforceable global netting agreement or a similar agreement.

Derivative trading is subject to a global netting agreement. However, the German framework agreement and the ISDA agreements do not meet the criteria for an offsetting obligation in the group balance sheet. The right to offset is only enforceable in the event of future events (e.g. the insolvency of one of the contracting parties).

Offsetting financial assets and financial liabilities:

Global offsetting assets			
Financial assets	**12/31/2017 TEUR**	**12/31/2016 TEUR**	**12/31/2015 TEUR**
Gross and net values in the statement of financial position	17,401	7,491	2,337
Potential netting capability	1,472	7,472	2,970
Net value	15,928	19	(633)
Financial liabilities	**12/31/2017 TEUR**	**12/31/2016 TEUR**	**12/31/2015 TEUR**
Gross and net values in the statement of financial position	(7,308)	(23,660)	(22,291)
Potential netting capability	(1,472)	(7,472)	(2,970)
Net value	(5,836)	(16,188)	(19,321)

Factoring

The Group participates in a receivables sales program, in which trade accounts receivable are sold to a financial services provider. Through these measures, the Group pursues the goal to improve the liquidity situation, especially in relation to customers with extended payment terms. At Knorr-Bremse, a distinction is made between factoring with a disposal on the balance sheet and without a disposal in the balance sheet.

In the case of factoring with disposal, essentially all opportunities and risks associated with ownership of the financial asset are transferred to the financial service providers. The intention is to hold the non-transferred receivables in a portfolio until final payment and to collect the contractual cash flows. The business model for these receivables is therefore classified as hold and sell and recognized at fair value with no effect on income.

In the case of factoring without disposal in the balance sheet, this is also transferred to the financial service providers. The Knorr-Bremse Group bears the credit risk until the receivable has been settled, so that not all opportunities and receivables are essentially transferred. These receivables are not derecognized and the corresponding portfolios are reported in the "Hold" category and are carried at "amortized cost". Since factoring is carried out without disposal from the balance sheet until the customer settles its liabilities with the financial services provider by agreed payment dates, the credit risk remains with Knorr-Bremse (see chapter H.1.4.).

Factoring	2017 TEUR	2016 TEUR	2015 TEUR
Book value of transferred receivables (factoring with balance sheet disposal)	205,816	129,427	143,474
Transaction price	(1,439)	(974)	(1,278)
Book value of transferred receivables (factoring without balance sheet disposal)	87,930	74,105	44,226
Transaction price	(1,133)	(953)	(549)
Book value of liabilities from factoring without balance sheet disposal	87,930	74,105	44,226

Due to the short term, the fair value of the receivables sold roughly corresponds to the book value of the receivables prior to the transfer.

The notes on the financial result (Chapter E.8) provide information on the net gains and net losses from financial instruments by measurement categories.

F.14.2. Impairments

The following table shows the impairment losses recognized in accordance with IFRS 9 due to credit risks for debt instruments that are measured at amortized cost and at fair value with no effect on income.

Financial instruments in impairment scope 2017 fiscal year	Impairment 12/31/2015 TEUR	Net change TEUR	Derecogni-tion TEUR	Impairment 12/31/2016 TEUR	Net change TEUR	Derecogni-tion TEUR	Impairment 12/31/2017 TEUR
Cash and cash equivalents	10	8	0	18	2	0	20
Trade accounts receivable (AC)	6,558	421	(1,978)	5,002	8,768	(9,670)	4,100

Breakdown of accounts receivable trade by sectors	Rail vehicles TEUR	Commercial vehicles TEUR	Other TEUR	Total TEUR
December 31, 2015	600,104	346,603	597	947,304
December 31, 2016	572,886	388,759	9,803	971,447
December 31, 2017	714,136	433,729	14	1,147,879

The customers were divided into various categories. The calculated probabilities of default of the respective customer groups estimate the creditworthiness and the ability to meet commitments from receivables within the next 12 months.

For the 1st group, the adjustment takes place according to the public rating (S&P/Moody's or the implied rating according to the Thomson Reuters valuation model) and the associated probability of default on the respective cut-off dates.

For the 2nd group, the probability of default is determined by a credit agency.

For the 3rd group, an average probability of default is determined on the basis of a comparison group with similar risk parameters.

F.14.3. Equity instruments

The Company holds various investments in third companies as well as non-consolidated investments in affiliated/associated companies. These equity participations are essentially reported at fair value.

Since 2016, the Company holds an investment in Haldex AB, which is of a long-term strategic nature. The Company exercises a voting right for this investment and assigns it to the "at fair value through equity" category. For this investment, changes to the fair value are reported in the reserve for adjustments in other results. No OCI release or OCI recycling will occur for these adjustments in future. In 2017 shares in Haldex AB were sold. The sales price of the shares amounted to TEUR 17,961. A cumulative loss of TEUR 7,228 was realized for the shares via OCI with no effect on net income.

Knorr-Bremse received no dividends from the aforementioned instrument in the reporting period.

The following table shows the changes in equity:

Changes in equity

	Fair value		
Investments at FVOCI	**12/31/2017 TEUR**	**12/31/2016 TEUR**	**12/31/2015 TEUR**
HALDEX SE	39,842	80,431	-

	Income / Expense		
Adjustments*	**12/31/2017 TEUR**	**12/31/2016 TEUR**	**12/31/2015 TEUR**
HALDEX SE	(22,629)	1,326	-

*Reported in the OCI with no effect on income

G. Notes on the cash flow statement

The group's statements of cash flows show the origin and use of cash flows and the net increase/decrease in cash and cash equivalents in fiscal years 2015 to 2017, and are prepared in compliance with IAS 7 (Statement of Cash Flows).
A distinction is made between cash flows from operating activities and from investment and financing activities. The cash flows from operating activities are derived indirectly based on the net profit of the year. By contrast, the cash flows from investment and financing activities are determined based on payments.
Interest expenses, grants and subsidies received, other investment income, as well as tax payments, are reported in operating activities.

G.1. Cash flow from operating activities

The cash flow from operating activities is calculated by adjusting the result for the period before taxes (including the earnings share of minority interests) by non-cash variables, especially by depreciation and amortization and appreciation on intangible assets and fixed assets, impairment of inventories and trade accounts receivable, profits and losses from the disposal of assets, and interest expenses, and supplementing it with other changes to short-term assets, liabilities not related to investment and financing activities, as well as accruals. After taking account of the interest expenses and tax payments as well as the grants and subsidies received and other investment income, this results in a cash inflow from operating activities.

Change between 2016 and 2015

The cash inflow from operating activities decreased by TEUR 190,305 to TEUR 769,178 in 2016 compared to the previous year. The main reason for this was the decrease of TEUR 143,490 to TEUR 567,160 in the result for the period, mainly due to the 6 % decline in sales compared to the previous year. The net working capital increased by TEUR 9,670 from TEUR 709,653 to TEUR 719,323.

Change between 2017 and 2016

In 2017, the cash inflow from operating activities decreased by a further TEUR 89,292 to TEUR 679,886 compared to the previous year. The net working capital increased by TEUR 62,691 from TEUR 719,323 to TEUR 782,014.

G.2. Cash flow from investing activities

The cash outflow from investing activities results from the cash outflow for investments in intangible assets, property, plant and equipment, financial assets and for the acquisition of consolidated companies and the cash inflow from the disposal of intangible assets, property, plant and equipment and financial assets.

Interest received and cash outflows from investments in plan assets for pensions are also reported in investment activities.

In the event of changes to the group of consolidated companies by selling or buying companies, the purchase price paid (not including acquired debt) is reported as cash flow from investment activities.

Change between 2016 and 2015

The TEUR 145,561 increase in cash outflows from investment activities in the 2016 fiscal year compared to the previous year primarily resulted from the cash outflows for the acquisition of consolidated companies (TEUR 160,083) and for disbursements for investments in financial assets in the amount of TEUR 86,820.

The cash outflows for the acquisition of consolidated companies (less acquired liquid funds) of TEUR 104,020 in 2015, were mainly due to the acquisition of 100% of the shares and voting rights in Selectron Systems AG, Lyss/Switzerland, as well as its subsidiaries Selectron Systems Pvt. Limited, Gurgaon/India, and Selectron Systems (Beijing) Co. Ltd., Beijing/China as at January 1, 2015, which accounted for TEUR 97,989. Moreover, the contingent consideration for Knorr-Bremse Powertech GmbH, Berlin/ Germany (formerly PCS Power Converter Solutions GmbH Berlin/Germany), acquired in 2014, of TEUR 6,000 was also paid in 2015. The contingent consideration was reported as a liability at the fair value, excluding discount, of TEUR 6,000 as at December 31, 2014. The payment of the contingent consideration was therefore reported in the cash flow from investment activities pursuant to IAS 7.39.

The cash outflows for the acquisition of consolidated companies of TEUR 160,083 in 2016 were primarily due to the following transactions:

- TEUR 102,683 from the acquisition of 100 % of the shares and voting rights in GT Group Ltd, Peterlee/United Kingdom, on July 5, 2016
- TEUR 23,341 from the acquisition of 100 % of the shares and voting rights in tedrive Steering Systems GmbH, Wülfrath/Germany, as of September 8, 2016
- TEUR 18,532 from the acquisition of the remaining 50 % of the shares and voting rights in Icer Rail S.L., Pamplona/Spain on November 21, 2016

A further TEUR 15,527 was invested in further company acquisitions that were individually and in total insignificant.

Investments in property, plant and equipment and intangible assets without changes due to acquisitions in the scope of consolidation amounted to TEUR 246,311 (previous year: TEUR 236,288), with a moderate increase above the level of the previous year after a significant increase of 25.0% from TEUR 188,957 in 2014 to TEUR 236,288 in 2015. Capital expenditure in 2016 focused on the expansion of the Budapest plant, machinery and equipment as part of the introduction of new product generations, the new location of the French rail subsidiary in Tinqueux near Reims and the equipment of the new development center in Munich. Replacement investments were also made. In 2015, the focus of investment activity was on the expansion of global production capacities and replacement investments.

The cash outflows for financial investments in 2016 primarily resulted from the acquisition of the strategic investment in Haldex AB.

Changes between 2017 and 2016

In the 2017 fiscal year, cash outflow from investment activities decreased by TEUR 168,368. This is mainly due to the decrease of TEUR 63,570 to TEUR 96,513 in cash outflows for the acquisition of consolidated companies, the decrease of TEUR 78,119 in investments in financial assets to TEUR 8,701 and the decrease of TEUR 15,635 in investments in property, plant and equipment to TEUR 184,685.

The cash outflows for business combinations (less acquired cash and cash equivalents) in 2017 in the amount of TEUR 96,513 resulted mainly from the following transactions:

- TEUR 29,392 from the acquisition of 100% of the shares and voting rights in Vossloh Kiepe GmbH, Düsseldorf, as of February 1, 2017
- TEUR 65,539 from the acquisition of all assets of the Bosch Transmission Systems Division (TRS) in Musashi/Japan on March 31, 2017.

In addition, a contingent purchase price payment of TEUR 4,029 was due in 2017 for the Selectron Group acquired in 2015.

The decrease in investments in property, plant and equipment and intangible assets in 2017 (excluding changes in the scope of consolidation) was caused by time shifts. The focus was on investments in machinery and equipment as part of the introduction of new product generations and in the expansion of capacity in high-growth business areas and locations. In addition, investments were made in the expansion of the Guo Tong site in China and in the new Business Services Center in Liberec, Czech Republic, as well as in global IT infrastructure projects. In addition, regular replacement investments were made.

G.3. Cash flow from financing activities

The cash flow from financing activities is calculated from the balance of paid shareholder dividends, proceeds and disbursements from issued bonds, proceeds from equity contributions, established bank debt, and loans and their repayment and interest payments, as well as disbursements for the repayment of finance lease obligations. In addition, also shown under cash inflows from financing activities are proceeds from factoring with recourse and disbursements for the resulting liabilities. The cash inflows from proceeds due to the settlement of the receivables underlying the factoring are shown in cash flows from operating activities.

Change between 2016 and 2015

In December 2016, a fixed-interest euro-denominated bond of TEUR 500,000 was issued, which led to a cash inflow of TEUR 498,738. This cash inflow particularly exceeds the cash outflows for dividends paid to shareholders and minority shareholders of TEUR 428,695, and the TEUR 30,330 higher cash outflows from the repayment of financial loans compared to the previous year. In total, there was a cash inflow from financing activities of TEUR 41,171 in 2016.

Change between 2017 and 2016

In fiscal year 2017, there was a cash outflow from financing activities in the amount of TEUR 460,067, which represents a TEUR 501,239 higher cash outflow compared to the previous year. In 2016, the cash outflow from financing activities was dominated by the issuance of the fixed-interest euro-denominated bond in the amount of TEUR 500,000. In 2017, the cash outflow from financing activities resulted mainly from dividends paid to shareholders and minority shareholders in the amount of TEUR 433,090 with simultaneous decrease of TEUR 22,900 to TEUR 18,272 in payments for the repayment of financial loans.
Within the cash flows from investment activities, the accounting for the put option described in chapter B.1.9 according to the so-called "anticipated acquisition method" according to IFRS in comparison to the presentation according to HGB leads to a shift from

the dividends paid to minority shareholders to the dividends paid to the shareholders of the parent company in the amount of TEUR 21,073.

G.4. Composition of the cash funds

In 2015, after adjustment for exchange rate-related effects (TEUR +21,406), the group's cash funds increased by TEUR 272,110.

In 2016, the development of the individual cash flows, after adjustment for exchange rate-related effects (TEUR +9,532) in the group, resulted in an increase of TEUR 371,680 in cash funds.

In 2017, the cash funds decreased by TEUR 132,162. This includes adjustments for exchange rate-related effects in the amount of TEUR -72,147.

The cash funds reported in the statement of cash flows include the cash and cash equivalents reported under F.7. as well as short-term marketable securities and bank debt from overdraft facilities with maturities of up to three months, which must be paid upon request at any time.

The cash funds are comprised as follows on the cut-off dates:

Financial funds at end of period	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Cash and cash equivalents	1,600,033	1,720,827	1,360,548
Short-term securities available for sale	51	51	11
Short-term liabilities to banks (less than 3 months)	(21,255)	(9,887)	(21,248)
	1,578,829	**1,710,991**	**1,339,311**

H. Other information

H.1. Risk management

As a result of its global operating activities, the Group is exposed to various financial risks, especially market risks, credit risks, and liquidity risks. The group-wide risk management is focused on the unpredictable nature of developments on the financial markets and aims to minimize the potential negative effects on the group’s financial situation. The objective of the company policy is to limit risks through systematic financial management. To do so, the Group specifically uses financial derivatives to hedge against market risks.

The central Group Finance Department is responsible for risk management in accordance with the guidelines adopted by the management board. It identifies, assesses, and hedges financial risks in close cooperation with the group’s operating units. The management board provides guidelines for risk management as well as fixed principles for certain risk areas.

H.1.1. Currency risks

Currency risks arise from future transactions involving both the purchase of intermediate products and the sale of end products. Receivables and liabilities recognized in the balance sheet as well as highly probable expected cash flows in foreign currencies are examined. Risk positions also arise in a minor role from financing in foreign currencies.

The objective of the group’s hedging transactions is to reduce the risks from exchange rate fluctuations. For this purpose, currency exposure is centralized and the aggregated position is hedged with external banks using forward exchange transactions and options.

The terms are based on the terms of the underlying transactions, whereby the planning and hedging horizon generally extends over three years. Currency futures and option transactions are exclusively entered into to hedge existing and future foreign currency receivables and payables from the purchase and sale of goods, as well as to eliminate the currency risk for financing transactions. Hedge accounting is not applied here.

Currency exposure

	12/31/2017 TEUR			12/31/2016 TEUR			12/31/2015 TEUR		
	USD	HUF	CZK	USD	HUF	CZK	USD	HUF	CZK
Operative Exposure	169,386	-120,801	-82,077	129,502	-113,642	-47,146	161,810	-127,449	-43,448
Derivate	-122,000	76,250	37,000	-128,000	63,750	17,600	-133,000	79,000	23,000

An increase or appreciation or depreciation of the exchange rates (USD, HUF, CZK) in relation to the EUR by 10% would have the following impact on earnings:

Effect on earnings

	12/31/2017 TEUR		12/31/2016 TEUR		12/31/2015 TEUR	
	+10%	-10%	+10%	-10%	+10%	-10%
USD	-4,308	7,051	-137	167	-2,619	4,201
HUF	4,050	-4,950	4,536	-5,544	4,404	-5,383
CZK	4,098	-5,009	5,862	-7,164	1,859	-2,272

Both the recognized and planned exposures and hedging transactions are included in the sensitivity analysis.

Exposures to other currencies exist, which however do not have a material effect on earnings.

H.1.2. Interest rate risks

Interest rate risks arise as a result of market-related fluctuations in the interest rates. They affect the level of the group's interest expenses. These arise in the Knorr-Bremse Group from variable-interest financial obligations. Interest rate risks are aggregated at headquarters and hedges are made at individual case level, taking into account the hedging period and nominal volume of the risk position.

To hedge the variable components of obligations under a leasing agreement, the Group has two interest rate swaps with a nominal volume of TEUR 35,522 in its portfolio for which hedge accounting is not applied.

The interest rate risk position, which includes variable-interest credit balances and liabilities, is shown below on the respective reporting date:

Interest rate exposure

	Nominal		
	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Fixed-interest financial debt	674,633	678,846	183,377
Variable-interest financial debt	57,804	49,909	66,570
Lease liabilities	35,977	27,448	21,478
Interest rate derivatives	35,522	35,522	35,522

The following list shows the sensitivity of the group earnings to a change in interest rates (by a rise of 100 basis points and a fall of 25 basis points) based on the impact on variable-rate loans and balances as well as on the present value of interest rate derivatives.

Effect on earnings						
	12/31/2017 TEUR		12/31/2016 TEUR		12/31/2015 TEUR	
	+100 Bp	-25 Bp	+100 Bp	-25 Bp	+100 Bp	-25 Bp
Variable-interest financial debt	-578	145	-499	125	-666	166
Interest rate derivatives	1,910	-477	2,224	-556	2,534	-635
Total	**1,332**	**-333**	**1,725**	**-431**	**1,868**	**-468**

H.1.3. Commodity price risks

Commodity price risks arise from the fact that raw materials (especially metals) required in the production process can only be procured at higher costs due to fluctuating market prices, without a full price adjustment in sales transactions. The planned purchases of raw materials or components with raw material contents as well as the corresponding sales contracts are taken into account for the analysis of the commodity price risk. The risk position determined in this way, the so-called exposure, is continuously monitored and hedged on a case-by-case basis using commodity swaps. Hedge accounting is not applied here.

The volume of the underlying transactions is calculated from the highly probable need for commodities over a rolling 2-year planning period. The following table lists the quantities of commodity exposures on the purchasing side and commodity swaps for hedging them. The remaining open position can essentially be passed on the sales side.

Commodity exposure			
	12/31/2017 in Mt	12/31/2016 in Mt	12/31/2015 in Mt
Procurement of aluminum	5,167	3,566	6,874
Derivative financial instruments	-	1,195	1,380

The following list shows the sensitivity of group earnings to commodity prices (10% increase/decrease in the market price):

Effect on earnings						
	12/31/2017 TEUR		12/31/2016 TEUR		12/31/2015 TEUR	
	+10%	-10%	+10%	-10%	+10%	-10%
Aluminum	-1,167	1,167	-551	551	-1,103	1,103
Derivative financial instruments	-	-	185	-213	221	-221
	-1,167	**1,167**	**-366**	**338**	**-882**	**882**

H.1.4. Credit risks

On the investment side, credit risks arise from investments with banks and operating trade receivables from customers. On the credit institutions' side, the risk relates to counterparty default. On the customer side, late payment of receivables without compensation and non-payment.

The book value of the financial assets reported in the consolidated financial statements represents the maximum default risk. Regular monitoring is carried out both on the bank side and on the customer side. Decisions on financial transactions are made on the basis of this monitoring. Contracts on financial derivatives and financial transactions are only concluded with financial institutions with high credit ratings in order to keep the counterparty default risk as low as possible.

In principle, commercial transactions are exposed to the risk of a possible loss of value due to the defaulting of business partners, such as banks, suppliers, and customers.

Screening process for banks

The monitoring of core banks, including their rating and CDS development, as well as the diversification of the group's business activities and investments, takes place on a quarterly basis. Compliance with the regulations in the guideline on the management of banking relationships is also reviewed at the same time. This specifies that no more than 40% of total deposits may be held by an individual bank and that business relationships may essentially only be maintained with banks with an investment grade rating. Financial investments are fine-tuned and adjusted as required on this basis. As a result, the assumption of low credit risk is supported by the investment guidelines only for investment-grade rated banks through regular controls.

Impairment of deposits

All of the Company's deposits are held in the business accounts of a small number of selected banks, most of which belong to the group of core and principal commercial banks used by the group. A public issuer rating is provided by established rating agencies for all core and principal commercial banks. For the Impairment of these cash holdings, the probability of default is calculated according to the rating scale. The rating indicators and probabilities of occurrence are updated annually.

Ratings	12/31/2017 TEUR	12/31/2016 TEUR	12/312015 TEUR
AAA to A-	1,030,081	742,154	721,206
A- to BBB-	233,602	747,872	421,328
Below BBB- but in the investment grade range	336,350	230,801	218,014
	1,600,033	**1,720,827**	**1,360,548**

Screening process for customers and suppliers

When establishing new business relationships, public sources, such as credit agencies, are used to obtain an economic business evaluation and credit opinion in advance. During the business relationship, a regular monitoring process occurs via the automated, system-based analyses of supplier portfolios. This takes account of the probabilities of occurrence and sales volumes. While suppliers are monitored as a group, major customers are reviewed on an individual basis.

Impairment of receivables

The credit rating structure of the Company's receivables portfolio is illustrated below.

Credit rating structure of the receivables profile	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Top costumers AAA to A-	272,999	198,891	185,149
Top costumers A- to BBB-	161,397	117,014	126,748
Top costumers Below BBB-	107,471	149,525	139,970
Other receivables without a rating classification on an individual basis	606,012	506,017	495,437
	1,147,879	**971,447**	**947,304**

As at the reporting date, there were no material agreements that limit the maximum default risk. No significant collateral was received in the period under review.

According to the sales analysis of the customer structure, the 30 largest customers (top customers) per division (Rail and Commercial Vehicles) together account for the majority of total sales. The assessment and calculation of the probabilities of default for the receivables of these customers take place on a detailed individual basis via the public issuer rating, if this was provided by the rating agencies or credit agencies.

There was no significant concentration of default risk with respect to individual business partners.

The data on the rating and probability of default, as well as the identification of the 30 largest customers per division is updated annually.

The calculated default probabilities reflect the creditworthiness of the respective company. The due dates of receivables play a subordinate role in the impairment, as the underlying average term of receivables in the Company is essentially short-term.

For large customers, the assessment of the country risks flowed into the rating via their own group-wide country structure or via the assessment by credit agencies. This Group is responsible for the majority of the total receivables. For the group of small customers without a rating, the probability of default is assessed based on the calculated benchmark spreads for all customers.

No fully written-off assets, which are still enforceable, exist.

There was no material concentration of a default risk with regard to a business partner or a clearly distinguishable group of business partners. As at the reporting date, there were no material agreements that limit the maximum default risk.

H.1.5. Liquidity risks

Liquidity risks exist in that funds required to satisfy payment obligations cannot be procured on time.

Within the Knorr-Bremse group, liquidity risks arise from payment obligations arising from operating transactions or financing obligations. The management of liquidity within the Group is intended to ensure that sufficient cash and cash equivalents are always available to meet payment obligations at maturity under both normal and tense conditions without incurring unacceptable losses or damaging the reputation of the group. Liquidity requirements from business activities over the next three months are determined on a rolling weekly basis and differentiated by currency in short-term liquidity planning. This planning takes into account the more precise expected cash flows.

As part of the medium-term planning, which takes place twice a year and has a planning horizon of three years, the liquidity requirement is determined on the basis of the forecast cash flows. This process allows appropriate actions to be taken at an early stage in case of changes to the financing requirement.

The Group has sufficient cash and cash equivalents available to meet its payment obligations. In addition there are not yet drawn down credit, current and guarantee facilities (thereof EUR 150 million midterm facilities spread over the core banks). On September 21, 2017, the Luxembourg Stock Exchange approved the increase of the Company's existing Debt Issuance Program to a total of EUR 1,500 million with a program term until September 30, 2018. This is a documentation platform for issuing bonds and other debt instruments. In December 2016, the Company had already issued a fixed-interest euro-denominated bond in the amount of EUR 500 million which matures in 2021 and will be fully repaid, on this basis.

The remaining free volume from the Debt Issuance Program, further loans and, if required, the use of the capital market represent additional financing instruments that ensure a long-term supply of liquidity at all times. There are certain concentrations of risk for the repayment of the final repayment of the European Investment Bank promotional loan (EUR 100 million) in 2020 and the final repayment of the bond (EUR 500 million) in 2021. These repayment obligations are taken into account as part of regular liquidity planning in order to initiate appropriate measures in good time. From today's perspective, no further major cash outflows are known or expected.

The following shows the remaining contractual maturities of the financial liabilities as at December 31, 2017, including the estimated interest payments. This relates to undiscounted gross amounts, including estimated interest payments.

Maturities	Book value TEUR	Contractually agreed cash flows TEUR	Up to 1 year TEUR	1 to 5 year TEUR	Over 5 years TEUR
2017 fiscal year					
Derivative financial instruments	(7,308)	(7,308)	(994)	(82)	(6,233)
Bank loans	(230,567)	(240,722)	(46,142)	(175,582)	(18,998)
Liabilities resulting from options for minority interests	(379,616)	(379,616)	(379,616)	-	-
Bonds and debt instruments	(497,390)	(510,000)	(2,500)	(507,500)	-
Lease liabilities	(35,977)	(45,640)	(6,680)	(19,360)	(19,601)
Other financial liabilities	(158,843)	(158,843)	(150,611)	(8,232)	-
Trade account payables	(894,119)	(894,119)	(894,119)	-	-
Total	**(2,203,820)**	**(2,236,248)**	**(1,480,662)**	**(710,755)**	**(44,831)**
2016 fiscal year					
Derivative financial instruments	(23,660)	(23,660)	(14,805)	(1,143)	(7,712)
Bank loans	(227,303)	(241,469)	(18,704)	(179,532)	(43,234)
Liabilities resulting from options for minority interests	(367,143)	(367,143)	(367,143)	-	-
Bonds and debt instruments	(496,701)	(512,500)	(2,500)	(510,000)	-
Lease liabilities	(27,448)	(33,896)	(5,652)	(15,224)	(13,021)
Other financial liabilities	(145,301)	(146,796)	(145,588)	(1,208)	-
Trade account payables	(754,458)	(754,458)	(754,458)	-	-
Total	**(2,042,015)**	**(2,079,923)**	**(1,308,851)**	**(707,106)**	**(63,967)**
2015 fiscal year					
Derivative financial instruments	(22,291)	(22,291)	(12,638)	(1,963)	(7,690)
Bank loans	(245,149)	(264,953)	(33,732)	(187,056)	(44,164)
Liabilities resulting from options for minority interests	(327,019)	(327,019)	(327,019)	-	-
Bonds and debt instruments	-	-	-	-	-
Lease liabilities	(21,478)	(26,678)	(4,367)	(12,286)	(10,025)
Other financial liabilities	(136,721)	(138,084)	(129,413)	(8,670)	-
Trade account payables	(727,042)	(727,042)	(727,042)	-	-
Total	**(1,479,700)**	**(1,506,067)**	**(1,234,212)**	**(209,975)**	**(61,880)**

H.2. Events after the reporting date

Changes in the management board of Knorr-Bremse AG

The Company's management board member responsible for the Finance, Controlling and IT departments will change with effect from January 1, 2018. The Company's Supervisory Board appointed Ralph Heuwing as the successor to Dr. Lorenz Zwingmann. Ralph Heuwing had joined the Company on November 1, 2017 and the handover of the departments was supervised by Dr. Zwingmann.

Investigations U.S. Department of Justice

On April 3, 2018, the U.S. Department of Justice, Antitrust Division (hereinafter: DOJ) announced that it reached a settlement with Knorr-Bremse AG and Westinghouse Air Brake Technologies Corporation (Wabtec) on allegations of unlawful agreements not to compete for each other´s employees.

The settlement provides for the following framework points:

- no criminal liability for all facts disclosed by Knorr-Bremse AG,
- no fine for disclosed matters,
- requirements for the implementation of controls and other compliance requirements for a period of seven years; and
- annual declaration by Knorr-Bremse AG that there were no violations in this context.

Following the settlement reached with the DOJ in April 2018, several law firms filed class action lawsuits on behalf of employees against Knorr-Bremse AG, Wabtec and some of their subsidiaries. The aim of the class action lawsuits is to obtain damages to compensate employees for reduced payment on the basis of the alleged unlawful agreements not to compete for each other´s employees between the above mentioned parties.

Due to the very early stage of the class action and the unforeseeable number of potential claimants, it is not possible to determine a reliable amount for a provision for potential claims. For this reason, no provisions were formed as of December 31, 2017.

In addition, in fiscal year 2016, the DOJ initiated a non-public civil law investigation against Knorr Brake Company, Westminster, Maryland/USA and New York Air Brake LLC, Watertown, New York/USA and one competitor, which has not yet been completed.

Acquisition of minority interest in Knorr Brake Holding Corporation

With effect from April 20, 2018, all non-voting preference shares held by Ursus Vermögensverwaltungs GmbH, Grünwald, Germany in Knorr Brake Holding Corporation, Delaware, USA, were repurchased by Knorr Brake Holding Corporation for a purchase price of TUSD 159,600. At the same time, these preference shares were canceled by Knorr Brake Holding. The rights associated with the preference shares no longer exist as of this date.

Change in the Supervisory Board of Knorr-Bremse AG

With effect from May 29, 2018, Kathrin Dahnke, residing in Bielefeld, member of Wilh. Werhahn KG, was unanimously elected to the Supervisory Board. The election was for a term of office until the end of the Annual Shareholders' Meeting that resolves on the ratification of the actions of the Supervisory Board for fiscal year 2020, i.e. until the end of the Annual Shareholders' Meeting in 2021.

Change in equity, creation of Authorized Capital 2018, issue of convertible bonds and/or bonds with warrants, profit participation rights and/or income bonds in connection with Conditional Capital 2018

At the Extraordinary Shareholders' Meeting on May 29, 2018, the following changes to equity were resolved, which were entered in the Commercial Register on June 21, 2018:

The capital stock of Knorr-Bremse AG has been newly divided. Accordingly, one share with a par value of EUR 26.00 each will be replaced by 26 shares with a par value of EUR 1 each. The voting rights were adjusted accordingly.

In this context, the previous capital stock was increased by issuing 93,600,000 new no-par value bearer shares through a capital increase from company funds in accordance with § 207 ff. of the German Stock Corporation Act. AktG of TEUR 93,600 from TEUR 67,600 to TEUR 161,200 by converting the other revenue reserves shown under revenue reserves. The new shares carry dividend rights as of January 1, 2018.

In addition, the Extraordinary Shareholders' Meeting on May 29, 2018 resolved the following changes to equity, which were entered in the Commercial Register on July 10, 2018:

Authorized capital 2018 was created. The management board is authorized, with the approval of the Supervisory Board, to increase the capital stock of the Company on one or more occasions in the period up to May 28, 2023 by up to TEUR 40,300 by issuing up to 40,300,000 new bearer shares against cash and/or non-cash contributions (Authorized Capital 2018). These are to be offered directly or indirectly to the shareholders for subscription. The management board is, however, entitled, under certain circumstances, to completely or partially exclude the subscription right with the consent of the Supervisory Board.

Furthermore, subject to the approval of the Supervisory Board, the management board was authorized until May 28, 2023 to issue convertible bonds and/or bonds with warrants, profit participation rights and/or income bonds (or combinations of these instruments) to exclude the subscription right to create conditional capital (Conditional Capital 2018). To this end, the capital stock of Knorr-Bremse AG is conditionally increased by up to TEUR 16,120 by issuing up to 16,120,000 new bearer shares (Conditional Capital 2018). The conditional capital increase is only to be implemented to the extent that conversion or option rights are exercised.

Corporate bond

On June 14, 2018, a corporate bond with a volume of EUR 750 million and a fixed interest coupon of 1.125% p.a. with a term of seven years was issued. The new bond is rated 'A2' by Moody's. With a denomination of TEUR 1, the security is designed for both private and institutional investors. The new corporate bond was listed on the EURO MTF Luxembourg Stock Exchange.

Bosch option

In a letter dated June 21, 2018, Robert Bosch GmbH declared the exercise of a put option regarding its minority shareholding in Knorr-Bremse Systeme für Nutzfahrzeuge GmbH. Negotiations are currently underway between Knorr-Bremse and Robert Bosch GmbH on the terms and conditions for exercising options.

Acquisition of Rail Friction Know-How from Federal Mogul

As of June 29, 2018, Knorr-Bremse signed a purchase agreement with Federal Mogul for the acquisition of intangible rights in the form of know-how for the development and production of products in the area of rail vehicles and industry friction for a purchase price of EUR 63 million in total. On August 2, 2018, the consent of the antitrust authorities was given and thereby the agreement for the real transfer of the rights.

Publication of the new HEUBECK-RICHTTAFELN 2018 G

On July 20, 2018, HEUBECK AG published new HEUBECK Mortality Tables 2018 G. These tables are based on the newest statistics of the statutory pension insurance and the Federal Statistics Office and thereby reflect the most recent developments regarding mortality, disability, marriage and fluctuation probabilities. Since the average life expectancy has further increased, however more slowly than in the past, a moderate increase in the overall pension provision is expected according to HEUBECK.

The Group has so far not applied the new HEUBECK Mortality Tables 2018 G. The resulting change in the pension obligation in the event of the first-time application of the new mortality tables will to be recognized in OCI.

Sale Sydac

The simulation business in the Rail Vehicles segment (Sydac; see chapter F.8.1.), which was classified as a disposal group as of December 31, 2017, was sold when the purchase agreement was signed on July 31, 2018. An additional loss of approximately EUR 5.5 million is expected from the sale. Of the total expected loss of EUR 10.8 million, EUR 5.3 million was already recognized through the income statement as of the December 31, 2017 balance sheet date as an impairment loss. On the other hand, the Group anticipates for 2019 a tax relief In the amount of approximately EUR 0.4 million from the total losses.

Sale Blueprint

With the signing of two sales contracts as of January 12, 2018 and August 3, 2018, the Vehicle Maintenance business classified as a disposal group as of December 31, 2017 in the Rail Vehicle segment (Blueprint; see chapter F.8.1) was sold. An additional loss of EUR 13.6 million is expected from the sale. Of the expected total loss of EUR 33.6 million, EUR 20.0 million, as of December 31, 2017, was already realized as an impairment loss through the income statement.

Otherwise, there were no additional events of particular significance subsequent to the end of the fiscal year.

H.3. Number of employees

Average number of employees	2017	2016	2015	2014
Wage earners	13,920	12,522	12,846	12,007
thereof leased personnel	*2,469*	*2,275*	*2,679*	*2,697*
Salaried employees	12,792	11,952	11,796	10,779
thereof leased personnel	*432*	*420*	*462*	*412*
Trainees	198	190	237	273
	26,910	**24,664**	**24,879**	**23,059**

H.4. Auditor fees

The following fees were reported as expenses for the group auditor services provided in the fiscal year:

Auditor fees	2017 TEUR	2016 TEUR	2015 TEUR
Audit services	2,083	500	514
Other attestation services	11,353	129	33
	13,436	**629**	**547**

H.5. Relationships with related parties

Related parties within the meaning of IAS 24 are natural persons or companies that can be influenced by Knorr-Bremse AG that can exert an influence on Knorr-Bremse AG or that are under the influence of another related party of Knorr-Bremse AG. Transactions with related parties were conducted at arm's length.

H.5.1. Parent company and ultimate parent entity

The Group is directly controlled by KB Holding GmbH, Grünwald, Germany (hereinafter "KB Holding"), which holds 95% of the shares of the group. The remaining 5% of the shares are held by URSUS Vermögensverwaltungs GmbH, Grünwald, Germany (hereinafter "URSUS").

The shares in KB Holding GmbH are held by TIB Vermögens- und Beteiligungsholding GmbH, Grünwald, Germany (hereinafter "TIB"), of which Stella Vermögensverwaltungs GmbH, Grünwald, Germany (hereinafter "Stella") in turn holds a majority interest.

The ultimate parent entity of the Group is Heinz Hermann Thiele.

H.5.2. Related parties

All related parties that can be controlled by the Group or over which the Group can exercise significant influence are listed in the Notes under chapter H.12. List of shareholdings.

Balances and transactions between Knorr-Bremse AG and its subsidiaries included in the consolidated financial statements that are related parties have been eliminated in the course of consolidation and are not explained in these notes.

In addition to the companies included in the consolidated financial statements, in the course of its normal business activities the group also has relationships with other non-consolidated companies and associates and joint ventures that are considered to be related parties within the meaning of IAS 24.

H.5.3. Remuneration of key management personnel

Management in key positions consists of the management board and the Supervisory Board. The remuneration of members of management in key positions includes:

Remuneration of key management personnel	2017 TEUR	2016 TEUR	2015 TEUR
Compensation of the executive board			
Short-term compensation	6,306	5,976	5,332
Post-employment benefits	1,582	1,615	939
Termination benefits	-	-	825
	7,888	**7,591**	**7,096**
Compensation for the Members of the supervisory board			
Fixed compensation and attendance fees	620	720	236
	620	**720**	**236**
l	**8,508**	**8,311**	**7,331**

The remuneration of the members of the management board includes salaries, benefits in kind and contributions in defined benefit and defined contribution plans for post-employment benefits. The post-employment benefits relate to the additions and reversals of pension provisions for active members of the Board of Management in the financial year.

Total remuneration of the Supervisory Board and the management board in accordance with chapter 314 (1) No. 6 in connection with chapter 315e (3) HGB

The total remuneration of the members of the Supervisory Board in 2017 amounted to TEUR 620 (2016: TEUR 720, 2015: TEUR 236) and the total remuneration of the management board 2017 TEUR 6.306 (2016: TEUR 5,976, 2015: TEUR 6,157).

Pension obligations to former members of the management board and their surviving dependents totaled TEUR 51,345 as of December 31, 2017 (2016: TEUR 52.511, 2015: TEUR 41.734). Current pension payments amounted to TEUR 3,376 (2016: TEUR 3.221, 2015: TEUR 3,252).

H.5.4. Sale of goods and services

Sale of goods and services	2017 TEUR	2016 TEUR	2015 TEUR
Sale of goods and services			
Parent company (recharge of consulting costs)	3,179	-	-
Companies under joint control or significant influence by the Company (various services)	167	-	-
Associated companies	72,152	55,751	40,378
Ultimate parent entity (various services)	172	182	64
Other related companies and persons	7,415	13,456	15,422
	83,085	**69,389**	**55,864**

The sale of goods and services to related parties comprises legal transactions within and outside the scope of normal delivery and service relationships.

H.5.5 Purchase of goods and services

Purchase of goods and services	2017 TEUR	2016 TEUR	2015 TEUR
Purchase of goods and services			
Associated companies	3,792	2,819	9,141
Member of Management in key positions	659	843	413
Ultimate parent entity (consulting services)	1,861	1,772	1,688
Ultimate parent entity (rents)	2,308	2,042	1,982
Other related companies and persons (rents)	825	571	536
Other related companies and persons (goods)	-	1,646	387
	9,445	**9,693**	**14,147**

The purchase of goods and services comprises legal transactions within the framework of and outside normal delivery and service relationships.

Goods and services (including rents) were purchased from related parties at arm's length conditions.

Consulting services obtained from the supreme controlling party related in particular to advising the management board on current matters and supporting and maintaining important customer relationships.

The consulting services were provided to and remunerated by Knorr-Bremse AG and other group companies under the existing consulting agreement with Knorr-Bremse AG, last amended on March 31, 2016.

H.5.6 Miscellaneous business transactions

Miscellaneous business transactions	2017 TEUR	2016 TEUR	2015 TEUR
Disposal of land and other assets			
Related companies	29,520	1,578	-
Ultimate parent entity	5,135	318	-
	34,655	**1,896**	-
Donations to			
Related companies (Knorr-Bremse Global Care e. V.)	1,503	1,551	1,500
	1,503	**1,551**	**1,500**
Dividends			
Parent company (KB Holding)	345,800	345,800	296,400
Minority shareholders (Ursus)	26,205	27,307	24,386
Ultimate parent entity	1,214	1,214	1,214
	373,219	**374,321**	**322,000**
Further business transactions			
Acquisition of shares in Vossloh Kiepe	73,619	-	-
	73,619	-	-
	482,996	**377,768**	**323,500**

The purchase price for the Kiepe Electric companies acquired from Vossloh AG was negotiated on the basis of internal valuation scenarios.

H.5.7. Balances and transactions with related parties, persons and management

Open items with related parties, persons and management	12/31/2017 TEUR	12/31/2016 TEUR	12/31/2015 TEUR
Receivables from			
Associated companies	30,078	29,224	18,187
Parent company (KB Holding)	3,179	-	-
Minority shareholders (Ursus)	167	-	-
Related companies	20,558	2,456	2,889
Ultimate parent entity	549	961	1,355
	54,531	**32,641**	**22,431**
Liabilities to			
Associated companies	1,218	1,283	896
Related companies	-	239	60
Members of the Management in key positions	1,140	1,139	477
	2,358	**2,661**	**1,433**

Receivables from related parties result from trade receivables and from the sale of land.

The receivables are unsecured and are settled in cash. No guarantees have been given or obtained. No impairment losses were recognized for unrecoverable or doubtful receivables from related parties in the current fiscal year or previous fiscal years.

Liabilities to related parties result from trade payables and Supervisory Board compensation. The liabilities are interest-free.

H.6. Executive bodies

H.6.1. Management board of Knorr-Bremse AG

Klaus Deller

Member of the management board since May 1, 2009, Chairman of the Management Board since January 1, 2015, responsible for the Rail Vehicle Systems division since July 1, 2016.

Dr. Peter Laier

Member of the management board since January 1, 2016, responsible for the Commercial Vehicle Systems division.

Dr. Lorenz Zwingmann

Member of the management board from December 1, 2008 to December 31, 2017, responsible for the Finance, Controlling and IT departments.

Ralph Heuwing

Member of the management board since November 1, 2017, responsible for the Finance, Controlling and IT departments since January 1, 2018.

H.6.2. Supervisory Board of Knorr-Bremse AG

Heinz Hermann Thiele, Munich/Germany

Honorary chairman
Chairman of the Supervisory Board until March 11, 2016
Entrepreneur

Dr. Bernd Bohr, Stuttgart/Germany,

Chairman of the Supervisory Board since March 11, 2016, departed July 4, 2016
Chairman of Kraftfahrzeugtechnik Robert Bosch GmbH (retired)

Hans-Georg Härter, Munich/Germany

Chairman of the Supervisory Board since July 5, 2016,
former Chairman of ZF Friedrichshafen AG (retired)

Dr. Eduard Gerum*, Rosenheim/Germany

1st Deputy Chairman of the Supervisory Board, departed March 11, 2016
Management Consultant, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

Franz-Josef Birkeneder*, Aldersbach/Germany

1st Deputy Chairman of the Supervisory Board since March 11, 2016
Plant Manager Knorr-Bremse, Aldersbach location

Manfred Wennemer, Bensheim/Germany

2nd Deputy Chairman of the Supervisory Board, departed March 11, 2016
Chairman of Continental AG (retired)

Kathrin Dahnke; Bielefeld/Germany

Member of the Supervisory Board since May 29, 2018
Member of the management board of Wilh. Werhahn KG

Michael Jell*, Munich/Germany

Full-time Deputy Chairman of the Works Council of
Knorr-Bremse Systeme für Schienenfahrzeuge GmbH, Knorr-Bremse AG
KB Media GmbH

Dr. Wolfram Mörsdorf, Essen/Germany

Retired member of the management board of ThyssenKrupp AG

Werner Ratzisberger*, Aldersbach/Germany

Project Engineer for mechanical processing/surfaces,
Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

Sebastian Roloff*, Munich/Germany

Attorney at law at IG Metall trade union, Munich office

Julia Thiele-Schürhoff, Munich/Germany

Member of the Supervisory Board since March 11, 2016
Chairman of the management board of Knorr-Bremse Global Care e.V.

Erich Starkl*, Passau/Germany

2nd Authorized Representative of IG Metall trade union, Passau office

Wolfgang Tölsner, Uetersen/Germany

Management Consultant

Georg Weiberg, Stuttgart/Germany

Retired Head of Development Daimler Trucks

Günter Wiese*, Berlin/Germany

Full-time Works Council member of Knorr-Bremse Systeme für Schienenfahrzeuge GmbH, Berlin plant

* Employee representative

H.7. Other financial commitments

Other financial commitments	Up to 1 year TEUR	1 to 6 years TEUR	Over 6 years TEUR
12/31/2017			
Rent and lease obligations	36,896	81,207	64,328
Investment projects	11,890	825	-
Other obligations	16,773	859	-
	65,559	**82,891**	**64,328**
12/31/2016			
Rent and lease obligations	38,966	90,545	62,675
Other obligations	732	3,126	3,978
	39,699	**93,671**	**66,653**
12/31/2015			
Rent and lease obligations	37,756	89,109	61,814
Other obligations	696	3,290	4,222
	38,452	**92,399**	**66,036**

The Company's other financial obligations are primarily comprised of lease agreements. The Company predominantly holds leasing contracts for commercial and production buildings. In addition, lease agreements exist for company cars and fork lifts. No special termination or extension options exist in the lease agreements. Further information on operating leases and finance leases is provided in chapter H.10.

Operating leases enable alternative financing to borrowed capital from banks, whereby the lease agreements are not reflected in the balance sheet, as they are assigned to the lessor. The leasing instalments are taken into account in the statement of income as operating expenses.

The decline in leasing agreements in 2017, especially for terms of 1-6 years, is due to the fact that newly concluded leases are more than compensated by expiring and non-extended agreements.

The other liabilities item includes loan commitments and bank guarantees.

H.8. Contingent liabilities

Contingent liabilities	2017	Probability of occurrence	2016	Probability of occurrence	2015	Probability of occurrence
	TEUR	%	TEUR	%	TEUR	%
Guarantees	23,226	14%	23,592	15%	36,603	14%
Warranties	1,451	10%	2,743	11%	2,975	10%
Other	2,352	15%	1,058	10%	695	10%
	27,028		**27,393**		**40,274**	

Contingent liabilities or commitments lead to possible obligations, which cannot be influenced due to the occurrence of potential future events. The amount of these obligations can also not be adequately calculated.

The Company's contingent liabilities primarily involve guarantees and warranties. Guarantees are issued for outstanding bank bonds, performance warranties for banks, as well as a rent guarantee for commercial/factory buildings. In particular, the amount of the rent guarantee is significant (2015: TEUR 3,900; 2016: TEUR 3,200; 2017: TEUR 2,600), which each was assessed with a probability of occurrence for utilization at 50% in these years.

Guarantees exist mainly in Hungary with regard to customer contracts for products. In this case, the guarantee exceeds the statutory warranty obligations.

H.9. Government grants

Government grants include grants for structural support and business development as well as funding for research and development projects.

Grants for assets in the 2017 fiscal year amounted to TEUR 1,697 (2016: TEUR 1,788; 2015: TEUR 1,809).

Performance-related grants in 2017 amounted to TEUR 3,568 (2016: TEUR 2,782; 2015: TEUR 3,468), and were recognized in income. Performance-related grants are fundamentally reported in other operating income. In fiscal years 2016 and 2015, TEUR 1,016 of the grants recognized in income were recorded as a wage cost subsidy to reduce expenses.

H.10. Leases

The Company is a lessee in finance lease agreements as well as in operating lease agreements.

H.10.1. Finance leases

The net book value of assets as a result of finance leases as at December 31, 2017 is provided below. The Company essentially concluded finance leases for land and commercial/production buildings with a term of 10 to 20 years. A signi-ficant portion of these land and buildings is owned by Knorr-Bremse GmbH/Austria, Knorr-Bremse Systemes Ferroviaires France S.A./France, Knorr-Bremse Commercial Vehicle Japan Ltd, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH/Germany and Knorr-Bremse Rail Systems Ltd/United Kingdom.

A rise in the net book value of the land and buildings of 28%, to TEUR 17,470, was reported in the 2016 fiscal year. This rise is due to the conclusion of a new finance lease agreement for a commercial building by Knorr-Bremse Systemes Ferroviaires France S.A./France. The net book value of land and buildings increased by 54% to TEUR 9,401 in 2017, due in part to finance leases integrated into the Group as part of the asset deal of Knorr-Bremse Commercial Vehicle Systems Japan Ltd. Secondly, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH has entered into new finance leases.

As at December 31 2017, the total net book value of the assets from finance leases amounted to TEUR 32,063 (2016: TEUR 24,461; 2015: TEUR 17,510).

Finance leases

	12/31/2017 TEUR		2017 TEUR
Land and buildings	26,871	Depreciation and amortization/impairment test	4,159
Technical equipment and machinery	1,273	Interest expenses	1,507
Other assets	3,919	**Expenses**	**5,665**
Assets	**32,063**	Contingent rents reported as expense	43

	12/31/2016 TEUR		2016 TEUR
Land and buildings	17,470	Depreciation and amortization/impairment test	4,087
Technical equipment and machinery	2,706	Interest expenses	1,522
Other assets	4,284	**Expenses**	**5,609**
Assets	**24,461**	Contingent rents reported as expense	6

	12/31/2015 TEUR		2015 TEUR
Land and buildings	13,649	Depreciation and amortization/impairment test	3,320
Technical equipment and machinery	102	Interest expenses	1,408
Other assets	3,758	**Expenses**	**4,727**
Assets	**17,510**	Contingent rents reported as expense	10

The following table shows the reconciliation of the total future minimum lease payments to their present value on the reporting date.

The total future minimum lease payments primarily result from the obligations from finance leases for land and commercial/production buildings of Knorr-Bremse GmbH/Austria, Knorr-Bremse Systemes Ferroviaires France S.A./France, Knorr-Bremse Commercial Vehicle Systems Japan Ltd., Knorr-Bremse Systeme für Nutzfahrzeuge GmbH and Knorr-Bremse Rail Systems/United Kingdom. As at December 31, 2017, the minimum lease payments for land and buildings amount to TEUR 26,871. No atypical termination or extension options exist.

The Group did not conclude any new sale and lease-back transaction in years 2015 to 2017. An existing sale and lease-back relationship, in place since 2009, is classified as a finance lease and is shown in the table.

Finance leases - reconciliation of the sum of future minimum lease payments to the present value	Up to 1 year TEUR	1 to 5 years TEUR	Over 5 years TEUR	Total TEUR
December 31, 2017				
Minimum lease payments as at the reporting date	6,577	19,136	19,601	45,314
./. Included interest	1,245	4,187	3,905	9,338
Present value of the minimum lease payment	5,332	14,949	15,696	35,976
Future minimum lease payments, whose receipt is expected based on non-terminable subleases	**-**	**-**	**-**	**-**
December 31, 2016				
Minimum lease payments as at the reporting date	5.617	15.203	13.021	33.841
./. Included interest	1.175	3.556	1.663	6.394
Present value of the minimum lease payment	4.443	11.647	11.358	27.448
Future minimum lease payments, whose receipt is expected based on non-terminable subleases	**-**	**284**	**-**	**284**
December 31, 2015				
Minimum lease payments as at the reporting date	4.367	12.286	10.025	26.678
./. Included interest	1.024	3.146	1.030	5.200
Present value of the minimum lease payment	3.343	9.139	8.996	21.478
Future minimum lease payments, whose receipt is expected based on non-terminable subleases	**-**	**202**	**-**	**202**
January 1, 2015				
Minimum lease payments as at the reporting date	4.129	12.425	12.131	28.685
./. Included interest	1.172	3.395	1.667	6.234
Present value of the minimum lease payment	2.956	9.031	10.464	22.451
Future minimum lease payments, whose receipt is expected based on non-terminable subleases	**-**	**332**	**-**	**332**

H.10.2. Operating lease relationships

As at December 31, 2017, the following future minimum lease payments were outstanding within the scope of non-terminable leases.

Operating Lease	Up to 1 year TEUR	Between 1 and 5 years TEUR	Over 5 years TEUR	Total TEUR
December 31, 2017				
Outstanding minimum lease payments	36,896	81,207	64,328	182,430
Outstanding minimum lease payments from subletting (non-terminable)	389	360	-	749
December 31, 2016				
Outstanding minimum lease payments	38,912	90,599	62,675	192,186
Outstanding minimum lease payments from subletting (non-terminable)	136	185	-	321
December 31, 2015				
Outstanding minimum lease payments	37,715	89,150	61,814	188,679
Outstanding minimum lease payments from subletting (non-terminable)	106	222	-	328

Income and expenses	2017		2016		2015	
	Income TEUR	Expenses TEUR	Income TEUR	Expenses TEUR	Income TEUR	Expenses TEUR
Minimum lease payments	38	41,142	122	41,287	134	38,989
Contingent rent payments	-	2,390	-	9	-	7
	38	**43,531**	**122**	**41,295**	**134**	**38,997**

The Group leases a range of production buildings and plants within the scope of long-term operating leases. Another material part of the minimum lease payments arises from operating leases for forklift trucks and company cars, which generally have a term of 3 to 5 years. The decline in outstanding minimum lease payments in 2017, particularly for terms between 1-5 years, is due to the fact that the effect of newly concluded leases is more than offset by expiring, non-extended agreements. No atypical termination or extension options exist.

H.11. Share-based payments

Shares in two “Black Empowerment Entities” were issued in South Africa in 2009. This relates to share-based payments within the meaning of IFRS 2, which must be classified as transactions with equity settlement.

Knorr-Bremse (South Africa) (Pty) Ltd has fully financed the issuance of its treasury stock. The financing should be paid by collecting dividends on these shares. The rights transferred to the “Black Empowerment Entities” were measured at fair value. In the event that this exceeds the fair value of the payments received and the other assets, the difference is reported as an expense.

As no financial contributions were to be made by the shareholders of the “Black Empowerment Entities”, the costs and the issued equity instrument were equal.

The fair value was calculated as follows:

- The Black-Scholes model was used to calculate the costs with regard to the option pricing model in accordance with IFRS 2.
- The option has a term of twelve years.
- The cash value represents 25% of the discounted cash flow of the company’s equity valuation as at January 1, 2009.
- The exercise price on the expiry date.
- The risk-free interest rate was assumed to be 8.9%.
- A volatility of 30% was assumed based on an analysis of the sector in which the company operates.
- A dividend yield of 5.5% was assumed based on prudent dividend forecasts and corporate growth of 10% per annum.

On this basis, the equity effect of the share-based payment as of January 1, 2014 amounted to TEUR 1,707.

In 2017, changes in the shareholder structure were made according to which the shares of a "Black Empowerment Entity" were repurchased for a price of TEUR 550.

H.12 List of shareholdings

The following table shows the list of shareholdings in accordance with chapter 313 (2) HGB:

1. Consolidated affiliated companies	Share of capital (%)	Currency and unit	Equity	Income	Total assets
Albatros GmbH, Munich/Germany	100.0	TEUR	21	-3	21
Aldona Seals Ltd., Peterlee/United Kingdom	100.0	TGBP	993	260	1,179
Alpha Process Controls (International) Ltd., Peterlee/United Kingdom	100.0	TGBP	539	-168	680
Anchor Brake Shoe Company LLC, West Chicago, Illinois/USA	100.0	TUSD	28,985	2,018	37,634
APS electronic AG, Niederbuchsiten/Switzerland	100.0	TCHF	2,357	-15	4,985
BCVS Canadian Holdings LLC, Anjou, Québec/Canada	100.0		0	0	0
BCVS Mexican Holdings LLC, Cd Acuna, Coah/Mexico	100.0		0	0	0
Bendix Commercial Vehicle Systems LLC, Elyria, Ohio/USA	100.0	TUSD	797,367	104,659	911,991
Bendix CVS Canada Inc., Anjou, Québec/Canada	100.0		0	0	0
Bendix CVS de Mexico SA de CV, Cd Acuna, Coah/Mexico	100.0		0	0	0
Bendix Spicer Foundation Brake Canada, Inc., Kingston, Ontario/Canada	100.0		0	0	0
Bendix Spicer Foundation LLC, Elyria, Ohio/USA	80.0	TUSD	86,382	33,311	149,301
Black River Logistics Company LLC, Watertown, New York/USA	100.0	TUSD	19,025	-3,282	22,634
BSFB Holdings, Inc., Elyria, Ohio/USA	100.0				
Casram Rail S.p.A., Crimido/Italy	100.0	TEUR	621	-429	3,388
Comet Fans S.r.l., Solaro, Mailand/Italy	100.0	TEUR	4,149	272	7,850
Distribuidora Bendix CVS (de) Mexico SA de CV, Cd Acuña, Coah/Mexico	100.0				
Dr. techn. Josef Zelisko Ges.m.b.H., Mödling/Austria	100.0	TEUR	5,163	0	36,651
G.T. Group Ltd., Peterlee/United Kingdom	100.0	TGBP	4,201	-225	5,239
GT Emission Systems Ltd., Peterlee/United Kingdom	100.0	TGBP	18,374	4,323	27,435
GT Project Engineering Ltd., Consett/United Kingdom	100.0	TGBP	163	-352	956
Guangdong Knorr-Bremse Guo Tong Railway Vehicle Systems Equipment Co., Ltd., Jiangmen, Guangdong/China [1)]	49.0	TCNY	45,730	10,134	271,576
Hasse & Wrede CVS Dalian, China Ltd., Dalian/China	70.0	TCNY	99,067	45,685	213,068
Hasse & Wrede GmbH, Berlin/Germany	100.0	TEUR	8,656	0	24,886
Heine Resistors GmbH, Dresden/Germany	100.0	TEUR	4,644	152	5,559
Icer Rail S.L., Pamplona/Spain	100.0	TEUR	13,163	5,234	29,031
IFE North America LLC, Westminster, Maryland/USA	100.0	TUSD	4,700	669	7,456
IFE-CR a.s., Brünn/Czech Republic	100.0	TCZT	529,100	68,084	1,305,018
IFE-Tebel Technologies B.V., Leeuward/Netherlands	100.0	TEUR	18,573	-954	22,320
IFE-VICTALL Railway Vehicle Door Systems (Qingdao) Co., Ltd., Qingdao/China	59.0	TCNY	145,098	17,255	526,733
IGE-CZ s.r.o. , Brno/Czech Republic	100.0	TCZT	37,359	5,970	38,529
Kalmar Tågkompetens AB, Kalmar/Sweden	100.0	TSET	3,632	646	8,106
KB Gamma Beteiligungs GmbH, Munich/Germany	100.0	TEUR	21	-2	21
KB Lambda Beteiligungs GmbH, Munich/Germany	100.0	TEUR	26	1	26
KB Media GmbH Marketing und Werbung, Munich/Germany	100.0	TEUR	0	0	3,857
KB Omikron Beteiligungs GmbH, Munich/Germany	100.0	TEUR	24	-2	24
KB Sigma Beteiligungs GmbH, Munich/Germany	100.0	TEUR	26	1	26
Kiepe Electric Ges. m. b. H., Vienna/Austria	100.0	TEUR	10,932	-1,308	22,188
Kiepe Electric GmbH, Düsseldorf/Germany	100.0	TEUR	28,432	0	84,969
Kiepe Electric Inc., Alpharetta/USA	100.0	TUSD	4,731	294	11,320
Kiepe Electric Ltd., Birmingham/United Kingdom	100.0	TGBP	-4,115	-3,205	895
Kiepe Electric UK Limited, Birmingham/United Kingdom	100.0	TGBP	-8,803	173	11,250
Knorr Brake Company LLC., Westminster, Maryland/USA	100.0	TUSD	45,725	16,119	91,464
Knorr Brake Corporation Canada Holdings Ltd., Montreal, Québec/Canada	100.0	TCAD	3,767	5,024	13,978
Knorr Brake Holding Corporation, Watertown, New York/USA	89.3	TUSD	519,113	172,258	988,888
Knorr Brake Ltd., Kingston, Ontario/Canada	100.0	TUSD	11,702	1,331	12,446
Knorr Brake Realty, LLC, Westminster, Maryland/USA	100.0	TUSD	3,600	225	17,350
Knorr Brake Truck Systems Company, Watertown, New York/USA	100.0	TUSD	584,127	59,313	784,673
Knorr-Amabhiliki (Pty.) Ltd., Kempton Park/South Africa	100.0	TZAR	163	0	163
Knorr-Bremse / Nankou Air Supply Unit (Beijing) Co., Ltd., Nankou/China	55.0	TCNY	70,357	34,313	187,879
Knorr-Bremse 1520 OOO, Burashevskoe/Russland	100.0	TRUB	72,102	-712,037	2,462,674
Knorr-Bremse Asia Pacific (Holding) Limited, Hongkong/China	100.0	THTD	647,638	1,766,154	6,004,307
Knorr-Bremse Australia Pty. Ltd., Granville/Australia	100.0	TAUD	20,162	5,303	77,828
Knorr-Bremse Benelux B.V.B.A., Heist-op-den-Berg/Belgium	100.0	TEUR	1,312	90	6,219
Knorr-Bremse Beteiligungsgesellschaft mbH, Munich/Germany	100.0	TEUR	26	0	31
Knorr-Bremse Braking Systems for Commercial Vehicles (Dalian) Co. Ltd., Dalian/China	100.0	TCNY	252,254	122,013	659,495
Knorr-Bremse Brasil (Holding) Administração e Participação Ltda., Itupeva/Brazil	100.0	TBRL	188,306	16,453	230,785
Knorr-Bremse CARS LD Vehicle Brake Disc Manufacturing (Beijing) Co. Ltd., Daxing/China	50.0	TCNY	361,647	311,525	1,190,376
Knorr-Bremse Commercial Vehicle Systems (Shanghai) Co., Ltd., Shanghai/China	100.0	THTD	68,547	17,109	235,820
Knorr-Bremse Commercial Vehicle Systems Japan Ltd., Tokio/Japan	80.0	TYEN	4,458,203	1,023,482	16,799,239
Knorr-Bremse DETC Commercial Vehicle Braking Technology Co., Ltd., Shiyan/China	51.0	TCNY	117,356	36,449	373,692
Knorr-Bremse España, S.A.,Getafe/Spain	100.0	TEUR	0	0	0
Knorr-Bremse Fékrendszerek Kft., Kecskemét/Hungary	100.0	THUF	15,464,355	3,158,513	27,760,907
Knorr-Bremse Ges.m.b.H., Mödling/Austria	100.0	TEUR	52,141	44,937	159,062
Knorr-Bremse Ibérica S.L., San Fernando de Henares/Spain	100.0	TEUR	5,549	884	11,476
Knorr-Bremse India Pvt. Ltd., Faridabad/India	100.0	TINR	5,816,961	2,063,063	9,321,483
Knorr-Bremse Investment GmbH, Munich/Germany	100.0	TEUR	1,001	0	1,002
Knorr-Bremse KAMA Systems for Commercial Vehicles OOO, Naberezhnye Chelny/Russia	50.0	TRUB	916,801	255,319	1,251,372
Knorr-Bremse Nordic Rail Services AB, Lund/Sweden	100.0	TSET	51,552	-27,283	220,430
Knorr-Bremse Pensionsgesellschaft mbH, Munich/Germany	100.0	TEUR	24	0	24
Knorr-Bremse Polska SfN Sp. z o.o., Warschau/Polend	100.0	TPLN	4,391	1,487	4,575
Knorr-Bremse Powertech Corporation USA, Atlanta/USA	100.0	TEUR	2,921	1,041	14,570

1. Consolidated affiliated companies	Share of capital (%)	Currency and unit	Equity	Income	Total assets
Knorr-Bremse Powertech GmbH & Co. KG, Holzkirchen/Germany	100.0	TEUR	-12,024	-4,825	15,560
Knorr-Bremse Powertech GmbH, Berlin/Germany	100.0	TEUR	-15,515	-11,352	57,216
Knorr-Bremse Powertech Verwaltungs GmbH, Berlin/Germany	100.0	TEUR	70	4	71
Knorr-Bremse Rail Systems (UK) Ltd., Melksham, Wiltshire/United Kingdom	100.0	TGBP	20,036	13,671	80,415
Knorr-Bremse Rail Systems CIS Holding OOO, Moskau/Russia	100.0	TRUB	782,248	119,592	792,549
Knorr-Bremse Rail Systems Italia S.r.l., Campi Bisenzio/Italy	100.0	TEUR	29,762	9,017	74,215
Knorr-Bremse Rail Systems Japan Ltd., Tokio/Japan	94.0	TYEN	2,160,024	456,174	4,042,234
Knorr-Bremse Rail Systems Korea Ltd., Seoul/South Korea	100.0	Mio WON	5,618,459	786,642	10,428,635
Knorr-Bremse Rail Systems OOO, Moskau/Russiaa	100.0	TRUB	607,007	315,734	1,141,669
Knorr-Bremse Rail Systems Schweiz AG, Niederhasli/Switzerland	100.0	TCHF	8,379	3,084	17,194
Knorr-Bremse RailServices (UK) Ltd., Melksham, Wiltshire/United Kingdom	100.0	TGBP	-31,452	-3,094	32,276
Knorr-Bremse Railway Technologies (Shanghai) Co., Ltd., Shanghai/China	100.0	TCNY	-74,915	-1,028	34,658
Knorr-Bremse Raylı Sistemler Turkey Sanayi ve Ticaret Limited Şirketi, Ankara/Turkey	100.0	TTRY	3,953	2,031	5,110
Knorr-Bremse S.A. (Pty.) Ltd., Kempton Park/South Africa	75.0	TZAR	142,674	-4,600	321,642
Knorr-Bremse S.R.L., Bukarest/Romania	100.0	TLEU	983	42	2,238
Knorr-Bremse SA Holding Company (UK) Ltd., Melksham, Wiltshire/United Kingdom	100.0	TGBP	5,590	0	5,590
Knorr-Bremse Services Europe s.r.o., Stráž nad Nisou/Czech Republic	100.0	TCZT	-102,634	-102,644	49,363
Knorr-Bremse Services GmbH Munich/Germany	100.0	TEUR	4,737	0	36,660
Knorr-Bremse Sistemas para Veículos Comerciais Brasil Ltda., Itupeva/Brasil	100.0	TBRL	86,625	10,915	151,832
Knorr-Bremse Sistemas para Veículos Ferroviários Ltda., Itupeva/Brasil	100.0	TBRL	56,519	11,068	88,383
Knorr-Bremse Sistemi per Autoveicoli Commerciali S.p.A., Arcore/Italy	100.0	TEUR	8,673	409	18,716
Knorr-Bremse Steering Systems GmbH, Wülfrath/Germany	100.0	TEUR	19,839	2,770	33,638
Knorr-Bremse System för Tunga Fordon AB, Malmö/Sweden	100.0	TSET	13,291	9,274	17,255
Knorr-Bremse Systeme für Nutzfahrzeuge GmbH, Munich/Germany	80.0	TEUR	326,929	83,435	649,261
Knorr-Bremse Systeme für Nutzfahrzeuge Pensionsgesellschaft mbH, Munich/Germany	100.0	TEUR	24	0	24
Knorr-Bremse Systeme für Schienenfahrzeuge GmbH, Munich/Germany	100.0	TEUR	36,000	0	793,190
Knorr-Bremse Systeme für Schienenfahrzeuge Ibero Holding GmbH, Munich/Germany	100.0	TEUR	47,307	0	77,995
Knorr-Bremse Systemes Ferroviaires S.A., Tinqueux/France	100.0	TEUR	11,738	3,166	25,713
Knorr-Bremse Systèmes pour Véhicules Utilitaires France S.A., Lisieux/France	100.0	TEUR	47,473	22,620	92,679
Knorr-Bremse Systems for Commercial Vehicles (Chongqing) Ltd., Chongqing/China	66.0	TCNY	99,543	26,629	296,101
Knorr-Bremse Systems for Commercial Vehicles India Pvt. Ltd., Pune/India	100.0	TINR	170,889	-202,648	2,423,291
Knorr-Bremse Systems for Commercial Vehicles Ltd., Bristol/United Kingdom	100.0	TGBP	17,027	2,833	26,748
Knorr-Bremse Systems for Commercial Vehicles OOO, Moskau/Russia	100.0	TRUB	331,407	76,117	686,728
Knorr-Bremse Systems for Rail Vehicles (Suzhou) Co., Ltd., Suzhou/China	100.0	TCNY	1,280,212	1,079,122	2,975,123
Knorr-Bremse Systems for Rail Vehicles Kazakhstan LLP, Astana/Republic of Kazakhstan	100.0	TTZT	51,566	11,298	60,837
Knorr-Bremse Systemy Kolejowe Polska Sp. z o.o., Krakau/Poland	100.0	TPLN	51,099	7,544	72,816
Knorr-Bremse Systémy pro užitková vozidla ČR s.r.o.,Stráž nad Nisou/Czech Republic	100.0	TCZT	658,509	164,343	1,563,298
Knorr-Bremse Technology Center India Private Limited, Pune/India	100.0	TINR	91,497	25,499	239,759
Knorr-Bremse Ticari Arac Fren Sistemleri Limited Sirketi, Istanbul/Turkey	100.0	TTRY	3,789	1,225	4,411
Knorr-Bremse US Beteiligungs GmbH, Munich/Germany	100.0	TEUR	50	0	498
Knorr-Bremse US Investment GmbH, Munich/Germany	100.0	TEUR	25	0	25
Knorr-Bremse Vasúti Jármű Rendszerek Hungária Kft., Budapest/Ungarn	100.0	THUF	29,768,018	6,952,121	61,486,214
Knorr-Bremse Verwaltungsgesellschaft mbH, Munich/Germany	100.0	TEUR	28	-2	28
M.S. Resistances S.A., Saint Chamond/ France	51.0	TEUR	2,315	245	3,956
Merak Jinxin Air Conditioning Systems (Wuxi) Co., Ltd., Wuxi/China	51.0	TCNY	107,068	51,818	461,075
Merak Knorr Climatización S.A., Buenos Aires/Argentina	100.0	TARS	2,709	-256	7,535
Merak North America LLC, Westminster, Maryland/USA	100.0	TUSD	-3,739	-335	19,046
Microelettrica do Brasil Comercialização e Importação de Produtos Eletromecânicos Ltda.,Barueri, São Paulo/Brazil	100.0	TBRL	-983	-1,383	4,185
Microelettrica Heine (Suzhou) Co., Ltd., Suzhou/China	100.0	TCNY	55,776	9,351	95,822
Microelettrica Power (Pty) Ltd., Johhannesburg/South Africa	74.0	TZAR	24,090	5,107	81,871
Microelettrica Scientifica (Pty) Ltd., Johannesburg/South Afirca	100.0	TZAR	52,120	17,043	66,184
Microelettrica Scientifica S.p.A., Buccinasco/Italy	100.0	TEUR	29,459	2,500	69,919
Microelettrica USA LLC, Randolph, New Jersey/USA	100.0	TUSD	4,267	735	5,414
MST Electroteknik Sanayi ve Ticaret Limited Şirketi, Şerifali, Istanbul/Turkey	100.0	TTRY	-4,826	-4,424	5,209
New York Air Brake LLC, Watertown, New York/USA	100.0	TUSD	197,965	19,508	260,569
Selectron Systems (Beijing) Co., Ltd., Peking/China	100.0				
Selectron Systems AG, Lyss/Switzerlans	100.0	TCHF	26,236	7,505	39,464
Selectron Systems Private Limited, Gurgaon/India	100.0				
Semiconductor Solutions (Pty.) Ltd., Pretoria/South Africa	60.0	TZAR	14,797	3,282	26,187
Sigma Air Conditioning Pty. Ltd., Granville/Australia	100.0	TAUD	11,526	1,803	41,459
Sigma Transit Systems Pty. Ltd., Granville/Australia	100.0	TAUD	9,598	0	9,598
Skach Ges.m.b.H., Mödling/Austria	100.0	TEUR	66	0	2,410
STE Schwingungs-Technik GmbH, Klieken/Germany	100.0	TEUR	-2,131	119	42
Swedtrac RailServices AB, Solna/Sweden	100.0	TSET	3,454	2,645	52,933
Sydac Ltd., Manchester/United Kingdom	100.0	TGBP	1,811	6	2,205
Sydac Pty. Ltd., Granville/Australia	100.0	TAUD	-3,659	-2,453	6,985
Technologies Lanka Inc., La Pocatière, Québec/Canada	100.0	TCAD	12,551	3,974	21,271
tedrive Yönlendirme Sistemleri Sanayi ve Tic.Ltd.Şti. , Istanbul/Turkey	100.0	TTRY	11,845	650	27,654
Unicupler GmbH, Niederurnen/Switzerland	100.0	TCHF	3,226	-219	3,595
Zelisko Elektrik Sanayi ve Ticaret Limited Şirketi, Istanbul/Turkey	100.0	TTRY	4,776	-651	-8,002

2. Associated companies valued using the equity method	Share of capital (%)	Currency and unit	Equity	Income	Total assets
Alltrucks GmbH & Co. KG, Munich/Germany	33.3	TEUR	785	-2,859	1,426
Alltrucks Verwaltungs GmbH, Munich/Germany	33.3	TEUR	32	1	37
Knorr-Bremse DETC Commercial Vehicle Braking Systems (Shiyan) Co., Ltd., Shiyan/China	49.0	TCNY	10,000	5,162	231,496
Westinghouse Platform Screen Doors (Guangzhou) Ltd., Guangzhou/China	15.0	TCNY	50,100	14,420	170,191

3. Not consolidated associated companies	Share of capital (%)	Currency and unit	Equity	Income	Total assets
Di-Pro LLC., Fresno, Kalifornien/USA	100.0	TUSD	0	0	0
Dyno-Inno Test Center for Brake Equipment (Suzhou) Ltd., Suzhou/China	100.0	TCNY	3,500	0	3,500
EKA DOOEL, Skopje/Mazedonia	100.0	TMTD	22,400	653	39,093
Foro Verwaltungs GmbH & Co. KG, München/Deutschland (unbesch. haft. Ges. ist Knorr-Bremse Systeme für Schienenfahrzeuge Ibero Holding GmbH, Munich/Germany)	100.0	TEUR	6	0	6
Freios Bre Coahuila, S.A. de C.V., Cd. Acuña, Coah/Mexico	100.0	TUSD	7,473	-27	7,473
Heiterblick Projektgesellschaft mbH, Leipzig/Germany	49.0	TEUR	25	512	40,795
KB Investment UK Ltd., Chippenham/United Kingdom	100.0	TGBP	0	6,759	22,000
Kiepe Electric Corporation, Vancouver/canada	100.0	TCAD	1,260	487	2,512
Kiepe Electric d.o.o., Niš/Serbia	100.0	TRSD	1,703	-299	1,794
Kiepe Electric (Pty) Ltd. South Africa, Woodstock/South Africa	100.0	TZAR	-283	-96	41
Kiepe Electric S.r.l., Cernusco sul Navigilio/Italy	100.0	TEUR	267	40	1,006
Knorr-Bremse Systems for Rail Vehicles Enterprise Management (Beijing) Co., Ltd. Peking/China	100.0	TCNY	4,645	0	4,645
Metco Technical Consulting AG, Zug/Switzerland	100.0	TCHF	71	-17	1,582
SCI pour l'Industrie, Pau/France	100.0	TEUR	93	0	93
Sichuan Knorr-Bremse Guo Tong Railway Transportation Equipment Co., Ltd., Chengdu/China	100.0	TCNY	10,000	0	10,000
Sydac Simulation Technologies India Private Limited, Pune/India [2]	100.0				
tedrive Steering Systems Inc., Wixom, Michigan/USA (Gesellschaft wurde mit Wirkung zum 02.02.2018 liquidiert)	100.0	TUSD	0	-29	0
RBL-Technologie Ltd., Naberezhnye Chelny/Russia	100.0	TRUB	5,073	5,230	14,304

[1] *Control based on enforceability of management decisions and control of operations*

[2] *Due to the lack of significant influence on the net assets, financial position and results of operations by Knorr-Bremse AG, disclosure has not been made regarding capital and results of this company*

In accordance with IFRS, the following companies are consolidated in addition to the regulations of HGB:

- Megalith Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG, Mainz/Germany
- MORCAR Grundstücksgesellschaft mbH & Co. oHG, Munich/Germany
- Sanctor Grundstücks-Vermietungsgesellschaft mbH & Co. KG Objekt Marzahn KG, Düsseldorf/Germany
- K&D Progetto Srl, Bolzano/Italy

I. Segment information

I.1. Basics of segmentation

The Group has two reportable segments, which are the group's operating segments, as described below. The divisions offer different products and services and are managed separately as they require different technology and marketing strategies.

The following summary describes the reportable segments of the group.

In the **Rail Vehicle Systems (RVS)** segment, the Company plays a key role in the development, production, sales and service of modern braking systems and related subsystems for rail vehicle systems. In addition, the product fields of platform screen doors, boarding systems, power supply systems, driver assistance systems, air conditioning systems, control technology, friction material, simulators and control components are served.

The **Commercial Vehicle Systems (CVS)** segment is also characterized by the development, production, sales and service of modern braking systems. In addition to the complete braking system including driver assistance systems, the product range of the Commercial Vehicle Systems Division also includes steering systems, torsional vibration dampers, powertrain-related solutions and transmission controls for improving efficiency and saving fuel.

Other business areas mainly include leasing, holding and logistics activities as well as media and IT services.

For each segment, the group's management board reviews internal management reports on a monthly basis.

Transfer prices between the segments are determined on an arm's length basis.

I.2. Information on reportable segments

Information regarding the results of each reportable segment is given below. The profit (loss) of a segment before tax is used to measure profitability, as the management board believes that this is the most relevant information for assessing the results of the individual segments in relation to other industry companies.

Reporting to the management board as of December 31, 2017 is based on German GAAP (HGB) figures. Revenues within the segment are already presented on a pre-consolidation basis.

Information on reportable segments

	Reportable segments			Reconciliation to IFRS		Remaining segments and consolidation	Group
	RVS	CVS	Total	RVS	CVS		
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
December 31, 2017							
External revenues	3,308,512	2,918,937	6,227,450	(50,213)	(29,059)	5,365	6,153,543
Inter segment revenues	16,705	9,036	25,741	(14,886)	(8,293)	(2,562)	-
Segment revenues	**3,325,217**	**2,927,973**	**6,253,191**	**(65,099)**	**(37,352)**	**2,803**	**6,153,543**
EBITDA*)	659,785	475,174	1,134,959	(20,467)	28,569	(27,551)	1,115,510
Depreciation and amortization	(112,749)	(83,559)	(196,307)	(3,259)	1,307	(13,220)	(211,479)
EBIT*)	547,037	391,615	938,652	(23,726)	29,876	(40,771)	904,031
Interest income	8,569	1,708	10,277	4,222	3,446	6,091	24,036
Interest expense	(12,580)	(7,780)	(20,360)	(8,825)	(2,808)	(6,808)	(38,801)
Other financial result	-	(953)	(953)	394	331	(36,570)	(36,797)
thereof: Share of profit or loss from companies accounted for using the equity method	-	*(953)*	*(953)*	-	-	-	*(953)*
EBT	**543,026**	**384,591**	**927,617**	**(27,935)**	**30,845**	**(78,058)**	**852,469**
December 31, 2016							
External revenues	2,974,954	2,516,192	5,491,146	3,090	(24,143)	1,163	5,471,256
Inter segment revenues	15,387	6,991	22,378	(14,743)	(6,057)	(1,578)	-
Segment revenues	**2,990,342**	**2,523,182**	**5,513,524**	**(11,653)**	**(30,200)**	**(415)**	**5,471,256**
EBITDA*)	607,693	402,489	1,010,182	16,274	23,233	2,413	1,052,103
Depreciation and amortization	(96,871)	(71,402)	(168,272)	20,475	3,458	(21,320)	(165,659)
EBIT*)	510,822	331,088	841,910	36,749	26,692	(18,907)	886,444
Interest income	7,625	1,449	9,074	3,049	4,332	2,757	19,212
Interest expense	(9,352)	(3,896)	(13,248)	(8,152)	(3,711)	(3,571)	(28,681)
Other financial result	3,305	(685)	2,620	10,080	(7,852)	(40,549)	(35,701)
thereof: Share of profit or loss from companies accounted for using the equity method	*3,305*	*(685)*	*2,620*	-	-	*20*	*2,640*
EBT	**512,401**	**327,955**	**840,356**	**41,726**	**19,461**	**(60,269)**	**841,274**
December 31, 2015							
External revenues	3,339,492	2,490,964	5,830,456	(10,070)	-	3,122	5,823,508
Inter segment revenues	1,577	875	2,452	-	-	(2,452)	-
Segment revenues	**3,341,069**	**2,491,839**	**5,832,908**	**(10,070)**	-	**670**	**5,823,508**
EBITDA*)	769,893	396,077	1,165,969	27,389	72,018	3,665	1,269,041
Depreciation and amortization	(120,972)	(68,420)	(189,392)	47,646	(1,718)	(27,022)	(170,484)
EBIT*)	648,920	327,657	976,578	75,035	70,301	(23,357)	1,098,557
Interest income	10,464	1,624	12,088	2,247	3,941	3,422	21,698
Interest expense	(11,405)	(4,913)	(16,318)	(6,388)	(3,372)	(3,081)	(29,159)
Other financial result	2,987	(631)	2,356	(12,987)	(16,962)	(15,471)	(43,065)
thereof: Share of profit or loss from companies accounted for using the equity method	*2,987*	*(631)*	*2,356*	-	-	*(1,554)*	*802*
EBT	**650,966**	**323,737**	**974,703**	**57,907**	**53,908**	**(38,487)**	**1,048,031**

**) Not explicitly presented in management reporting to CODM*

Internal reporting does not contain any segment-specific information on assets and liabilities, this is therefore not included in the segment information.

i. Revenues	2017 TEUR	2016 TEUR	2015 TEUR
Revenues of reportable segments (German GAAP)	6,253,191	5,513,524	5,832,908
Revenues of other segments (German GAAP)	163,287	147,490	73,309
Inter-segment consolidation and other effects	(85,838)	(85,432)	(72,638)
Adjustment PoC-Accounting	(38,310)	17,689	(10,070)
Adjustment based on disclosure differences due to implementation of BilRuG	(138,787)	(122,015)	-
Consolidated revenues	**6,153,543**	**5,471,256**	**5,823,508**

ii. Earning before tax	2017 TEUR	2016 TEUR	2015 TEUR
Earnings before tax of reportable segments (German GAAP)	927,617	840,356	974,703
Earnings before tax of other segments (German GAAP)	593,693	528,678	476,829
Inter-segment consolidation and other effects	(678,994)	(538,394)	(490,950)
Adjustment due to amortization not recognized on Goodwill	50,023	34,918	60,239
Adjustment PoC-Accounting	(38,310)	17,689	(10,070)
Adjustment due to capitalization and amortization of development projects	20,789	13,843	12,678
Adjustment due to valuation differences in pension liabilities	17,863	14,116	32,999
Adjustment due to purchase options NCI	(12,543)	(40,125)	(30,865)
Adjustment inventory valuation	3,709	(1,429)	14,926
Adjustment provisions	10,669	(10,889)	17,893
Adjustment impairment of assets held for sale and disposal groups	(25,368)	-	-
Other adjustments based on differences between German GAAP and IFRS	(16,679)	(17,489)	(10,351)
Earnings from continued operations, consolidated and before taxes	**852,469**	**841,274**	**1,048,031**

I.3. Geographical information

The following table shows the group's sales revenues and non-current assets, broken down by country of domicile of the group company.

i. Revenues	2017 TEUR	2016 TEUR	2015 TEUR
Europe/Africa	**3,076,353**	**2,677,016**	**2,567,898**
thereof Germany	*1,536,024*	*1,339,736*	*1,295,832*
North America	**1,294,040**	**1,141,042**	**1,366,623**
thereof USA	*1,280,050*	*1,124,436*	*1,355,747*
South America	**92,778**	**99,511**	**100,084**
Asia-Pacific	**1,690,372**	**1,553,687**	**1,788,903**
thereof China	*1,235,805*	*1,187,162*	*1,407,727*
	6,153,543	**5,471,256**	**5,823,508**

ii. Non-current assets	2017 TEUR	2016 TEUR	2015 TEUR
Europa/Africa	**909,959**	**1,100,925**	**883,334**
thereof Germany	*537,849*	*469,493*	*419,790*
North America	**230,695**	**283,150**	**283,769**
thereof USA	*228,729*	*266,614*	*267,478*
South America	**36,407**	**41,044**	**34,278**
Asia-Pacific	**180,094**	**158,767**	**147,243**
thereof China	*86,089*	*86,134*	*84,181*
Goodwill	**299,737**	**-**	**-**
thereof Rail Vehicle Systems (Global)	*181,521*	*n/a*	*n/a*
thereof Commercial Vehicle Systems (Global)	*118,216*	*n/a*	*n/a*
	1,656,893	**1,583,886**	**1,348,625**

Non-current assets consist of property, plant and equipment, goodwill and other intangible assets.

Neither division is significantly dependent on external third parties. Neither in the year under review nor in the prior years did the Company generate more than 10% of its sales with one customer.

Regarding the change in the allocation of goodwill please refer to chapter F.2.

Munich, August 22, 2018

Knorr-Bremse AG
Management Board

Klaus Deller | Ralph Heuwing | Dr. Peter Laier

Auditor's Report

To the Knorr-Bremse Aktiengesellschaft, Munich

We have audited the consolidated financial statements prepared by the Knorr-Bremse Aktiengesellschaft, Munich, comprising consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of cash flows, consolidated statement of changes in equity and notes to the consolidated financial statements for the financial years from 1 January 2017 to 31 December 2017, 1 January 2016 to 31 December 2016 and 1 January 2015 to 31 December 2015. The preparation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, are the responsibility of the Company's management. Our responsibility is to express an opinion on the consolidated financial statements based on our audit.

We conducted our audit of the consolidated financial statements in accordance with section 317 HGB ("Handelsgesetzbuch: German Commercial Code") and German generally accepted standards for the audit of financial statements promulgated by the German Institute of Public Auditors (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements give a true and fair view of the net assets, financial position and the results of operations of the Group in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU.

Munich, 23 August 2018

KPMG AG
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Rupprecht Wirtschaftsprüfer [German Public Auditor]	Engelmann Wirtschaftsprüfer [German Public Auditor]