CONSOLIDATED FINANCIAL STATEMENTS (IFRS)

Balance sheet – Assets

of the euromicron Group as of December 31, 2018 (IFRS)

Balance sheet – Assets 014

	Note	Dec. 31, 2018	Dec. 31, 2017	Change
		€ thou.	€ thou.	€ thou.
Noncurrent assets				
Goodwill	(7)	110,629	110,629	0
Other intangible assets	(7)	15,879	16,557	–678
Property, plant and equipment	(7)	18,933	19,139	–206
Other financial assets	(7, 30)	159	232	–73
Other assets	(7)	1	4	–3
Deferred tax assets	(8)	2,758	255	2,503
Total noncurrent assets		**148,359**	**146,816**	**1,543**
Current assets				
Inventories	(9)	28,820	31,486	–2,666
Trade accounts receivable	(10, 30, 31)	11,937	8,994	2,943
Gross amount due from customers for contract work	(10)	N/A	52,518	–52,518
Contract assets	(10, 30, 31)	40,755	N/A	40,755
Claims for income tax refunds	(10)	430	928	–498
Other financial assets	(7, 10, 30)	4,738	3,898	840
Other assets	(10)	2,085	2,566	–481
Cash and cash equivalents	(11, 30)	6,553	4,954	1,599
Total current assets		**95,318**	**105,344**	**–10,026**
Total assets		**243,677**	**252,160**	**–8,483**

Balance sheet – Equity and liabilities

of the euromicron Group as of December 31, 2018 (IFRS)

Balance sheet – Equity and liabilities 015

	Note	Dec. 31, 2018	Dec. 31, 2017	Change
		€ thou.	€ thou.	€ thou.
Equity				
Subscribed capital	(12)	18,348	18,348	0
Capital reserves	(12)	94,298	94,298	0
Currency translation difference	(12)	–4	4	–8
Consolidated retained earnings	(12)	–47,228	–34,708	–12,520
Stockholders' equity		65,414	77,942	–12,528
Non-controlling interests	(12)	793	599	194
Total equity		**66,207**	**78,541**	**–12,334**
Noncurrent liabilities				
Provisions for pensions	(13)	1,369	1,424	–55
Other provisions	(13)	1,653	1,751	–98
Liabilities to banks	(14, 30)	38,958	19,993	18,965
Liabilities from finance leases	(14, 30)	790	1,143	–353
Other financial liabilities	(14, 30)	0	610	–610
Other liabilities	(14)	114	170	–56
Deferred tax liabilities	(15)	2,724	5,598	–2,874
Total noncurrent liabilities		**45,608**	**30,689**	**14,919**

Continuation of the balance sheet – Equity and liabilities, table 015 on P. 084

Continuation of the balance sheet – Equity and liabilities, table 015

Balance sheet – Equity and liabilities 015

	Note	Dec. 31, 2018	Dec. 31, 2017	Change
		€ thou.	€ thou.	€ thou.
Current liabilities				
Other provisions	(13)	1,941	1,955	–14
Trade accounts payable	(14, 30)	48,631	46,996	1,635
Gross amount due to customers for contract work	(14)	N/A	2,014	–2,014
Contract liabilities	(14, 30)	4,209	N/A	4,209
Liabilities from current income taxes	(14)	1,165	1,385	–220
Liabilities to banks	(14, 30)	58,681	70,556	–11,875
Liabilities from finance leases	(14, 30)	363	521	–158
Other tax liabilities	(14)	3,595	4,777	–1,182
Personnel obligations	(14, 30)	9,727	9,795	–68
Other financial liabilities	(14, 30)	1,295	1,562	–267
Other liabilities	(14)	2,255	3,369	–1,114
Total current liabilities		**131,862**	**142,930**	**–11,068**
Total equity and liabilities		**243,677**	**252,160**	**–8,483**

Income statement

of the euromicron Group for the period January 1 to December 31, 2018 (IFRS)

Income statement 016

	Note	2018	2017
		€ thou.	€ thou.
Sales	(16)	**318,012**	**332,908**
Inventory changes		–670	–612
Own work capitalized	(17)	3,362	3,389
Other operating income	(18)	1,779	2,190
Cost of materials	(19)	–165,112	–172,432
Personnel costs	(20)	–114,304	–112,551
Other operating expenses	(21)	–41,181	–43,389
Earnings before interest, taxes, depreciation and amortization (EBITDA)		**1,886**	**9,503**
Depreciation/amortization	(22)	–9,636	–8,405
Earnings before interest and taxes (EBIT)		**–7,750**	**1,098**
Interest income	(23)	23	313
Interest expenses	(23)	–6,282	–4,943
Other financial income	(23)	0	200
Other financial expenses	(23)	–34	–219
Income before income taxes		**–14,043**	**–3,551**
Income taxes	(24)	2,896	45
Consolidated net loss for the year		**–11,147**	**–3,506**
Thereof for euromicron AG shareholders		–11,466	–3,769
Thereof for non-controlling interests	(25)	319	263
(Un)diluted earnings per share in €	(26)	**–1.60**	**–0.53**

Statement of comprehensive income

of the euromicron Group for the period January 1 to December 31, 2018 (IFRS)

Statement of comprehensive income 017

	Note	2018	2017
		€ thou.	€ thou.
Consolidated net loss for the year		**–11,147**	**–3,506**
Items to be subsequently recognized in profit or loss			
Currency translation differences	(12)	–8	9
Items not to be subsequently recognized in profit or loss			
Revaluation effects from pensions	(13)	–311	–201
Other comprehensive income (net)		**–319**	**–192**
Total profit/loss		**–11,466**	**–3,698**
Thereof for euromicron AG shareholders		–11,785	–3,961
Thereof for non-controlling interests		319	263

Statement of changes in equity

of the euromicron Group as of December 31, 2018 (IFRS)

Statement of changes in equity 018

	Note	Subscribed capital	Capital reserves	Consolidated retained earnings	Currency translation difference	Equity attributable to the shareholders of euromicron AG	Non-controlling interests	Total equity
		€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
December 31, 2016		**18,348**	**94,298**	**–30,743**	**–5**	**81,898**	**461**	**82,359**
Consolidated net loss for 2017		**0**	**0**	**–3,769**	**0**	**–3,769**	**263**	**–3,506**
Other comprehensive income								
Currency translation differences	(12)	0	0	0	9	9	0	9
Revaluation effects from pensions	(13)	0	0	–201	0	–201	0	–201
		0	**0**	**–201**	**9**	**–192**	**0**	**–192**
Total profit/loss		**0**	**0**	**–3,970**	**9**	**–3,961**	**263**	**–3,698**
Transactions with owners								
Transfer of the pro-rata claim for compensation of losses on the part of minority interests to "Other assets"	(12)	0	0	5	0	5	0	5
Distributions to/drawings by minority interests	(12)	0	0	0	0	0	–125	–125
		0	**0**	**5**	**0**	**5**	**–125**	**–120**
December 31, 2017		**18,348**	**94,298**	**–34,708**	**4**	**77,942**	**599**	**78,541**

Continuation of the statement of changes in equity, table 018 on P. 088

Continuation of the statement of changes in equity, table 018

Statement of changes in equity

018

	Note	Subscribed capital	Capital reserves	Consolidated retained earnings	Currency translation difference	Equity attributable to the shareholders of euromicron AG	Non-controlling interests	Total equity
		€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
December 31, 2017		**18,348**	**94,298**	**–34,708**	**4**	**77,942**	**599**	**78,541**
Adjustments from first-time application of IFRS 9 and IFRS 15 in acc. with IAS 8		0	0	–739	0	–739	0	–739
January 1, 2018 (adjusted)		**18,348**	**94,298**	**–35,447**	**4**	**77,203**	**599**	**77,802**
Consolidated net loss for 2018		**0**	**0**	**–11,466**	**0**	**–11,466**	**319**	**–11,147**
Other comprehensive income								
Currency translation differences	(12)	0	0	0	–8	–8	0	–8
Revaluation effects from pensions	(13)	0	0	–311	0	–311	0	–311
		0	**0**	**–311**	**–8**	**–319**	**0**	**–319**
Total profit/loss		**0**	**0**	**–11,777**	**–8**	**–11,785**	**319**	**–11,466**
Transactions with owners								
Correction to the pro-rata claim for compensation of losses on the part of minority interests recognized in the previous year	(12)	0	0	–4	0	–4	0	–4
Distributions to/drawings by minority interests	(12)	0	0	0	0	0	–125	–125
		0	**0**	**–4**	**0**	**–4**	**–125**	**–129**
December 31, 2018		**18,348**	**94,298**	**–47,228**	**–4**	**65,414**	**793**	**66,207**

Statement of cash flows

of the euromicron Group for the period January 1 to December 31, 2018 (IFRS)

Statement of cash flows 019

	Note	2018	2017
		€ thou.	€ thou.
Income before income taxes	(23)	– 14,043	– 3,551
Net interest income/loss and other financial expenses	(23)	6,293	4,649
Depreciation and amortization of fixed assets	(23)	9,636	8,405
Reversal of write-downs of fixed assets	(23)	0	0
Disposal of assets, net	(23)	– 16	– 51
Non-cash deconsolidation effects	(23)	0	70
Depreciation/amortization of other noncurrent and current assets	(23)	0	238
Allowances for inventories and doubtful accounts	(23)	553	770
Change in provisions	(23)	– 141	540
Changes in current and noncurrent assets and liabilities:			
– Inventories	(23)	2,127	– 3,764
– Trade accounts receivable and contract assets (previous year: gross amount due from customers for contract work)	(23)	7,217	– 2,408
– Trade accounts payable and contract liabilities (previous year: gross amount due to customers for contract work)	(23)	1,629	3,299
– Other operating assets	(23)	– 810	1,493
– Other operating liabilities	(23)	– 1,575	– 4,377
– Income tax paid	(23)	– 2,483	– 2,870
– Income tax received	(23)	726	832
– Interest paid	(23)	– 5,975	– 4,960
– Interest received	(23)	208	125
Net cash provided by/used in operating activities *	(23)	**3,346**	**– 1,560**

↓ Continuation of the statement of cash flows, table 019 on P. 090

Continuation of the statement of cash flows, table 019

Statement of cash flows

019

	Note	2018	2017
		€ thou.	€ thou.
Net cash provided by/used in operating activities *	(23)	**3,346**	**– 1,560**
Proceeds from			
– Retirement/disposal of intangible assets	(23)	0	0
– Retirement/disposal of property, plant and equipment	(23)	70	68
Payments for			
– the purchase of intangible fixed assets	(23)	– 3,737	– 4,410
– the purchase of tangible fixed assets	(23)	– 3,636	– 6,380
– the acquisition of subsidiaries and other business units, less assumed cash and cash equivalents	(23)	– 500	– 2,048
– the disposal of subsidiaries and other business units, including transferred cash and cash equivalents	(23)	0	– 701
Net cash used in investing activities	(23)	**– 7,803**	**– 13,471**
Proceeds from raising of financial loans	(23)	12,590	18,720
Cash repayments of financial loans	(23)	– 5,898	– 4,775
Cash repayments of liabilities from finance leases	(23)	– 511	– 525
Distributions to/withdrawals by non-controlling interests and profit shares of minority interests	(23)	– 125	– 279
Net cash provided by financing activities	(23)	**6,056**	**13,141**
Net change in cash funds	(23)	1,599	– 1,890
Cash funds at start of period	(23)	4,954	6,844
Cash funds at end of period	(23)	**6,553**	**4,954**
* Adjusted for factoring effects:	(23)		
Net cash provided by operating activities:	(23)	**7,530**	**386**

General disclosures

1. Description of business activities

euromicron AG (hereinafter referred to as the "company") is a registered stock corporation under German law whose shares are traded on the stock market and that has its registered offices in Frankfurt/Main, Germany (commercial register number HRB 45562). The euromicron Group unites medium-sized high-tech companies that operate in particular in the target markets of "Digital Buildings", "Smart Industry" and "Critical Infrastructures". As German specialists for digital infrastructures, the companies in the euromicron Group enable their customers to network business and production processes and so successfully move to a digital future. From design and implementation, operation, to intelligent services – euromicron provides its customers with tailor-made solutions for technologies, system integration and smart services and creates the IT, network and security infrastructures required for them. As a result, euromicron lets its customers migrate existing infrastructures gradually to the digital age. Thanks to this expertise, the euromicron Group helps its customers increase their own company's agility and efficiency, as well as develop new business models that lay the foundation for commercial success down the road.

The Executive Board gave its consent to publication of these consolidated financial statements on April 8, 2019. They were approved by the Supervisory Board at its meeting on April 10, 2019.

2. Summary of the main accounting policies

2.1 Accounting principles

euromicron AG prepares its consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB), as are applicable in the European Union, and the supplementary regulations pursuant to Section 315e (1) of the German Commercial Code (HGB), in the valid version at December 31, 2018. All the mandatory standards at the balance sheet date were applied.

Rounding effects may mean that individual figures might not add up exactly to the specified total.

(a) Effects of new standards and interpretations or amendments to them on the consolidated financial statements

The table below presents the new and amended standards and interpretations that have been adopted by the International Accounting Standards Board (IASB) and the International Financial Reporting Standards Interpretations Committee (IFRS-IC) and are mandatory for the first time in fiscal 2018:

Table 020

Standards to be applied for the first time in the fiscal year 020

	Standard / interpretation	Mandatory application in the EU	Adoption by the EU Commission
IAS 40	Investment Property: Transfers of Investment Property (amendment)	January 1, 2018	Yes
IFRS 2	Share-based Payment: Classification and Measurement of Share-based Payment Transactions (amendment)	January 1, 2018	Yes
IFRS 4	Insurance Contracts (amendment)	January 1, 2018	Yes
IFRS 9	Financial Instruments	January 1, 2018	Yes
IFRS 15	Revenue from Contracts with Customers	January 1, 2018	Yes
IFRS 15	Revenue from Contracts with Customers (clarifications)	January 1, 2018	Yes
IFRIC 22	Foreign Currency Transactions and Advance Consideration	January 1, 2018	Yes
AIP	Annual improvements to the IFRSs, cycle 2014-2016	January 1, 2017 / January 1, 2018	Yes

Apart from the effects of IFRS 9 and IFRS 15 presented in the following, there were no significant effects on the consolidated financial statements.

IFRS 9 "Financial Instruments"

The IASB adopted the final version of IFRS 9 "Financial Instruments" on July 24, 2014. Adoption of IFRS 9 means that its previous versions (Classification and Measurement: Financial Assets and Liabilities; Hedge Accounting) and its predecessor standard IAS 39 – "Financial Instruments: Recognition and Measurement" are superseded.

When first carried, financial assets are to be categorized as measured at "fair value through profit or loss" or, respectively, at "fair value through other comprehensive income" or at "amortized cost".

There is the irrevocable possibility of applying a "fair value through other comprehensive income" option for equity instruments provided the instruments in question are not held for trading. Otherwise they are measured at "fair value through profit or loss".

The shares in the listed company Track Group Inc., Utah, U.S., carried by the euromicron Group under "Other financial assets" were assigned to the category "Available for sale" under IAS 39 and measured at fair value (carrying amount at December 31, 2018: €21 thousand; no measurement effects contained in OCI). According to IFRS 9, these are equity instruments and are assigned to the category "fair value through profit or loss" when the standard is applied for the first time; the "fair value through other comprehensive income" option is not applied.

The classification of debt instruments is dependent on the company's business model and the contractual terms of the financial asset. For example, financial assets whose business model is based on the collection of contractual cash flows ("Hold to collect" business model) and whose cash flows relate solely to repayments and interest on the unpaid principal must be assigned to the category "amortized cost". That is true of most of the euromicron Group's financial assets.

The regulations of IFRS 9 have an appreciable impact on trade accounts receivable, which the euromicron Group sells to a significant extent under a factoring agreement. As part of that, receivables from certain trade debtors are sold to a factoring company within defined factoring volumes. These receivables thus meet the requirements for the business model "collection of cash flows from sale" ("Sell" business model). The trade accounts receivable sold at the balance sheet date result in a partial disposal with booking of a low continuing involvement.

If receivables tendered under the factoring agreement remain on the balance sheet at the reporting date (for example because the factoring volume of the Group company in question or the trade debtor is already used up), they must likewise be assigned to the "Sell" business model and so to the measurement category "fair value through profit or loss". Trade accounts receivable not sold or tendered under the factoring agreement must be assigned to the measurement category "amortized cost".

The classification of financial liabilities has not changed compared with IAS 39. Only the regulations in the event of a change to the own credit risk have changed for financial liabilities measured to date at "fair value through profit or loss". This change in value now has to be carried in the "Other comprehensive income". The changes to IFRS 9 do not have any impact on financial liabilities at the euromicron Group.

The new regulations in IFRS 9 on recognition of impairments are based on the premise of providing for anticipated losses (expected loss model), a change from the previous model of losses that had already occurred (incurred loss model). Unlike the incurred loss model, the expected loss model takes into account anticipated losses if there are no concrete loss indicators. Consequently, a risk provision for expected payment losses must now be formed in principle in accordance with IFRS 9.

In order to determine the extent of provisions for risks, there is a three-tier model under which in principle expected losses for twelve months are to be carried as of first-time recognition and, in the event of a significant deterioration in the credit risk, the anticipated total losses are to be recognized. An exception to the general impairment model is the simplified impairment model for trade receivables, lease receivables and contract assets in accordance with IFRS 15. Under the simplified impairment model, a risk provision must be carried for all instruments (regardless of the quality of the credit) to the amount of the anticipated losses over their remaining term.

Application of the expected loss model on trade accounts receivable and contract assets in accordance with IFRS 15 resulted upon first-time application of IFRS 9 in an increase in impairments of €153 thousand, which was recognized directly in equity and allocated to the consolidated retained earnings.

IFRS 9 contains regulations on hedge accounting that create a stronger connection between hedge accounting on the balance sheet and the risk management practiced as part of operational activities. There are no effects from the changes to hedge accounting, since the euromicron Group does not use hedge accounting.

In principle, first-time adoption of IFRS 9 must be retrospective; however, various simplification options are granted. No adjustment is made to the comparative figures for the previous year.

The table below presents a reconciliation of the financial assets and liabilities from the measurement categories of IAS 39 with the measurement categories in accordance with IFRS 9 at December 31, 2017 / January 1, 2018 (before adjustments to recognition and measurement): Table 021

The table below presents a reconciliation of the financial assets by measurement categories at January 1, 2018: Table 022

Reconciliation of financial instruments by measurement categories at December 31, 2017 / January 1, 2018 — 021

	Measurement category acc. to IAS 39	Carrying amount	Measurement category acc. to IFRS 9	Carrying amount
		€ thou.		€ thou.
Assets				
Cash and cash equivalents	LaR [1]	4,954	AC [5]	4,954
Trade accounts receivable	LaR [1]	8,994	AC [5] FVPL [6]	7,797 1,197
Other financial assets	AfS [2] LaR [1] FVtPoL [3] IAS 17 N/A	55 3,609 3 162 301	FVPL [6] AC [5] FVPL [6] IAS 17 N/A*	55 3,609 3 162 301
Equity and liabilities				
Trade accounts payable	FLAC [4]	46,996	AC [5]	46,996
Liabilities to banks	FLAC [4]	90,549	AC [5]	90,549
Other financial liabilities	FLAC [4] FVtPoL [3]	1,494 678	AC [5] FVPL [6]	1,494 678
Financial personnel obligations	FLAC [4]	5,676	AC [6]	5,676
Liabilities from finance leases	IAS 17	1,664	IAS 17	1,664

[1] LaR = Loans and Receivables.
[2] AfS = Available for Sale.
[3] FVtPoL = At Fair Value through Profit or Loss.
[4] FLAC = Financial Liabilities Measured at Amortized Cost.
[5] AC = Amortized Cost.
[6] FVPL = At Fair Value through Profit or Loss.
* The continuing involvement carried in the other financial assets is not assigned to any of the listed categories in accordance with IAS 39 and IFRS 9, since separate measurement rules apply as part of the stipulations on retirement of financial assets.

Reconciliation of the financial assets by measurement categories [1] at January 1, 2018 — 022

	Financial assets			Total
	FVPL (FVtPoL 2017)	FVOCI (AfS 2017)	AC (LaR 2017)	
	€ thou.	€ thou.	€ thou.	€ thou.
Closing balance sheet value at December 31, 2017 (IAS 39)	3	55	17,557	17,615
Reclassification of receivables tendered as part of factoring from the measurement category "Loans and receivables" to the measurement category "Fair value through profit or loss"	1,197	0	–1,197	0
Reclassification of other financial assets (shares in Track Group Inc.) from the measurement category "Available for sale" to the measurement category "Fair value through profit or loss"	55	–55	0	0
Opening balance sheet value at January 1, 2018 (IFRS 9) before remeasurement effects	1,255	0	16,360	17,615
Remeasurement effects [2]	0	0	–99	–99
Opening balance sheet value at January 1, 2018 (IFRS 9)	1,255	0	16,261	17,516

[1] In deviation from the assets stated as LaR in the Annual Report at December 31, 2017, the reconciliation presented here does not include the gross amount due from customers for contract work (€52,518 thousand) and the continuing involvement carried in the other financial assets (€301 thousand), since these are not to be assigned to the category LaR. As regards the liabilities stated as FLAC in the Annual Report at December 31, 2017, the gross amount due to customers for contract work (€2,014 thousand) is not to be assigned to the category FLAC, since different measurement rules apply to it. These assets and liabilities likewise do not fall under the scope of IFRS 9 and so are not included in the disclosures in the notes on first-time application of IFRS 9.
[2] The adjustment from retrospective application of the expected loss model is carried under the remeasurement effects.

There were no reconciliation items as regards financial liabilities.

The table below presents a reconciliation between the allowances at January 1, 2018, and their changes at December 31, 2018:
Table 023

Reconciliation of impairment 023

	Allowances for doubtful accounts in acc. with IAS 39 at Dec. 31, 2017	Remeasurement	Allowances for doubtful accounts in acc. with IFRS 9 at Jan. 1, 2018	Change in allowances for doubtful accounts in 2018	Allowances for doubtful accounts in acc. with IFRS 9 at Dec. 31, 2018
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Trade accounts receivable	2,387	99	2,486	–830	1,656
Contract assets	0	54	54	–18	36
Total	**2,387**	**153**	**2,540**	**–848**	**1,692**

The assets assigned to the category "Loans and receivables" under IAS 39 or to the category "Amortized cost" under IFRS 9 comprise trade accounts receivable, cash and cash equivalents and other financial assets. No allowances were carried for cash and cash equivalents and other financial assets for reasons of materiality. The contract assets are not assigned to any measurement category in accordance with IFRS 9.

IFRS 15 "Revenue from Contracts with Customers"
The IASB published the standard IFRS 15 "Revenue from Contracts with Customers" in May 2014. The standard provides a single, principles-based five-step model for determining and recognizing revenue that is to be applied to all contracts with customers and contains the core principle that revenue must be recognized at the time control over goods and services passes to the customer. In particular, it supersedes the standards IAS 11 and IAS 18 and the regulations in various interpretations.

As part of first-time application of IFRS 15, euromicron has used the modified retrospective method, i.e. any conversion effects were recognized cumulatively in the consolidated retained earnings at the start of the comparative period on January 1, 2018. euromicron made use of possible exemptions here. In this connection, contracts that began or were fulfilled before January 1, 2018, were not remeasured, in particular at January 1, 2018.

First-time application of IFRS 15 had the following significant impacts on the presentation of the consolidated financial statements:

- If one of the parties has fulfilled its contractual obligation, IFRS 15 stipulates that the company must carry the contract as a contract asset or contract liability in the balance sheet. A contract asset is the right to receive a consideration in exchange for goods or services transferred to a customer. A contract liability is the obligation to transfer goods or services to a customer for which the company has received (or is to receive) a consideration from the customer. The new items "Contract assets" and "Contract liabilities" have been included in the balance sheet for that purpose. As a result, the previous items "Gross amount due from customers for contract work" and "Gross amount due to customers for contract work" will be dropped from the balance sheet in the future.

- If euromicron fulfills its obligations under contracts with customers before the other party pays a consideration or the consideration becomes due, euromicron presents this contractual right (excluding all amounts carried as trade accounts receivable) as a contract asset.

- As of fiscal 2018, due payments on account not carried in the balance sheet in previous periods until they have been paid are recognized under "Trade accounts receivable" as of the time they become due. The value carried under "Contract liabilities" is reduced to a corresponding amount.

- If a customer pays a consideration or if euromicron has an unconditional right to a specific consideration (i.e. a receivable) before goods are transferred to or a service is performed for the customer, euromicron must recognize the contract as a contract liability when the payment is made or becomes due (whichever is earlier). As a result, euromicron will no longer carry prepayments in future under the balance sheet item "Other liabilities", but instead under "Contract liabilities".

- As of fiscal 2018, due invoices for prepayments not carried in the balance sheet in previous periods until they have been paid are recognized under "Trade accounts receivable" as of the time they become due. The corresponding performance obligation is presented under the "Contract liabilities".

- Under the regulations in IAS 11.22 in conjunction with 11.34 and 11.36, an anticipated loss from construction contracts had to be recognized as an expense immediately. In accordance with IAS 37.69, an impairment loss on an asset first had to be recognized before a separate provision for an onerous contract was established. In accordance with IFRS 15.107, the impairment of a "contract asset" is assessed in accordance with the regulations of IFRS 9 as of fiscal year 2018. We refer in this regard to the section "IFRS 9 – Financial Instruments". That means there is no impairment of a "contract asset" from onerous contracts for as long as no default on contractually agreed payments is anticipated. Provisions for anticipated losses from onerous contracts which are not attributable to default on contractually agreed payments must be set up to the amount of the anticipated unavoidable costs in accordance with IAS 37.68. As a result, the contract assets and other provisions increased by €167 thousand at January 1, 2018.

There are also the following significant adjustments to measurements:

- In construction-related project business/system integration business, there were impacts on the recognition of effects from contract modifications (e.g. from supplements or claims) on the balance sheet. These relate in particular to their measurement, i.e. the amount at which they are to be included in the order total in order to determine the revenue recognized over time. IFRS 15 demands here a higher degree of certainty than was the case under the previous regulations of IAS 11. In accordance with IFRS 15.56, such a consideration may be included fully or partly in the transaction price only if it is highly likely that there is no significant cancellation as regards the recognized cumulated revenues as soon as the uncertainty in connection with the consideration no longer exists. The necessary adjustments resulted at January 1, 2018, in a reduction of € –759 thousand in "contract assets", which was recognized directly in equity and allocated to the consolidated retained earnings.

- In the remaining project business, revenue is recognized at a later point in time in individual areas – for construction contracts carried up to now using the percentage of completion method in accordance with IAS 11 –, since the requirements for revenue recognition over time in accordance with IFRS 15 are not fulfilled. This adjustment resulted at January 1, 2018, in a reduction in contract assets (€ –297 thousand) and a corresponding increase in work in progress (€157 thousand). The effect of that adjustment (€ –140 thousand) was presented as a reduction in the consolidated retained earnings.

The following overview presents the effects of IFRS 15 on the relevant balance sheet items at January 1, 2018: Table 024

Adjustments from first-time application of IFRS 15 024

	Dec. 31, 2017 (before adjustment)	Change in presentation of construction contracts / contract assets	Change in recognition of due payments on account	Change in recognition of prepayments	Change in recognition of onerous contracts	Switch from PoC method to revenue recognition at a point in time	Other measurement adjustments	Jan 1, 2018 (after adjustment)
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Assets								
Inventories	31,486	0	0	0	0	157	0	31,643
Trade accounts receivable	8,994	0	1,424	24	0	0	0	10,442
Gross amount due from customers for contract work	52,518	–52,518	0	0	0	0	0	N/A
Contract assets	N/A	52,518	–1,424	0	167	–297	–759	50,205
Equity and liabilities								
Consolidated retained earnings	–34,708	0	0	0	0	–140	–759	–35,607
Other provisions	3,706	0	0	0	167	0	0	3,873
Gross amount due to customers for contract work	2,014	–2,014	0	0	0	0	0	N/A
Contract liabilities	N/A	2,014	0	1,033	0	0	0	3,047
Other liabilities	3,539	0	0	–1,009	**0**	**0**	**0**	2,530

The table below presents a summary of the effects from first-time application of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers" on assets, liabilities and equity at January 1, 2018:

Tables 025 and 026

Adjustments from first-time application of IFRS 9 and IFRS 15 in acc. with IAS 8 — 025

		Adjustments from first-time application of			
	Dec. 31, 2017 (before adjustment)	IFRS 15 (excl. deferred tax effects)	IFRS 9 (excl. deferred tax effects)	Effects on deferred taxes	Jan. 1, 2018 (after adjustment)
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Assets					
Noncurrent and current assets					
Inventories	31,486	157	0	0	31,643
Trade accounts receivable	8,994	1,448	–99	0	10,343
Gross amount due from customers for contract work	52,518	–52,518	0	0	N/A
Contract assets	N/A	50,205	–54	0	50,151
Deferred tax assets	255	0	0	2	257
Other noncurrent and current assets	158,907	0	0	0	158,907
Total assets	**252,160**	**–708**	**–153**	**2**	**251,301**

Adjustments from first-time application of IFRS 9 and IFRS 15 in acc. with IAS 8 — 026

		Adjustments from first-time application of			
	Dec. 31, 2017 (before adjustment)	IFRS 15 (excl. deferred tax effects)	IFRS 9 (excl. deferred tax effects)	Effects on deferred taxes	Jan. 1, 2018 (after adjustment)
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Equity and liabilities					
Equity					
Consolidated retained earnings	–34,708	–899	–153	312	–35,448
Other equity (including non-controlling interests)	113,249	0	0	0	113,249
Total equity	**78,541**	**–899**	**–153**	**312**	**77,801**
Noncurrent and current liabilities					
Other provisions	3,706	167	0	0	3,873
Gross amount due to customers for contract work	2,014	–2,014	0	0	N/A
Contract liabilities	N/A	3,047	0	0	3,047
Deferred tax liabilities	5,598	0	0	–310	5,288
Other liabilities	3,539	–1,009	0	0	2,530
Other noncurrent and current liabilities	158,762	0	0	0	158,762
Total noncurrent and current liabilities	**173,619**	**191**	**0**	**–310**	**173,500**
Total equity and liabilities	**252,160**	**–708**	**–153**	**2**	**251,301**

The tables below present a summary of the differences in recognition and measurement on the balance sheet and income statement at December 31, 2018, that would have resulted if the IFRS standards applicable at December 31, 2017 (in particular IAS 11 "Construction Contracts", IAS 18 "Revenue" and IAS 39 "Financial Instruments: Recognition and Measurement") would have had to still be applied in 2018: Tables 027, 028 and 029

Reconciliation of the adjustment effects from IFRS 9 and IFRS 15 at December 31, 2018 027

		Adjustments from first-time application of			
	Dec. 31, 2018 (before adjustment)	IFRS 15 (excl. deferred tax effects)	IFRS 9 (excl. deferred tax effects)	Effects on deferred taxes	Dec. 31, 2018 (after adjustment)
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Assets					
Noncurrent and current assets					
Inventories	28,751	69	0	0	28,820
Trade accounts receivable	11,464	581	–108	0	11,937
Gross amount due from customers for contract work	41,374	–41,374	0	0	N/A
Contract assets	N/A	40,790	–35	0	40,755
Deferred tax assets	2,684	0	0	74	2,758
Other noncurrent and current assets	159,407	0	0	0	159,407
Total assets	**243,680**	**66**	**–143**	**74**	**243,677**

Reconciliation of the adjustment effects from IFRS 9 and IFRS 15 at December 31, 2018 028

		Adjustments from first-time application of			
	Dec. 31, 2018 (before adjustment)	IFRS 15 (excl. deferred tax effects)	IFRS 9 (excl. deferred tax effects)	Effects on deferred taxes	Dec. 31, 2018 (after adjustment)
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Equity and liabilities					
Equity					
Consolidated retained earnings	–46,857	–383	–143	154	–47,228
Other equity (including non-controlling interests)	113,435	0	0	0	113,435
Total equity	**66,579**	**–383**	**–143**	**154**	**66,207**
Noncurrent and current liabilities					
Other provisions	3,192	402	0	0	3,594
Gross amount due to customers for contract work	1,763	–1,763	0	0	N/A
Contract liabilities	N/A	4,209	0	0	4,209
Deferred tax liabilities	2,804	0	0	–80	2,724
Other liabilities	4,768	–2,399	0	0	2,369
Other noncurrent and current liabilities	164,574	0	0	0	164,574
Total noncurrent and current liabilities	**177,101**	**449**	**0**	**–80**	**177,470**
Total equity and liabilities	**243,680**	**66**	**–143**	**74**	**243,677**

Reconciliation of the adjustment effects from IFRS 9 and IFRS 15 at December 31, 2018 029

	Dec. 31, 2018 (before adjustment)	Adjustments from first-time application of IFRS 15 (excl. deferred tax effects)	Adjustments from first-time application of IFRS 9 (excl. deferred tax effects)	Effects on deferred taxes	Dec. 31, 2018 (after adjustment)
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Sales	317,551	461	0	0	318,012
Inventory changes	–739	69	0	0	–670
Cost of materials	–165,098	–14	0	0	–165,112
Other operating income	1,769	0	10	0	1,779
Other expense and income items (incl. amortization/depreciation and the net financial result)	–168,052	0	0	0	–168,052
Income taxes	3,055	0	0	–159	2,896
Consolidated net loss for the period	**–11,514**	**516**	**10**	**–159**	**–11,147**
Thereof for euromicron AG shareholders	–11,832	516	9	–159	–11,466
Thereof for non-controlling interests	318	0	1	0	319
(Un)diluted earnings per share in €	**–1.65**	**0.07**	**0.00**	**–0.02**	**–1.60**

Effects on the cash flow

First-time application of IFRS 9 and IFRS 15 did not have any significant effects on the euromicron Group's cash flow. There are slight changes in recognition within the cash flow from operating activities.

(b) Standards, interpretations and amendments of published standards which do not yet have to be applied in 2018 and that were not used by the Group before they apply

The following new or changed accounting regulations of the IASB have recently been adopted. However, since their application is not yet mandatory or they have not yet been adopted by the European Union, they were not used in the consolidated financial statements as of December 31, 2018:

Table 030

Standards to be applied in future fiscal years 030

	Standard / interpretation	Mandatory application in the EU	Adoption by the EU Commission
IAS 1	Presentation of Financial Statements: definition of material (amendment)	January 1, 2020	No
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors: definition of material (amendment)	January 1, 2020	No
IAS 19	Employee Benefits: Plan Amendment, Curtailment or Settlement (amendment)	January 1, 2019	Yes
IAS 28	Long-term Interests in Associates and Joint Ventures (amendment)	January 1, 2019	Yes
IFRS 16	Leases	January 1, 2019	Yes
IFRS 17	Insurance Contracts	January 1, 2021	No
IFRS 3	Business Combinations: Amendments to clarify the definition of a business	January 1, 2020	No
IFRS 9	Financial Instruments: Prepayment Features with Negative Compensation (amendment)	January 1, 2019	Yes
IFRIC 23	Uncertainty over Income Tax Treatments	January 1, 2019	Yes
Conceptual Framework	Amendments to References to the Conceptual Framework in IFRS Standards	January 1, 2020	No
AIP	Annual improvements to the IFRSs, cycle 2015 – 2017	January 1, 2019	No

Voluntary premature application of individual standards or interpretations to be applied in future, where permissible for the standard or interpretation in question – subject to any still outstanding endorsement –, is not envisaged by the euromicron Group.

Apart from the effects of IFRS 16 presented in the following, there are not expected to be any significant effects on the consolidated financial statements.

IFRS 16 "Leases"

On January 13, 2016, the IASB published its standard on future lease accounting "IFRS 16 – Leases". IFRS 16 thus replaces the previous regulations of IAS 17 "Leases" and related interpretations (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").

Under the new regulations, the lessee must recognize all leases in future in the balance sheet in the form of a right of use (right of use assets) and corresponding lease liability. They are always presented in the income statement as a financing transaction, i.e. the right of use must usually be amortized using the straight-line method and the lease liability amortized using the effective interest method.

Only leases with a total maximum term of twelve months and leases for low-value assets (IT equipment and operating and office equipment with a value when new of up to €5,000, if they are not closely linked to other assets) are exempted from being carried in the balance sheet. In these cases, the lessee can elect to recognize the assets in a similar way as for the previous operating lease under IAS 17 "Leases".

The new standard does not contain any major changes for lessors. The IASB has adopted the regulations of IAS 17 for lessors in the new standard almost without any changes. As a result, the lessor still classifies every lease from the aspect of risk and reward, both for the purpose of presenting it on the balance sheet and in earnings. As a result, there is no longer a mirror-image reflection between the lessor and lessee. In addition, the IASB has established the control principle familiar from IFRS 10 "Consolidated Financial Statements" and IFRS 15 "Revenue from Contracts with Customers" in IFRS 16 "Leases". Accordingly, a lease will exist in future if fulfillment of the contract depends on use of an identified asset and the contract also gives the customer the right to control use of that asset.

Further changes from previous regulations include in relation to sale and leaseback transactions, in which in a first step it is now necessary to assess where there is a sale in accordance with IFRS 15 "Revenue from Contracts with Customers", which did not have to be taken into account under IAS 17 "Leases". In addition, IFRS 16 contains amended regulations on the separation of lease and service components, accounting in the event of modification to existing contracts, and a significant expansion in disclosure obligations on the part of both the lessor and lessee.

IFRS 16 must be applied to fiscal years beginning on or after January 1, 2019. The euromicron Group intends to apply the new standard for the first time effective January 1, 2019, using the modified retrospective approach and recognize the cumulative effect from first-time application of IFRS 16 as an adjustment to the opening balance sheet value for the revenue reserves at January 1, 2019, without any retroactive adjustment to the comparative information for the year before its first-time application.

As regards the options and exemptions available under IFRS 16, the euromicron Group chooses the following approach:

- Rights of use are carried under the fixed assets.
- Lease obligations are recognized separately in the balance sheet.
- Use is made of the option whereby the recognition, measurement and carrying requirements of IFRS 16 do not have to be applied to short-term leases (total maximum term of twelve months) and to leases for which the underlying asset is of low-value.
- No inclusion of the direct costs initially incurred

The lease obligations mainly comprise rental agreements for buildings and vehicle leasing agreements. In the case of significant, short-term agreements relating to the rental of buildings, the terms of the agreements on which measurement is based were adjusted to reflect the Group's five-year planning horizon.

In fiscal 2016, the euromicron Group initiated a Group-wide project to introduce IFRS 16 and had almost completed it by the end of 2018. As part of the project, a survey of the existing tenancy agreements and leases was initially conducted throughout the Group. The agreements are administered by means of a contract management system that has been implemented. This system supplies the foundation for calculating the rights of use to be recognized in accordance with IFRS 16; they essentially correspond to the amount of the lease obligations at the time of the switch. An IT-based leasing tool was rolled out to calculate and update these amounts.

First-time application of IFRS 16 effective January 1, 2019, will result in a significant increase in total assets due to the fact that rights of use and lease obligations have to be carried in the balance sheet. The increase in lease obligations will entail a corresponding increase in net financial debt. The increase in total assets means there will also be a reduction in the euromicron Group's equity ratio.

One of the effects on items in the consolidated income statement will be a significant improvement in EBITDA due to lower rent and lease expenses carried under "Other operating expenses". That will also have a positive impact on EBIT, although this effect will be far lower due to the additional amortization of the recognized rights of use. On the other hand, there will be higher interest expense and so a fall in the net financial result. There will also be corresponding expenses and income from deferred taxes. We initially expect a reduction in earnings before taxes from the presented effects in fiscal 2019. However, earnings will remain unchanged over the entire term of the leases.

In the consolidated statement of cash flows, the repayment portion of the lease payments from operating leases to date will reduce the net cash from financing activities in future. The cash flows for the lease payments made under operating leases were previously carried in the net cash from operating activities, which will therefore improve.

Based on the information gathered, the Group expects that additional rights of use and lease obligations totaling €28.0 million to €29.0 million will be recognized at January 1, 2019. As a result of that, the Group's equity ratio, which is 27.2% at December 31, 2018, is expected to fall by around 3 percentage points.

The Group does not anticipate any effects on compliance with agreed financial covenants as a result of the introduction of IFRS 16.

2.2 General principles

Preparation of consolidated financial statements in compliance with IFRS requires estimates. In addition, the application of company-wide accounting policies necessitates assessments by management. Areas where there is a large latitude for assessment or greater complexity or areas where assumptions and estimates are crucial to the consolidated financial statements are specified in section 3.

Unless otherwise specified, all amounts, including the figures for the previous year(s), are shown in thousand euros (€ thou.). The consolidated income statement has been prepared using the type of expenditure format. The fiscal year is the calendar year.

The balance sheet is presented by noncurrent and current assets and liabilities in accordance with IAS 1. Assets and liabilities are classified as current if they are due within twelve months. Irrespective of when they are due, inventories, trade accounts receivable and trade accounts payable, and contract assets and contract liabilities are regarded as current assets or liabilities even if they are not sold, consumed or due within a year, but are sold, consumed or due within the normal course of the business cycle. The time at which the assets and liabilities are due are presented in detail in the notes.

Offsetting of assets and liabilities

In accordance with IAS 1.32, assets and liabilities and income and expenses are not allowed to be offset unless required or permitted by a standard or an interpretation. Offsetting was carried out in the following circumstances:

- Offsetting of deferred tax assets against deferred tax liabilities if they relate to income tax levied by the same tax authority and there is an entitlement to offsetting of an actual tax refund claim against an actual tax liability.
- Offsetting of pension obligations against the associated plan assets.
- Offsetting of payments on account received that can be directly assigned to individual construction contracts and are covered by services provided by the balance sheet date on the basis of the percentage of completion method.
- Offsetting of income and expenses from allowances according to IFRS 9

2.3 Currency translation

The consolidated financial statements of euromicron AG are prepared in euro, the functional currency of euromicron AG.

Foreign currency transactions are translated into the functional currency at the exchange rates at the time of the transaction. Gains and losses resulting from fulfillment of such transactions and translation of monetary assets and liabilities held in foreign currency at the balance sheet date are recognized in the income statement.

The results and balance sheet items of Group companies that have a different functional currency to the euro are translated into euros as follows:

- Assets and liabilities are translated at the spot rate on the balance sheet date.
- Income and expenses are translated for each income statement at the average rates during the year (unless use of the average rate does not result in a reasonable approximation of the cumulative effects that would have resulted from translation at the rates applicable at the times of the transactions, in which case income and expenses are to be translated at their rates on the transaction date).

All resultant translation differences are recognized in equity in the separate item "Currency translation difference".

2.4 Consolidation principles

Subsidiaries

Subsidiaries are all companies that are controlled by the Group. The Group controls an associated company if it has power of disposal over the company, there is a risk exposure as a result of or rights to variable returns from its engagement in the associated company and the Group has the ability to use its power of disposal over the company so as to influence the level of the variable returns from the associated company. Subsidiaries are included in the consolidated financial statements by way of full consolidation. They are included from the date on which control has passed to the Group and no longer included where the Group does not have control over them.

The financial statements of euromicron AG and its German and foreign subsidiaries included in the consolidated financial statements have been prepared in accordance with Group-wide accounting policies.

Receivables and payables between the companies included in the consolidated financial statements are offset against each other; any differences are recognized in the income statement under "Other operating income" or "Other operating expenses" respectively. If impairment allowances for shares of consolidated companies or intragroup receivables are carried in individual financial statements, they are reversed as part of consolidation.

Intragroup sales, material expenses, other operating expenses and income and interest are eliminated in the consolidated financial statements. Deferred taxes are formed for transactions recognized in profit or loss as part of consolidation.

The Group dispenses with the elimination of intercompany profits in inventories and fixed assets since the resultant amounts are of minor importance.

Company acquisitions

Acquired subsidiaries are carried using the purchase method of accounting in accordance with IFRS 3. The transferred consideration for the acquisition corresponds to the fair value of the assets, the issued equity instruments and the debts that were assumed at the time of the transaction. It also includes the fair values of any recognized assets or liabilities resulting from a conditional consideration agreement. Identifiable assets, liabilities and contingent liabilities as part of a business combination are measured at their fair value at the time of acquisition in first-time consolidation. Any positive difference remaining after allowance for deferred taxes is carried as goodwill under the intangible assets.

If the transferred consideration is less than the net assets of the acquired subsidiary measured at fair value, the difference is recognized directly in the income statement.

Incidental costs as part of company acquisitions are recognized as an expense in the current period and carried under "Other operating expenses" (mainly as consulting costs).

Non-controlling interests are measured at their share proportionate to the identifiable and re-measured net assets of the subsidiary.

If put or call options for non-controlling interests are concluded in a company acquisition, the "anticipated acquisition method" is used; complete acquisition is assumed in this method, with the result that non-controlling interests are not carried.

Any conditional considerations are measured at fair value at the time of acquisition. Subsequent changes to the fair value of a conditional consideration classified as an asset or liability are measured in accordance with IFRS 9 and any resultant profit or loss is recognized in the income statement. A conditional consideration classified as equity is not re-measured; its later settlement is recognized in equity.

When the group loses control of a company, the remaining portion is re-measured at fair value and the resultant difference recognized as profit or loss. In additional, all the amounts reported in the other comprehensive income in relation to that company are recognized as would be required if the parent company had directly sold the associated assets and liabilities. That means any profit or loss previously carried in the other comprehensive income is reclassified from equity to profit/loss.

2.5 Intangible assets – Goodwill

Goodwill from business combinations is not written off using the regular method of depreciation, but examined for impairment at least once a year in accordance with the regulations of IAS 36 (impairment test). euromicron tests goodwill for impairment every year at December 31 of the respective year under review. An impairment test is also conducted if there are indications or circumstances ("triggering events") that suggest the value might be reduced.

In the impairment test, the carrying amount of each cash generating unit (CGU) to which goodwill is allocated is compared with the recoverable amount. The carrying amount of a CGU is determined by addition of the carrying amounts of the assets minus the associated liabilities. The recoverable amount is the higher of its fair value less costs of retirement and value in use of a CGU. The fair value is calculated as the present value of the future free cash flow using the discounted cash flow (DCF) method with a risk-adjusted discount rate (WACC).

In order to determine recoverable amounts for the cash-generating units, payment flows for the next five years were forecast on the basis of past experience, current operating results and the best-possible assessment of future developments by management, as well as on market assumptions. The near-term sales planning is geared to the sales pipeline and the analyzed potentials for new and existing customers. In its multi-year approach, management is essentially oriented toward the potentials and anticipated individual developments of the addressed markets. The anticipated effects of measures by government and public authorities in the field of infrastructure are also taken into account if they can be adequately foreseen. The variable costs mainly change in line with the anticipated development of sale volumes and purchase prices. The planning figures are updated for subsequent years using a long-term growth rate of 0.75% (previous year: 1.0%). The fair value determined for the groups of cash-generating units was assigned to level 3 in the hierarchy of fair values.

Other intangible assets

The other intangible assets comprise concessions, industrial and similar rights, brand name rights, capitalized development costs and self-created software. The other intangible assets are carried at cost and amortized using the straight-line method, on the basis of the following useful lives: Table 031

Useful lives of other intangible assets 031

	Useful life in years
Concessions, industrial and similar rights	3 – 10
Brand name rights	10 – 25
Capitalized development costs	3 – 8
Self-created software	5

There are no intangible assets with an indefinite period of use either at the balance sheet date or at the balance sheet date of the previous year.

In the case of self-created intangible assets, development costs are carried at acquisition and manufacturing cost in accordance with IAS 38, provided the expenses can be clearly assigned, technical feasibility is ensured, there is the intent and ability to create and sell the intangible assets, and marketing of products based on development work is likely to result in future inflows of funds.

Capitalized development costs and own work for self-created software and IT solutions include directly attributable unit costs, which are recorded in cost accounting, and pro-rata overhead costs.

Research expenditure – where incurred – is posted as an expense, but is not a material factor at the euromicron Group.

Property, plant and equipment

Property, plant and equipment is measured at its acquisition or manufacturing cost less cumulated depreciation.

Property, plant and equipment is depreciated using the straight-line method, on the basis of the following useful lives: Table 032

Useful lives of property, plant and equipment 032

	Useful life in years
Buildings / leasehold improvements	5 – 40
Technical equipment and machinery	3 – 14
Other equipment, operating and office equipment	3 – 16

Financing costs are capitalized as acquisition or manufacturing costs in accordance with IAS 23 if they are directly attributable to a qualifying asset. This relates to assets for which borrowing costs can be directly attributed to the acquisition or production of a qualifying asset and for which a considerable period of usually more than twelve months is required to put them into a usable state. In the past fiscal year or in the previous fiscal year before that, there were no borrowing costs that must be capitalized within the meaning of IAS 23.

Impairment of long-lived assets

Long-lived assets (other intangible assets and property, plant and equipment) are tested for impairment if, due to events or changes in circumstances, there are indications that the carrying amount of the objects can no longer be recovered (triggering events). As part of the impairment test, assets are grouped at the lowest level for which cash flows can be separately identified (CGU). The recoverable amount is the higher of its fair value less costs to sell and its value in use. The fair value of the asset is the price that would be obtained for the asset on the measurement date in an orderly business transaction between market participants.

Value in use is the present value of the estimated future cash flow expected to be derived from continued use of an asset and its retirement at the end of its useful life. If the reasons for the value impairments in earlier reporting periods no longer exist, the assets – with the exception of goodwill – are written up again.

2.6 Leasing

If, in accordance with IAS 17, the lessee bears the main risks and opportunities in relation to leased assets, economic ownership is ascribed to the lessee ("finance lease"). In the case of the assets leased by the euromicron Group, the leased object under a finance lease is carried at the time of addition in other intangible assets or the property, plant and equipment at the lower of its fair value or the present value of the minimum lease payments. Capitalized leased objects are written down using the straight line method over their scheduled useful lives or over the agreement's term. The corresponding liability to the lessor is carried at the same amount under "Liabilities from finance leases" at the time of the addition and amortized by means of the effective interest method.

If the main risks and opportunities from a lease remain with the lessor, this constitutes an operating lease. Payments in connection with an operating lease are carried in the income statement linearly over the term of the lease.

When the euromicron Group leases assets in a finance lease, the present value of the minimum lease payments is carried as the leasing receivable. The difference between the gross receivable (minimum lease payments before discounting) and the present value of the receivable is carried as unrealized financial income.

Lease contracts are recognized over the term of the lease in income in such a way that there is a constant rate of interest for the leasing receivable.

Assets that are leased by the euromicron Group as part of an operating lease are allocated on the balance sheet on the basis of their nature. Income from operating leases is carried linearly over the term of the lease.

2.7 Inventories

Inventories are carried in principle at the lower of acquisition/historical cost or net realizable value on the balance sheet date in accordance with IAS 2.9. The net realizable value is the estimated selling price that can be achieved in the ordinary course of business, less the variable costs necessary to make the sale. An average value or a value calculated using the first in, first out method is normally used at the euromicron Group to measure inventories. The historical cost of inventories includes production materials and labor costs, as well as allocable material and production and administrative overheads. In the past fiscal year or in the previous fiscal year before that, there were no borrowing costs that had to be capitalized within the meaning of IAS 23.

2.8 Other receivables

Other receivables are measured at amortized cost.

2.9 Contract assets and contract liabilities

The euromicron Group's portfolio includes project companies that report project and installation services running beyond the key date in their balance sheet. Customer-specific construction contracts are carried on the basis of their percentage of completion, which is derived using the input-oriented cost-to-cost method. The performance provided, including pro-rata earnings, is recognized in revenue over time. Depending on the relationship between performance by euromicron and payment by the customer, a contract asset, a contract liability or a receivable is recognized. Contract assets and contract liabilities are regarded as current assets or liabilities since they are incurred within the normal course of the business cycle. Receivables are recognized if the right to receive a consideration is no longer subject to any condition. Allowances on contract assets for counterparty risks are carried in accordance with the method described under "Trade accounts receivable".

2.10 Financial assets

As of January 1, 2018, classification of financial assets when they are first carried and their subsequent measurement depend on the company's business model for managing its financial assets and from the characteristics of the contractual cash flows from the financial assets. The euromicron Group reclassifies debt instruments only if the business model for managing such assets has changed.

The euromicron Group's business model for managing its financial assets reflects how the company manages its financial assets in order to generate cash flows. Depending on the business model, the cash flows are generated by collection of contractual cash flows ("Hold to collect" business model), the sale of financial assets ("Sell" business model) or both "Hold to collect and sell" business model).

So that a financial asset can be classified as and measured at "amortized cost" or "fair value through other comprehensive income", the cash flows must comprise solely payments of principal and interest (SPPI) on the principal amount outstanding. This assessment is termed "SPPI test" and is conducted at the level of the individual financial instrument.

The euromicron Group measures a financial asset at fair value when it is carried for the first time. Transaction costs of a financial assets measured at fair value through profit or loss are recognized as an expense in profit or loss.

As of January 1, 2018, euromicron AG classes its financial asset in the following measurement categories:

a) Measurement at amortized cost: Financial assets with the "Hold to collect" business model that pass the SPPI test are measured at amortized cost. These assets are subsequently measured using the effective interest method and must be tested for impairment. Gains and losses are recognized in the income statement in the event of derecognition, modification or impairment of these assets. For reasons of materiality, impairment losses or reversals of impairment losses in accordance with IFRS 9 are not presented in a separate item in the income statement, but under the other operating expenses or other operating income, respectively. Interest income is recognized in the financial income. Gains or losses from derecognition are recognized together with the foreign currency gains and losses under the other operating income or other operating expenses, respectively.

b) Measurement at fair value through other comprehensive income: Assets with the "Hold to collect and sell" business model that pass the SPPI test are measured at fair value through comprehensive income. Interest income, remeasurement of currency translation gains and losses, and impairment costs or reversals of impairment losses are recognized in the income statement and calculated as for financial assets measured at amortized cost. The remaining changes to the fair value are carried in other comprehensive income. When the financial asset is derecognized, the accumulated profit or loss previously carried in the other comprehensive income is transferred from equity to the income statement. Interest income is carried in the financial income using the effective interest method. Foreign currency gains and losses are carried under the other operating income or other operating expenses, respectively.

c) Measurement at fair value through profit or loss: Assets with the "Sell" business model are classified in this category and subsequently measured at fair value through profit or loss. Gains and losses from a change to the fair value are netted off and carried under the other financial income or other financial expenses.

The euromicron Group has financial assets in the categories "Amortized cost" and "Fair value through profit or loss" at the balance sheet date. Most of the euromicron Group's financial assets are in the measurement category "amortized cost". The euromicron Group's financial assets that are measured at "fair value through profit or loss" mainly comprise receivables that have been tendered, but are still on the balance sheet (for example because the factoring volume of the Group company in question or the trade debtor is already used up).

There is the irrevocable possibility of applying a "fair value through other comprehensive income" option for equity instruments provided the instruments in question meet the definition of equity under IAS 32 and are not held for trading. Otherwise they are measured at "fair value through profit or loss". Each instrument is classified individually. The shares in the listed company Track Group Inc., Utah, U.S., carried by the euromicron Group under "Other financial assets" were assigned to the category "Fair value through profit or loss" in accordance with IFRS 9 as part of its first-time application; the "fair value through other comprehensive income" option is not used.

Regular purchases or sales of financial assets are recognized on the day of trading. Financial assets are derecognized if the rights to payments from the financial assets have expired or been transferred and the Group has essentially transferred all risks and opportunities attached to ownership of them.

The trade accounts receivable sold at the balance sheet date result in a partial disposal with booking of a low continuing involvement.

2.11 Impairment of financial assets

As of January 1, 2018, the Group assesses on a prospective basis the expected loss relating to its debt instruments (which are measured at amortized cost). The impairment method depends on whether there is a significant increase in the credit risk.

In order to determine the extent of provisions for risks, there is a three-tier model under which in principle expected losses for twelve months are to be carried as of first-time recognition and, in the event of a significant deterioration in the credit risk, the anticipated total losses are to be recognized. An exception to the general impairment model is the simplified impairment model for trade receivables, receivables from finance leases and contract assets in accordance with IFRS 15. Under the simplified impairment model, a risk provision must be carried for all instruments (regardless of the quality of the credit) to the amount of the anticipated losses over their remaining term. Since the trade accounts receivable and contract assets do not contain any significant financing component, a provision matrix is created for estimating the expected losses of these financial instruments. This provision matrix is based on the euromicron Group's prior experience with credit losses and has been adapted to reflect prospective factors that are specific to the debtors and general economic conditions.

If there are substantial objective indications that a financial asset is impaired, it is tested individually for impairment. Such indications of impairment are, for example, a deterioration in a debtor's creditworthiness and related delays in or stoppage of payment or the threat of insolvency. Receivables, trade accounts receivable and contract assets are derecognized if, in a reasonable assessment, they can not longer be realized. That is the case at euromicron if the debtor does not commit itself to a repayment schedule or, at the latest, files insolvency proceedings.

No allowances are carried for cash and cash equivalents and other financial assets for reasons of materiality.

2.12 Cash and cash equivalents

Cash and cash equivalents include cash and demand deposits that have a maximum remaining term of three months at the time they are acquired. They are measured at their nominal value.

2.13 Current and deferred taxes

The tax expense for the period is composed of current and deferred taxes. Taxes are carried in the income statement, unless they relate to items that are recognized directly in equity or the other comprehensive income. In that case, the taxes are likewise carried in equity or the other comprehensive income.

The current tax expense is calculated using the tax regulations that apply on the balance sheet date for the countries in which the company and its subsidiaries earn taxable income.

Deferred taxes are formed on temporary differences in carrying values between the consolidated balance sheet and tax balance sheet and on loss carryforwards using the liabilities method in accordance with IAS 12. In this, deferred taxes at the level of the individual companies and from consolidation effects are taken into account.

Deferred tax claims (deferred tax assets) are recognized to the extent that is it probable that there will be a taxable result in future. The tax rates that are enacted or can be expected to be enacted on the balance sheet at the time of realization are used to calculate deferred taxes. In general, deferred taxes are carried in the noncurrent balance sheet items.

Deferred taxes resulting from temporary differences in connection with shares in subsidiaries are not recognized if the time at which the temporary differences are reversed can be determined by the Group and it is likely that the temporary differences will not be reversed in the foreseeable future due to this influence.

Deferred tax assets are netted off against deferred tax liabilities if they relate to income tax levied by the same tax authority and there is an entitlement to offsetting of an actual tax refund claim against an actual tax liability.

2.14 Equity

Equity comprises the shares in euromicron AG. There are no preferential shares or shares whose nominal amounts must be repaid.

In accordance with IAS 32.37, the equity transaction costs incurred as part of capital increases and the issue of new shares or options, minus deferred taxes, are directly offset with the premium and not recognized in the income statement.

If a company in the euromicron Group acquires equity interests in euromicron AG (treasury shares), the value of the paid consideration, including directly attributable additional costs (net after income taxes), is deducted from euromicron AG's equity until all the shares have been redeemed or issued again. If such treasury shares are subsequently issued again, the received consideration (net after deduction of directly attributable additional transaction costs and related income tax) is carried in euromicron AG's equity.

2.15 Liabilities

Liabilities are classified as current if the payment obligation is due within one year or if they are due within the normal course of the business cycle. Otherwise, they are classified as noncurrent liabilities.

When carried for the first time, liabilities are measured at fair value. They are subsequently measured at amortized cost using the effective interest method.

2.16 Financial liabilities

As of January 1, 2018, financial liabilities will basically be classified in two categories when they are carried for the first time, provided the criteria of IFRS 9 are met:

a) Financial liabilities at fair value through profit or loss;

b) Other financial liabilities measured at amortized cost using the effective interest method.

The euromicron Group's financial liabilities comprise trade accounts payable, other liabilities and loans, including overdrafts.

All financial liabilities are measured at fair value when they are recognized for the first time, with directly attributable transaction costs being deducted from loans and liabilities. Financial liabilities are subsequently measured at fair value through profit or loss. Changes to fair value are carried in the income statement in the period they occur.

All other financial liabilities are measured in subsequent periods at amortized acquisition cost using the effective interest method. Gains and losses are recognized in the income statement when the liability is derecognized and also as part of amortization using the effective interest method. Amortized costs are calculated taking into account any premium or discount upon acquisition and any fees or charges that are an integral part of the effective interest rate. Amortization using the effective interest method is carried in the income statement under the financial expenses. Interest-bearing loans are usually included in this category.

Financial liabilities are only derecognized on the balance sheet if their underlying obligation has been fulfilled or canceled or has elapsed.

2.17 Provisions for pensions and similar obligations

There are defined benefit and defined contribution pension schemes at the euromicron Group. A defined contribution scheme is a pension scheme where the Group pays fixed contributions to a company (fund) that is not part of the Group. The Group has no legal or factual obligation to pay additional contributions if the fund does not contain sufficient assets to settle the pension entitlements of all employees from the current and previous fiscal years. A defined benefit scheme is a scheme that is not a defined contribution scheme. Typically, defined benefit schemes prescribe an amount for the pension benefits which the employees will receive when they retire and which is usually dependent on one or more factors (age, length of service and salary).

The provision for defined benefit schemes on the balance sheet corresponds to the present value of the defined benefit obligation (DBO) on the balance sheet date minus the fair value of the plan assets. The DBO is calculated annually by an independent actuarial expert using the projected unit credit method. The present value of the DBO is calculated by discounting the anticipated future cash payments at the interest rate of high-quality corporate bonds. The corporate bonds are denominated in the currency of the amounts to be paid out and have maturities matching the pension obligations.

The current service cost reflects the increase in the benefit obligation earned by employees in the period under review. It is carried in the income statement under "Personnel costs". Past service costs are also recognized immediately in the income.

The net interest is calculated by multiplying the net debt (asset) from the defined benefit schemes by the discount rate. Both are calculated at the beginning of the period under review, taking into account any changes that have occurred to the net debt due to payments of contributions and benefits in the course of the period under review. The net interest is carried under "Net interest income/loss" in the income statement.

New valuations due to experience adjustments and changes to actuarial assumptions are recognized in equity under "Other comprehensive income" in the period in which they occur.

In the case of defined contribution schemes, the Group pays contributions to public or private pension institutions voluntarily or subject to a statutory or contractual obligation. The Group has no further payment obligations above and beyond making the contributions. The contributions are carried under "Personnel costs" when they are due. Prepaid contributions are recognized as assets to the extent that there is a right to repayment or a reduction in future payments.

2.18 Other provisions

Provisions are recognized in the case of a current legal or constructive obligation to third parties from a past event where utilization is probable and the expected amount of the necessary provision can be measured reliably. The provisions are measured in compliance with IAS 37 at the best estimate of the expenditure required to settle the obligation. Provisions are reversed against the expense item where the original allocation to a provision was carried. If the discounting effect for long-term provisions is material, the provisions are recognized at the present value of the anticipated future cash flows.

2.19 Revenue from contracts with customers

euromicron comprises companies whose specialist know-how complements each other. From its own products, distribution, system solutions, to maintenance and further services, euromicron offers a full-line portfolio in the field of digitalization.

euromicron recognizes revenue from contracts with customers when the control over separable goods or promised services passes to the customer, i.e. when the customer has the ability to determine use of the transferred goods or services and substantially all of the remaining benefits from the them. That requires a contract that creates enforceable rights and obligations and, among other things, collection of the consideration – taking the customer's creditworthiness into account – is likely.

The revenues correspond to the transaction price to which euromicron is likely to be entitled. They are stated net of discounts, customer bonuses and rebates. If a contract comprises multiple separable goods or services, the transaction price is split over the performance obligations on the basis of the relative standalone selling prices. If standalone selling prices are not directly observable, euromicron estimates them reasonably.

For each performance obligation, revenues are recognized either at a specific point in time or over a specific period of time.

Revenue from the sale of goods

The technology suppliers of euromicron develop and produce active and passive optical network components, high-quality fiber-optic cabling systems, public address systems, testing and inspection equipment, networked workplace systems and highly professional safety and security technology for special applications. These revenues are recognized at a point in time when control passes to the purchaser and euromicron fulfills its performance obligation. That is usually the case when the goods are supplied or handed over to the customer. Invoices are issued in accordance with the contractual terms and conditions; the terms of payment usually envisage payment within 30 to 60 days of invoicing.

Revenue from project business

Our project business ranges from networking and digitalization of individual buildings (such as office buildings or hospitals) to supraregional networking of companies and public authorities. The revenue from project business is mainly from projects with just one performance obligation and is recognized over a specific period of time in accordance with the percentage of completion method on the basis of the ratio of the already incurred costs to the estimated total costs. An anticipated loss from a contract is immediately recognized as an expense.

The percentage of completion method is based on an estimate of the extent to which the contract has been completed; it may also entail estimates on the scope of deliveries and services required to fulfill the contractual obligations. These significant estimates comprise the estimated total costs, the estimated total revenues, the order risks – including technical, political and regulatory risks – and other important factors. Estimates of revenues, costs or the progress of an order are revised if circumstances change. Supplements or changes to a contract are recognized, among other things, only if it is highly likely that the work performed will result in revenue. Any resultant increases or reductions in the estimated revenues or costs are carried in profit or loss in the period in which the circumstances leading to the revision become known. Invoices are issued in accordance with the contractual terms and conditions; the terms of payment usually envisage payment within 14 to 60 days of invoicing.

Revenues from the performance of services

Our services cover the entire range of information technology and, for example, include services related to platforms and software. The revenue comes from fees we receive for, among other things, the use of licenses for software products, consulting services and other services. euromicron assumes responsibility for all IT administration work and other services, such as maintenance. Revenues from the performance of services are recognized linearly over a specific period of time or – if provision of the services is not linear – when the services are provided. Invoices are issued in accordance with the contractual terms and conditions; the terms of payment usually envisage payment within 7 to 30 days of invoicing.

Revenues from distribution

In the area of distribution, euromicron supplies customers with active and passive network components in the fiber-optic and copper arena on a vendor-independent basis. It also offers a full portfolio for FTTx networks and passive data center design. These revenues are recognized at a point in time when control passes to the purchaser and euromicron fulfills its performance obligation. That is usually the case when the goods are supplied or handed over to the customer. Invoices are issued in accordance with the contractual terms and conditions; the terms of payment usually envisage payment within 30 to 90 days of invoicing.

2.20 Statement of cash flows

In accordance with IAS 7, the statement of cash flows presents the changes in cash funds reported in the consolidated balance sheet under the item "Cash and cash equivalents" and comprising cash and cash equivalents (cash on hand, demand deposits at banks and checks) with a term of no more than three months. The cash flows are grouped by the three areas of operating, investing and financing activities. Net cash provided by operating activities is determined using the indirect method in accordance with IAS 7.18.

Net cash provided by operating activities is derived indirectly by the income before income taxes being adjusted for the effects of non-cash transactions and allowing for changes in current assets and liabilities and paid and received interest and income taxes.

Cash outflows from the exercise of options or preemptive tender rights in relation to minority interests that are not recognized as such due to use of the "anticipated acquisition method" are shown in the "Net cash provided by/used in investing activities" in the consolidated statement of cash flows.

3. Discretionary decisions and uncertainties in estimates

In preparation of the consolidated financial statements, it is necessary to make estimates and assumptions that have an effect on the recognition and measurement policies and the level of assets, liabilities and contingent liabilities, as well as the level of expenses and income. The assumptions and estimates are based on the knowledge and data available at the balance sheet date; however, the actual results may differ from the anticipated figures and result in appropriate adjustments to the carrying amounts of the assets and liabilities. The assumptions and estimates of relevance to preparation of the consolidated financial statements are constantly reviewed.

Predictive estimates and assumptions are essentially made for the following:

- Measurement of goodwill: €110,629 thousand (previous year: €110,629 thousand)

Goodwill is tested for impairment every year and as warranted (event-driven test). As part of this impairment test, specific measurement parameters, such as future sales growth and future EBITDA margin, are estimated, with management making assessments as regards the development of markets, market share and prices. We refer in this regard to the notes on the consolidated balance sheet, section 2.5.

- Measurement of capitalized development costs: €9,684 thousand (previous year: €9,078 thousand)

We refer in this regard to the notes on the consolidated balance sheet, section 2.5.

- Payment of income taxes (claims for refunds (+) and income tax liabilities (–) netted off): € –735 thousand (previous year: € –457 thousand)

Claims for refunds and income tax liabilities are based on calculations that include estimates and assumptions. The final amount is not fixed until the tax assessment notices have been issued or the tax audits completed.

- Contract assets: €40,755 thousand (previous year: "Gross amount due from customers for contract work": €52,518 thousand).

- Contract liabilities: €4,209 thousand (previous year: "Gross amount due to customers for contract work": €2,014 thousand)

DUse of the percentage of completion method demands in particular estimates of the anticipated total costs and revenues for construction contracts. We refer in this regard to the notes on the consolidated balance sheet (sections 10 and 14) and the notes on the consolidated income statement (section 16).

- Measurement of the other provisions (short- and long-term): €3,594 thousand (previous year: €3,706 thousand)

Measurement of the other provisions is based in particular estimates as to their amount, the likelihood of their being utilized and the time they are utilized. We refer in this regard to the notes on the consolidated balance sheet (section 13 (a)).

- Measurement of provisions for pensions: €1,369 thousand (previous year: €1,424 thousand)

The present value of the pension obligations depends on a large number of factors that are based on actuarial assumptions. We refer in this regard to the notes on the consolidated balance sheet (section 13 (b)).

- Measurement of deferred taxes (deferred tax assets (+) and deferred tax liabilities (–) netted off): €34 thousand (previous year: € –5,343 thousand)

We refer in this regard to the notes on the consolidated balance sheet (sections 2.13 and 15).

Consolidated companies

4. Companies included in the consolidated financial statements

The euromicron Group is made up of euromicron AG and 23 companies to be consolidated (previous year: 23). euromicron AG controls all of the associated companies. All companies are included in the consolidated financial statements by way of full consolidation.

Of these companies, 16 (previous year: 16) are based in Germany, 5 (previous year: 5) in other European countries, and 2 (previous year: 2) in non-European countries.

There were the following changes to the consolidated companies apart from euromicron AG: Table 033

Number of consolidated companies 033

	2018	2017
January 1	23	23
First-time consolidation / newly established companies	0	2
Deconsolidation	0	–2
December 31	**23**	**23**

The table below presents the companies included in the consolidated financial statements: Table 034

[1] Exemption in accordance with Section 264 (3) HGB (German Commercial Code).

[2] Exemption in accordance with Section 264b HGB (German Commercial Code).

[3] Still operated under the name "Stark- und Schwachstrommontage GmbH" in the previous year.

[4] Due to an existing opposite put/call option on the preemptive right or acquisition of the remaining 2.5% stake, 100% of the shares must be economically ascribed to euromicron AG for consolidation purposes.

[5] Due to existing put/call options on the preemptive right or acquisition of the remaining 25% stake, 100% of the shares must be economically ascribed to euromicron AG for consolidation purposes.

euromicron AG makes use of the provision under Section 264 (3) and Section 264b of the German Commercial Code that exempts subsidiaries of euromicron AG from the obligation to prepare notes and/or a management report and to audit and disclose annual financial statements and management reports and fulfills all the necessary conditions.

List of companies included in the consolidated financial statements 034

	Share in capital in %
Parent company:	
euromicron AG, Frankfurt/Main, Germany	
Consolidated subsidiaries	
telent GmbH [1] – ein Unternehmen der euromicron Gruppe, Backnang, Germany	100.00
RSR Datacom GmbH & Co. KG [2], Essen, Germany	100.00
RSR Datacom Verwaltungs GmbH, Essen, Germany	100.00
ProCom Professional Communication & Service GmbH [1], Essen, Germany	100.00
euromicron austria GmbH, Seekirchen, Austria	100.00
ATECS AG, Zug/Switzerland	100.00
Secure Information Management GmbH [1], Neustadt a. d. W., Germany	100.00
euromicron Deutschland GmbH [1], Neu-Isenburg, Germany	100.00
ssm euromicron GmbH [1][3], Hamburg, Germany	100.00
MICROSENS GmbH & Co. KG [2][4], Hamm, Germany	97.50
MICROSENS sp.z.o.o. [4], Wroclaw / Poland	97.50
Microsens Beteiligungs GmbH [4], Hamm, Germany	97.50
EUROMICRON Werkzeuge GmbH [1], Sinn-Fleisbach, Germany	100.00
LWL-Sachsenkabel GmbH – Spezialkabel und Vernetzungstechnik [1], Gornsdorf, Germany	100.00
ELABO GmbH – ein Unternehmen der euromicron Gruppe [1], Crailsheim, Germany	100.00
Qubix S.p.A., Padua, Italy	90.00
SKM Skyline GmbH, Munich [1], Germany	100.00
Avalan GmbH – ein Unternehmen der euromicron Gruppe, Spiesen-Elversberg, Germany	100.00
euromicron holding gmbh, Seekirchen, Austria	100.00
Netzikon GmbH, Backnang, Germany	100.00
SIM Asia PTE.LTD, Singapore	100.00
KORAMIS GmbH 5), Saarbrücken, Germany	75.00
ProCom Communication Systems Trading (Beijing) Co. Ltd., Beijing, China	100.00

5. Acquisition and disposal of companies and divisions

There have been no changes in the companies consolidated in the euromicron Group in fiscal year 2018. There were also no acquisitions or disposals of divisions.

6. Disclosures on company acquisitions from previous years

ATECS AG, Zug, Switzerland and Secure Information Management GmbH, Neustadt a. d. W.

On December 27, 2017, an agreement was reached to exercise the existing preemptive rights relating to the remaining 5.0% of the shares in ATECS AG, Zug, Switzerland, (hereinafter referred to as ATECS AG) and the remaining 5.0% of the shares in Secure Information Management GmbH, Neustadt a. d. W., (hereinafter referred to as SIM GmbH). As a result, euromicron AG holds all of the shares in ATECS AG and all of the shares in SIM GmbH. The amount of the liabilities from preemptive rights discounted to the present value was €500 thousand at December 31, 2017 (previous year: €493 thousand), of which €400 thousand (previous year: €394 thousand) is for ATECS AG and €100 thousand (previous year: €99 thousand) for SIM GmbH. These liabilities from preemptive rights were carried under "Other current financial liabilities". The above acquisitions were each subject to the suspensive condition that the purchase price had to be paid in full, which was done on January 10, 2018.

There was a subsequent purchase price payment of €33 thousand in fiscal year 2018. It was recognized in the income statement.

MICROSENS GmbH & Co. KG, Hamm, and Microsens Beteiligungs GmbH, Hamm

On December 13, 2017, the period for exercising the preemptive right and the purchase option relating to the remaining 2.5% of the shares in MICROSENS GmbH & Co. KG and Microsens Beteiligungs GmbH was extended. The options can now be exercised on January 1, 2018, at the earliest and on December 31, 2020, at the latest. The present value of this resultant liability from preemptive rights (fixed purchase price plus the conditional purchase price component) at December 31, 2018, is €251 thousand (previous year: €251 thousand) and is carried under "Current financial liabilities". As a result of interest accrued on this liability, there were interest expenses of €0 thousand in fiscal 2018 (previous year: €7 thousand).

The preemptive right and the purchase option relating to the remaining 2.5% of the shares in MICROSENS GmbH & Co. KG and Microsens Beteiligungs GmbH were not exercised up to December 31, 2018.

KORAMIS GmbH, Saarbrücken

As part of the acquisition of the company in 2017, the minority shareholder obtained a preemptive right to tender the remaining 25% of the shares and euromicron AG an option to purchase them. The minority shareholder can exercise the preemptive right in the period from October 1, 2019, to December 31, 2019; if the preemptive right is exercised, the purchase price is €650 thousand. telent GmbH can exercise the purchase option in the period from October 1, 2017, to December 31, 2019; if the option is exercised, the purchase price is €850 thousand. If neither the purchase option nor the preemptive right is exercised, the minority shareholder has a further preemptive tender right which it can exercise in the period from January 1, 2020, to March 31, 2020; if this preemptive right is exercised, the purchase price is €650 thousand plus a contractually agreed premium. The minority shareholder's respective share of the debt at the time of acquisition is deducted from the exercise prices of the individual put/call options.

Notes on the consolidated balance sheet

7. Fixed assets

A complete overview of all long-lived assets is provided in the fixed asset movement schedule under b) "Property, plant and equipment" of these notes.

(a) Intangible assets

The intangible assets comprise goodwill, concessions, industrial property and similar rights, brand name rights, capitalized development costs and self-created software.

Goodwill

Goodwill developed as follows in the fiscal year: Table 035

Goodwill 035

	2018	2017
	€ thou.	€ thou.
Goodwill at January 1	110,629	108,291
Additions	0	2,363
Disposals	0	– 25
Goodwill at December 31	**110,629**	**110,629**

The addition of goodwill in the previous year resulted from the acquisition of the company KORAMIS GmbH by telent GmbH and the acquisition of the business operations of Elektroanlagen GmbH Dollenchen & Co. KG by way of an asset deal by euromicron Deutschland GmbH. The disposal of goodwill in the previous year resulted from the fact that the targets for a conditional purchase price component were not achieved from an acquisition that falls under the scope of IFRS 3 (2004 version).

The goodwill at the euromicron Group is distributed over the CGUs as follows: Table 036

Allocation of goodwill to CGUs 036

	31.12.2018	31.12.2017
	€ thou.	€ thou.
Smart Buildings	68,212	68,212
Critical Infrastructures	37,186	37,186
Distribution	5,231	5,231
Total	**110,629**	**110,629**

Goodwill impairment test

Regardless of any event-driven impairment tests, euromicron conducts the obligatory annual goodwill impairment test at December 31 of the reporting period. This annual impairment test was conducted at the end of fiscal 2018 on the basis of the cash-generating units identified at the end of the year.

The impairment test is based on the following main planning and measurement assumptions: Table 037

Planning and measurement assumptions for the impairment test 037

CGU	Carrying amount of the goodwill allocated to the CGU in € thou.	Sales growth in %					EBITDA margin in %					Long-term growth rate
		2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	
Smart Buildings	68,212	10.1 %	6.4 %	5.5 %	5.4 %	5.2 %	6.7 %	8.0 %	8.7 %	9.7 %	10.4 %	0.75 %
Critical Infrastructures	37,186	3.7 %	5.0 %	5.6 %	2.8 %	2.3 %	5.7 %	6.7 %	7.3 %	7.6 %	7.7 %	0.75 %
Distribution	5,231	– 1.7 %	6.8 %	5.5 %	4.9 %	3.6 %	14.7 %	14.6 %	14.8 %	14.9 %	15.0 %	0.75 %

In particular, estimates by management of how the markets, market shares and prices will develop are subject to some uncertainty.

Since individual business risks have already been taken into account in preparing the budgeting for the respective CGUs and will reduce the derived free cash flow, the following parameters were applied uniformly to all CGUs for calculating the WACC for the impairment test at December 31, 2018: Table 038

Interest assumed in the 2018 impairment test 038

	2018	2017
Borrowing rate after taxes	2.20 %	1.49 %
Risk-free interest rate	0.89 %	1.07 %
Markup for return on equity	6.50 %	6.50 %
Beta factor	1.44	0.79
Ratio between outside capital / equity	57.5 %	6.25 %
Weighted average cost of capital (WACC)	7.29 %	5.94 %
Growth rate	0.75 %	1.00 %
WACC perpetuity	6.54 %	4.94 %

As in the previous year, the goodwill impairment test at December 31, 2018, did not reveal any need to reduce the value of the goodwill of individual CGUs.

Sensitivity analysis

As part of a sensitivity analysis, changes to the parameters that were considered possible were simulated stepwise in a model calculation for each of the cash-generating units and examined as to whether there was a need to reduce the value for the CGU.

Given the described assumptions and sustained sales growth of 0.75% at the end of the planning period the recoverable amount of the CGUs will sharply exceed the carrying amount. Even in the event of a sharp, unanticipated reduction in the assumptions for sustained sales growth (0.25% reduction in the estimated sales growth rate of 0.75%), or an increase in WACC by 1 percentage point or a 1.0% lower EBITDA margin over the whole planning period (including perpetuity), there would be a recoverable amount above the carrying amount and so no need for write-downs.

The fair value calculated as part of the goodwill impairment test was measured on the basis of level 3. The fair value is calculated as the present value of the future free cash flow using the discounted cash flow (DCF) method with a risk-adjusted discount rate (WACC). As part of that, assumptions are made about future sales or the anticipated EBITDA margin, for example.

Other intangible assets

Development costs for self-created intangible assets of €2,865 thousand were carried in the year under review (previous year: €2,775 thousand). In addition, own work for self-created software and IT solutions was capitalized to an amount of €205 thousand (previous year: €155 thousand) in the year under review.

Intangible assets were written down to an amount of €65 thousand in the year under review (previous year: €150 thousand). They are allocated in the fixed-asset movement schedule to the category "Concessions, industrial and similar rights" (previous year: to the "Capitalized development costs"). This relates to write-down of the remaining book value of a software program that is to be replaced by a new program at the beginning of 2019. In segment reporting, the write-downs on purchased intangible assets have been fully assigned to the "Smart Buildings" segment, as in the previous year.

(b) Property, plant and equipment

The manufacturing cost of capitalized, self-created property, plant and equipment contains the cost of direct materials and prime costs, as well as attributable overhead costs, and resulted in own work capitalized of €538 thousand in fiscal 2018 (previous year: €554 thousand).

As in the previous year, there were no write-downs of property, plant and equipment in fiscal 2018.

In accordance with IAS 16.74, at the balance sheet date there are no restrictions on title to, nor any significant contractual commitments to acquire property, plant and equipment. In addition, no property, plant or equipment has been assigned as collateral and there were no compensation payments to third parties due to value impairments in or loss of property, plant or equipment.

Changes in the Group's assets

Changes in the Group's assets in 2018 039

	Acquisition cost						Depreciation/amortization					Carrying amounts	
	Jan. 1, 2018	Additions	Disposals	Additions from company acquisitions	Reclassification and other	Dec. 31, 2018	Jan. 1, 2018	Additions	Disposals	Reclassification and other	Dec. 31, 2018	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Goodwill	**123,133**	**0**	**0**	**0**	**0**	**123,133**	**–12,504**	**0**	**0**	**0**	**–12,504**	**110,629**	**110,629**
Intangible assets													
Concessions, industrial and similar rights	30,859	765	–539	0	–4	31,081	–27,371	–1,822	539	4	–28,648	2,433	3,488
Brand name rights	12,530	0	0	0	0	12,530	–9,179	–222	0	0	–9,401	3,129	3,351
Capitalized development costs	19,638	2,865	–672	0	0	21,831	–10,560	–2,256	672	0	–12,147	9,684	9,078
Self-created software	1,576	205	0	0	0	1,781	–936	–212	0	0	–1,148	633	640
	64,603	**3,835**	**–1,211**	**0**	**–4**	**67,223**	**–48,046**	**–4,512**	**1,211**	**4**	**–51,344**	**15,879**	**16,557**
Property, plant and equipment													
Land and buildings	10,417	46	–210	0	503	10,756	–4,603	–540	198	–100	–5,045	5,711	5,814
Technical equipment and machinery	10,070	743	–132	0	21	10,702	–7,396	–768	132	0	–8,032	2,670	2,674
Other equipment, operating and office equipment	33,302	4,183	–952	0	–520	36,013	–22,651	–3,816	910	96	–25,461	10,552	10,651
	53,789	**4,972**	**–1,294**	**0**	**4**	**57,471**	**–34,650**	**–5,124**	**1,240**	**–4**	**–38,538**	**18,933**	**19,139**
Total	**241,525**	**8,807**	**–2,505**	**0**	**0**	**247,827**	**–95,200**	**–9,636**	**2,450**	**0**	**–102,386**	**145,441**	**146,325**

Changes in the Group's assets in 2017

040

	Acquisition cost						Depreciation/amortization					Carrying amounts	
	Jan. 1, 2017	Additions	Disposals	Additions from company acquisitions	Reclassification and other	Dec. 31, 2017	Jan. 1, 2017	Additions	Disposals	Reclassification and other	Dec. 31, 2017	Dec. 31, 2017	Dec. 31, 2016
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Goodwill	**121,195**	**0**	**–400**	**2,338**	**0**	**123,133**	**–12,904**	**0**	**400**	**0**	**–12,504**	**110,629**	**108,291**
Intangible assets													
Concessions, industrial and similar rights	29,343	1,477	–121	160	0	30,859	–25,696	–1,816	120	21	–27,371	3,488	3,647
Brand name rights	12,530	0	0	0	0	12,530	–8,957	–222	0	0	–9,179	3,351	3,573
Capitalized development costs	22,602	2,775	–5,739	0	0	19,638	–14,181	–2,097	5,739	–21	–10,560	9,078	8,421
Self-created software	2,022	155	–601	0	0	1,576	–1,292	–245	601	0	–936	640	730
	66,497	**4,407**	**–6,461**	**160**	**0**	**64,603**	**–50,126**	**–4,380**	**6,460**	**0**	**–48,046**	**16,557**	**16,371**
Property, plant and equipment													
Land and buildings	9,169	209	–38	12	1,065	10,417	–4,250	–391	38	0	–4,603	5,814	4,919
Technical equipment and machinery	10,190	587	–712	0	5	10,070	–7,354	–754	712	0	–7,396	2,674	2,836
Other equipment, operating and office equipment	28,337	6,563	–773	245	–1,070	33,302	–20,480	–2,880	709	0	–22,651	10,651	7,857
	47,696	**7,359**	**–1,523**	**257**	**0**	**53,789**	**–32,084**	**–4,025**	**1,459**	**0**	**–34,650**	**19,139**	**15,612**
Total	**235,388**	**11,766**	**–8,384**	**2,755**	**0**	**241,525**	**–95,114**	**–8,405**	**8,319**	**0**	**–95,200**	**146,325**	**140,274**

Leased equipment (€1,403 thousand; previous year: €1,809 thousand), operating and office equipment (€529 thousand; previous year: €675 thousand) and IT equipment reported under "Software" (€83 thousand; previous year: €115 thousand) were carried as finance leases with a net carrying amount of €2,015 thousand at December 31, 2018 (previous year: €2,599 thousand). Finance leases are used to fund assets with a useful life of at least three years – from machinery and production machines to warehouse systems at the manufacturing companies in the euromicron Group. Some of the existing finance lease agreements have purchase options at the end of their term. There was no subleasing from finance leases at the euromicron Group. See section 14 "Liabilities" for an explanation of the liabilities from financial leases.

All other lease agreements in which companies of the euromicron Group are the lessee are recognized as operating leases. The leasing payments are charged to expenditure (see section 28 "Other financial obligations, contingent claims and contingent liabilities"). There are no restrictions ("covenants") pursuant to leasing agreements.

(c) Other noncurrent financial assets

The table below presents the components of the other noncurrent financial assets: Table 041

Other noncurrent financial assets 041

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Shares in Track Group Inc.	21	55
Long-term receivables from finance leases	81	122
Rent deposits / deposits by third parties	53	51
Other noncurrent financial assets	3	4
Total	**158**	**232**

The shares in the listed company Track Group Inc., Utah, U.S., carried under "Other noncurrent financial assets" were acquired by euromicron AG in 2009. The stake held in its capital stock on the balance sheet date was 0.55% (previous year: 0.60%). The shares in Track Group Inc. are classified as a financial asset under the category "At fair value through profit or loss" and are measured at fair value. They were first measured at fair value on the day of trading (€934 thousand) and their carrying amount at December 31, 2017, was €55 thousand. The shares' fair value at the end of the fiscal year under review was €21 thousand. The value impairment of €33 thousand was recognized in the net financial result.

The receivables from finance leases are calculated as follows: Tables 042 and 043

Noncurrent receivables from finance leases 042

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Noncurrent receivables		
Gross receivables from finance leases	82	126
Financial income not yet realized	–1	–4
Total	**81**	**122**

Current receivables from finance leases 043

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Current receivables		
Gross receivables from finance leases	44	44
Financial income not yet realized	–2	–3
Total	**42**	**41**

The table below shows the reconciliation of gross investments in leases to the present value of the future minimum lease payments: Table 044

Gross investments in finance leases 044

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Gross receivables from finance leases		
Up to 1 year	44	44
1 to 5 years	82	126
More than 5 years	0	0
	126	**170**
Financial income not yet realized	–3	–7
Net investment in finance leases	**123**	**163**

There were no allowances for receivables from finance leases in fiscal 2018 (previous year: €0 thousand).

8. Deferred tax assets

Deferred tax assets are calculated on the basis of measurement differences in the following balance sheet items: Table 045

Deferred tax assets 045

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Intangible assets	39	17
Inventories	25,317	24,885
Property, plant and equipment	1	0
Other receivables and other assets	92	91
Provisions	2,887	2,827
Liabilities from finance leases	324	469
Other liabilities	375	666
Loss carryforwards for corporation income tax / trade tax and income taxes abroad	10,623	3,919
Total before netting off	**39,658**	**32,874**
Netting off	– 36,900	– 32,619
Total after netting off	**2,758**	**255**

There are long-term deferred tax assets (after netting off) totaling €2,754 thousand (previous year: €251 thousand); they mainly result from deferred tax assets on tax loss carryforwards.

Of the deferred tax assets remaining after netting off and totaling €2,758 thousand (previous year: €255 thousand), €2,731 thousand (previous year: €128 thousand) is attributable to six Group companies that made a tax loss in fiscal 2018 or the year before (previous year: four Group companies). The deferred tax assets were recognized on the basis of positive tax budgeting for the respective company. The Executive Board is of the view that it is highly probable that the deferred tax assets can be realized. In accordance with IAS 1.122, this discretionary decision by the Executive Board as regards the accounting method has a significant impact on the financial statements and may be subject to change, depending on future developments.

As of December 31, 2018, the Group had corporation income tax loss carryforwards totaling €73,833 thousand (previous year: €48,546 thousand), trade tax loss carryforwards totaling €68,067 thousand (previous year: €44,921 thousand) and loss carryforwards for income taxes abroad totaling €18,142 thousand (previous year: €16,024 thousand). The loss carryforwards relate to eleven (previous year: ten) domestic holdings and euromicron AG and four (previous year: four) holdings abroad. Of the loss carryforwards, €2,775 thousand (previous year: €0 thousand) may be carried forward with restrictions.

No deferred tax assets have been formed on existing tax loss carryforwards totaling €89,885 thousand (previous year: €84,400 thousand). Of this, €54,650 thousand (previous year: €54,650 thousand) was attributable to loss carryforwards prior to the integrated inter-company relationship that cannot be used before the end of the integrated inter-company relationship, and €35,235 thousand (previous year: €29,750 thousand) was attributable to tax loss carryforwards that can probably not be offset against taxable profits on the basis of the budgeting in the foreseeable future, of which €17,249 thousand (previous year: €16,513 thousand) was due to discontinued operations of the respective companies.

Of the existing tax loss carryforwards for which deferred tax assets were not formed, €76,549 thousand (previous year: €71,796 thousand) was in Germany and €13,336 thousand (previous year: €12,604 thousand) abroad.

9. Inventories

The euromicron Group's inventories on the balance sheet data are broken down as follows: Table 046

Inventories 046

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Raw materials and supplies	11,655	11,878
Work in progress	3,846	3,346
Finished goods and merchandise	12,421	15,397
Prepayments	898	865
Total	**28,820**	**31,486**

Of the inventories, €16 thousand (previous year: €0 thousand) have a shelf life of more than one year.

In fiscal 2018, there were write-downs on inventories totaling €601 thousand (previous year: €632 thousand) and reversals totaling €13 thousand (previous year: €0 thousand).

The carrying amount for the inventories recognized as an expense during the period was €111,183 thousand (previous year: €119,255 thousand).

10. Receivables and other current assets

Trade accounts receivable and contract assets

Trade accounts receivable that have defined terms of payment are classified in the measurement category "amortized cost". The receivables tendered as part of factoring are allocated to the category "Fair value through profit or loss". As in the previous year, all trade accounts receivable at December 31, 2018, were short-term.

The trade accounts receivable include receivables from supplier rebates totaling €731 thousand (previous year: €539 thousand), which may be offset with corresponding trade accounts payable.

The value of the contract assets is €40,755 thousand (previous year "Gross amount due from customers for contract work": €52,518 thousand).

Individual companies in the euromicron Group sell some of their receivables and contract assets to forfaiting companies (buyers of the receivables). The overall program for the Group has a maximum volume of €40,000 thousand (previous year: €40,000 thousand). At December 31, 2018, receivables and contract assets with a volume of €29,694 thousand (previous year: €32,481 thousand) were sold by the entire Group.

In accordance with IFRS 9, sold receivables from customers are only derecognized if essentially all opportunities and risks of the sold receivables have been transferred to the buyer of the receivables. The risk of the customer becoming insolvent (risk of nonpayment) is transferred to the buyer of the receivables under the contractual arrangements. The euromicron Group still bears the interest risk from delayed payments by customers.

Since virtually no opportunities and risks remain with euromicron, but not all of them without exception pass to the buyer of the receivables, euromicron carries the receivables at the amount of the continuing involvement of €181 thousand (previous year: €301 thousand). The continuing involvement is low relative to the total amount of the receivables sold. It is carried under "Other current financial assets". The continuing involvement comprises the maximum amount that euromicron would have had to pay to the buyer of the receivables up to receipt of payment relative to the carrying amount of the receivables sold on the key date.

Apart from the continuing involvement, there is a liability (associated liability) of €210 thousand (previous year: €312 thousand). It is carried under "Other current financial liabilities". The difference between the asset and liability items reflects the fair value of the continuing involvement. Interest expenses and charges resulting from the sale of receivables are carried in the net financial result.

Claims for income tax refunds

Claims for refunds due to the subsequent effects of the completed tax audit of euromicron AG (€66 thousand; previous year: €710 thousand) are carried under "Claims for income tax refunds" (€430 thousand; previous year: €928 thousand). In addition, receivables from creditable capital gains tax due to euromicron AG (€92 thousand; previous year: €77 thousand) and claims for income tax refunds of other Group companies (€272 thousand; previous year: €141 thousand) are disclosed.

Other current financial assets

The other current financial assets are broken down as follows: Table 047

Other current financial assets 047

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Receivables from factoring monies not yet paid out	4,149	2,877
Claims against former board members of euromicron AG	256	516
Continuing involvement (factoring)	181	301
Rent deposits / deposits	104	106
Receivables from finance leases	42	41
Other	6	57
Total	**4,738**	**3,898**

The receivables from factoring monies not yet paid out comprise amounts from sold receivables not paid out by the factoring company at the balance sheet date (such as blocked amounts).

Other current assets

The other current assets changed as follows: Table 048

Other current assets 048

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Prepaid expenses	1,292	1,306
Claims for refunds from other taxes	612	468
Claims for refunds from interest on tax refunds	14	200
Claims against employees	39	43
Other	128	549
Total	**2,085**	**2,566**

11. Cash and cash equivalents

Cash includes cash on hand, demand deposits at banks and cash equivalents with a remaining term of no more than three months and are classified in the category "amortized cost". Table 049

Cash and cash equivalents 049

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Cash in banking accounts	6,526	4,922
Cash on hand	27	32
Total	**6,553**	**4,954**

12. Equity

(a) Subscribed capital and authorized capital

The number of shares of euromicron AG in circulation is 7,176,398. The capital stock of euromicron AG is €18,347,554.88. The nominal amount per share is around €2.56. The shares are fully paid up. Table 050

Shares in circulation 050

	Dec. 31, 2018	Dec. 31, 2017
Shares in circulation	7,176,398	7,176,398

The General Meeting on June 13, 2018, adopted a resolution to create new authorized capital totaling €7,339,020.00. The Executive Board is authorized, with the consent of the Supervisory Board of euromicron AG, to increase the capital stock of the company until June 12, 2023, by up to €7,339,020.00 through the issue of up to 2,870,558 registered shares in exchange for cash and/or non-cash contributions (authorized capital). The authorization can be exercised once or more times in partial amounts. In accordance with the Articles of Association, there is the possibility, under specific preconditions, to exclude the statutory shareholders' subscription right. The previously existing authorized capital (€9,173,770.00) was rescinded.

The General Meeting on June 13, 2018, also adopted a resolution to create new contingent capital totaling €7,339,020.00. As a result, the capital stock is increased conditionally by up to €7,339,020.00 through the issue of up to 2,870,558 registered shares (contingent capital 2018). The contingent capital increase is to be used to grant option or conversion rights or service conversion obligations and to grant shares instead of cash payments to the holders of bonds which the company or its group companies issue in compliance with the authorization adopted by the General Meeting on June 13, 2018. The new shares are to be issued at the option or conversion price defined in compliance with the authorization adopted by the General Meeting on June 13, 2018. The conditional capital increase shall be carried out only and insofar as the holders or creditors of bonds issued or guaranteed on the basis of the authorization adopted by the General Meeting on June 13, 2018, make use of their option or conversion rights, fulfill their conversion obligations or shares are granted to the holders or creditors of these bonds instead of cash payments and other forms of fulfillment to service them are not used. The new shares will participate in profits from the beginning of the fiscal year in which they are issued. The Executive Board is authorized to define the further details of the contingent capital increase with the consent of the Supervisory Board.

Treasury shares

At December 31, 2018, there is no authorization from the General Meeting for euromicron AG to acquire its own shares. As in the previous year, the company did not therefore hold any treasury shares that could be offset with equity in accordance with IAS 32.33 at December 31, 2018.

(b) Capital reserves

The capital reserves at December 31, 2018, were unchanged year on year at €94,297,543.35.

The Company's capital reserves in accordance with Section 272 (2) of the German Commercial Code (HGB) comprise the premiums from share issues and capital increases. The capital reserves meet the requirements stipulated by Section 150 of the German Stock Corporation Law (AktG).

(c) Currency translation difference

The assets and liabilities of MICROSENS sp. z o.o., Wroclaw, Poland, whose functional currency is the Polish zloty, are translated at the mean spot exchange rate at the end of the period under review. Expenses and income are translated at mean rates during the year. The differences resulting from translation are recognized in equity and reclassified if the profit or loss from the sale of this foreign subsidiary is carried.

The difference resulting from translation of the financial statements of MICROSENS sp. z o.o. at December 31, 2018, is € –4 thousand (previous year: €4 thousand).

(d) Distributions in the fiscal year

As in the previous year, there were no dividend payouts in fiscal 2018.

(e) Non-controlling interests

The non-controlling interests reported at December 31, 2018 (€793 thousand; previous year: €599 thousand) relate exclusively to Qubix S.p.A., Padua (10%). The non-controlling interests should be regarded as not being material in relation to the consolidated financial statements.

The following table presents summarized financial information on the significant companies in which non-controlling interests are held or in which the euromicron Group does not hold all the shares: Table 051

Summarized financial information on subsidiaries with significant non-controlling interests 051

	Qubix S.p.A.		KORAMIS GmbH	
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.	€ thou.	€ thou.
Noncurrent assets	131	173	713	465
Current assets	12,486	10,819	1,169	1,224
Assets	**12,617**	**10,992**	**1,882**	**1,689**
Noncurrent liabilities	717	630	6	13
Current liabilities	4,427	4,836	2,445	1,843
Net assets	**7,473**	**5,526**	**–569**	**–167**
Sales	16,757	14,800	3,402	3,693
Income before income taxes	4,453	3,613	–588	114
Income tax expense	–1,254	–1,025	187	–41
Total profit/loss	**3,199**	**2,588**	**–401**	**73**
Share of total profit/loss ascribable to minority interests	319	263	N/A	N/A
Dividends paid to minority interests	125	125	0	0
Cash funds at end of period	5,882	3,625	59	38
Minority interests:*	10.0 %	10.0 %	25.0 %	25.0 %

* Only Qubix S.p.A.is carried in the non-controlling interests of the euromicron Group.

(f) Disclosures on capital management in accordance with IAS 1

The equity ratio and net financial debt are used as performance indicators. So as to ensure unrestricted access to the capital and credit markets at as favorable terms as possible and to increase the company's value, the objective of capital management is – taking into account the standard IFRS 16 "Leases" – to increase the equity ratio to above 30% and reduce current net financial debt in the medium term. Measures to help achieve that include reducing working capital and increasing consolidated earnings by safeguarding bread-and-butter business and tapping new strategic target markets in the field of digitalization. In addition, there is ongoing review of the possibility of reducing net debt by disposing of non-strategic Group companies. Net financial debt and the equity ratio are constantly monitored by management.

Follow-up financing with a maturity until March 31, 2021, was agreed with the financing partners in March 2018. The agreement specifies that the company must fulfill specific key ratios (covenants), which had to be tested quarterly for the first time as of June 30, 2018. They include the gearing ratio and key indicators relating to earnings and liquidity. The agreed key financial ratios were fulfilled in the year under review. In addition, the agreement specifies contractually stipulated repayments of €2.5 million effective March 31, 2019, and €25.0 million effective January 31, 2020. The lenders also have an extraordinary right to terminate the agreement if 30% or more of the shares and/or voting rights are taken over.

To repay the €25.0 million, the company has various repayment options available and the Executive Board initiated the process for validating them in 2018. They include measures to obtain liquidity on the capital market, as well as divestment measures involving the sale of non-strategic assets. Moreover, the company is holding discussions with investors and financial institutions about replacing or refinancing the current financing structure. Finally, there is the option of agreeing an extension to the special repayment II with the financiers. euromicron has engaged expert consultants to support it in all the measures. In view of the measures and planning that have been initiated, the Executive Board believes that reduction of debt by the above-described extent by January 2020 is ensured as far as can be seen at present.

The equity ratio is 27.2% (previous year: 31.1%) and is calculated as follows: Table 052

Equity ratio 052

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Equity acc. to consolidated balance sheet	66,207	78,541
Total assets	243,677	252,160
Equity ratio	**27.2%**	**31.1%**

The net financial debt is calculated from liabilities to banks (long- and short-term), liabilities from finance leases (long- and short-term), less cash and cash equivalents. At December 31, 2018, it is €92,239 thousand (previous year: €87,259 thousand). Table 053

Net financial debt 053

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Liabilities to banks	97,639	90,549
Liabilities from finance leases	1,153	1,664
Cash and cash equivalents	6,553	4,954
Net financial debt	**92,239**	**87,259**

The increase in net financial debt of €4,980 thousand is attributable in particular to the fact that net cash used in investing activities (€ –7,803 thousand) in fiscal 2018 exceeded the reported net cash provided by operating activities (€3,346 thousand). However, it should be noted in this respect that the reported net cash provided by operating activities in fiscal 2018 was reduced by an amount of € –4,184 thousand by effects from factoring (in particular a lower volume of factoring). The increase in net financial debt is therefore mainly due to effects from the Group's lower use of factoring. We refer in this regard to section 27 "Notes on the statement of cash flows" and to the explanations on the financial position in the group management report.

13. Provisions

(a) Other provisions

euromicron expects that provisions of €1,941 thousand (previous year: €1,955 thousand) will be used within one year, €1,146 thousand (previous year: €1,267 thousand) in the next two to five years and €507 thousand (previous year: €484 thousand) in the period after five years.

The provisions developed as follows in the

Provisions 054

	Dec. 31, 2017	Adjustment from first-time application of IFRS 15	Jan. 1, 2018	Utilization	Reversal	Accrued interest/ discounting	Allocation	Reclassification from short to long term	Dec. 31, 2018
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Provision for anniversaries and death benefits	497		497	–33		–9	21		476
Provision for severance payments	471		471	–3			71		539
Provision for restoration obligations	290		290	–108			7		189
Provision for warranties and follow-up costs	189		189	–43				–13	133
Provision for archiving	121		121		–10		1		112
Other provisions	183		183	–8			29		204
Total for other long-term provisions	**1,751**		**1,751**	**–195**	**–10**	**–9**	**128**	**–13**	**1,653**
Provision for warranties and follow-up costs	1,073		1,073	–336	–345		330	13	735
Provision for impending losses	–	167	167	–167			403		403
Provision for legal disputes	505		505	–505			555		555
Other provisions	377		377	–119	–50	3	37		248
Total for other short-term provisions	**1,955**	**167**	**2,122**	**–1,127**	**–395**	**3**	**1,325**	**13**	**1,941**
Total for other provisions	**3,706**	**167**	**3,873**	**–1,322**	**–405**	**–6**	**1,453**	**–**	**3,594**

fiscal year: Table 054

The provisions for severance payments relate to Group companies based in Austria and Italy and were set up pursuant to the obligation to make a specific one-off payment when an employment relationship ends.

The other long-term provisions include in particular a provision for severance payments to freelance commercial agents of a Group company based abroad.

The provisions for legal disputes comprise in particular legal costs for the current court instances in connection with litigation against former board members of the company and as part of the securities lending transactions.

The other short-term provisions are made up of various individual matters, such as provisions for interest in connection with tax audits or provisions for customs-related matters.

(b) Provisions for pensions and similar obligations

The euromicron Group has regulations on company pensions for active and former employees after fulfillment of the vesting periods, as well as their surviving dependants. These are mainly executives and employees for whom commitments from the time before a company was acquired have been assumed by euromicron AG.

The designated payments as part of pension schemes may be based either on the wage or salary received in the last year of employment or on the average of the last five years or the compensation of an employee and are usually dependent on the length of service. The benefits must be granted as a one-off payment or an annual pension payment. In the case of pension payments, the euromicron Group bears the full risk of recipients living for a long time and inflation due to pension adjustments. In the case that the employee is still alive, he or she acquires an entitlement to an existing benefit balance as an old-age benefit or invalidity benefit; the benefits paid to surviving dependants are a widow's pension and orphan's pension.

In order to cover a large part of the obligation, the euromicron Group has established a CTA (euromicron Pension Trust e. V.); the funds allocated to it are based on the level of the obligation.

The development in the pension commitment and plan assets are evidenced by actuarial reports. The changes in the present value of the defined benefit obligation (DBO) in the fiscal year are as follows: Table 055

Changes in the present value of the defined benefit obligation (DBO) 055

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Present value of benefit obligation at the beginning of the period under report	21,673	21,419
Transfer	0	0
Current service cost	341	373
Effects from plan settlements	0	–5
Interest cost	361	358
Pension payments	–461	–558
Revaluation effects	147	–7
of which change in financial assumptions	–334	0
of which change in demographic assumptions	306	0
of which experience adjustments	175	–7
Contributions by plan participants	78	68
Reclassification in connection with assets held for sale	0	25
Present value of benefit obligation at the end of the period under report	22,139	21,673

The plan assets measured at fair value changed as follows: Table 056

Changes in the plan assets 056

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Plan assets at the beginning of the period under report	20,249	20,038
Interest income from plan assets	344	341
Revaluation effects	–297	–295
Employer contributions/withdrawals	474	165
Plan assets at the end of the period under report	20,770	20,249

The plan assets consist to 100% (previous year: 100%) of trade accounts receivable of the euromicron Group, which are held in trust by the CTA. These assets are not traded on an active market.

Due to the increase of €147 thousand in the revaluation effects from pensions taken directly to equity (previous year: reduction of € –7 thousand), the deferred tax assets recognized via the other comprehensive income directly in equity rose in the year under review by €44 thousand; they had fallen in the previous year by €2 thousand. In addition, deferred tax expenses of €89 thousand (previous year: €88 thousand) from application of the net interest method were carried against the other comprehensive income.

The provision on the balance sheet changed as follows: Table 057

Provision on the balance sheet 057

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Provision at the beginning of the period under report	1,424	1,381
Current service cost	341	373
Effects from plan settlement	0	–5
Net interest cost/income	16	17
Pension payments	–461	–558
Employer's contributions/withdrawals	–474	–165
Contributions by plan participants	78	68
Revaluation effects	445	288
Other effects	0	25
Provision at the end of the period under report	1,369	1,424

The net interest expense is carried under the overall item "Net interest income/loss"; the other components of the pension costs (current service cost and past service costs and effects from plan settlement) are carried under the personnel costs.

The revaluation effects are carried via the "Other comprehensive income" and are contained in equity in the item "Consolidated retained earnings".

The following parameters, which are based on assumptions, were used to measure the future level of benefits: Table 058

Measurement factors 058

	2018	2017
	€ thou.	€ thou.
Discount rate	1.80 %	1.70 %
Age at expiry of financing	63 years	63 years
Future pension indexation	1.75 %	1.75 %

The discount rates are based on the returns for high-quality corporate bonds with a corresponding term; the 2018 G mortality tables compiled by Heubeck were used as a basis for the biometric parameters (previous year: 2005 G mortality tables). Since the pension commitments are solely at euromicron Group companies in Germany, the parameters relate to the economic situation in Germany.

If the assumptions vary by +/– 1 percentage point or +/– 1 year, the effects on the DBO are as follows: Table 059

Variation in the assumptions by + / – 1 % or + / – 1 year 059

	2018		2017	
	+ 1 % or + 1 year	– 1 % or – 1 year	+ 1 % or + 1 year	– 1 % or – 1 year
Discount rate	– 13.35 %	16.81 %	– 13.78 %	17.46 %
Life expectancy	2.52 %	– 2.46 %	1.83 %	– 1.84 %
Age at expiry of financing	– 2.38 %	1.77 %	– 2.16 %	1.53 %

A range of +/– 0.25% was used for the future pension trend. Table 060

Variation in assumptions by +/– 0.25 % 060

	2018		2017	
	+ 0.25 %	– 0.25 %	+ 0.25 %	– 0.25 %
Future pension indexation	2.48 %	– 2.36 %	2.50 %	– 2.38 %

As in the previous year, the effects were determined using the same methods as for measurement of the commitment at the end of the year.

The pension payments anticipated in the subsequent year are €972 thousand (previous year: €934 thousand), while the anticipated contributions to the plan cannot be estimated reliably at the balance sheet date.

The weighted average duration of the commitment at the balance sheet date is 15.99 years (previous year: 16.62 years).

Contributions of €7,923 thousand (previous year: €7,743 thousand) were paid to the statutory pension insurance fund as part of defined contribution pension schemes.

14. Liabilities

The euromicron Group's liabilities have the following terms: Table 061

Liabilities to banks

The interest rates for liabilities to banks and overdrafts are fixed or variable and range from 1.75% to 10.3% (previous year: 1.10% to 8.25%). The high interest rates relate to terms for overdraft lines under individual agreements between subsidiaries and their banks, but are not used or are terminable at short notice (with a view to optimizing financing).

euromicron AG concluded a borrower's note loan with a volume of €20,000 thousand in October 2014. The borrower's note loan consisted of two tranches of €10,000 thousand each, one of which has a variable interest rate and the other has a fixed interest rate. The variable tranche was converted to a maturity loan with the term until March 31, 2021, effective April 1, 2018.

Term of the liabilities — 061

	Dec. 31, 2018				Dec. 31, 2017			
	Total	Due in			Total	Due in		
		Up to 1 year	1 to 5 years	More than 5 years		Up to 1 year	1 to 5 years	More than 5 years
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Liabilities to banks	97,639	58,681	38,958	0	90,549	70,556	19,993	0
Liabilities from finance leases	1,153	363	790	0	1,664	521	1,139	4
Trade accounts payable	48,631	48,631	0	0	46,996	46,996	0	0
Gross amount due to customers for contract work	N/A	N/A	N/A	N/A	2,014	2,014	0	0
Contract liabilities	4,209	4,209	0	0	N/A	N/A	N/A	N/A
Liabilities from current income taxes	1,165	1,165	0	0	1,385	1,385	0	0
Other tax liabilities	3,595	3,595	0	0	4,777	4,777	0	0
Personnel obligations	9,727	9,727	0	0	9,795	9,795	0	0
Other financial liabilities	1,295	1,295	0	0	2,172	1,562	610	0
Other liabilities	2,369	2,255	114	0	3,539	3,369	170	0
Total	**169,783**	**129,921**	**39,862**	**0**	**162,891**	**140,975**	**21,912**	**4**

The banks retained €80 thousand (0.4%) as the arrangement fee; that expense is split over the agreement's term using the effective interest method. The loan liability was reduced by €80 thousand at the time it was disbursed. When the borrower's note loan was concluded, euromicron AG also paid an incentive fee of €30 thousand; this expense is deferred and distributed over the term of the agreement using the effective interest method. In fiscal 2018, these two circumstances resulted in a pro-rata amount totaling €32 thousand (previous year: €22 thousand), which was recognized in the income statement as an interest expense.

Follow-up financing with a maturity until March 31, 2021, was agreed with the financing partners in March 2018. The agreement specifies contractually stipulated repayments of €2.5 million effective March 31, 2019, and €25.0 million effective January 31, 2020.

So as to ensure its solvency at all times, the euromicron Group maintains a liquidity reserve in the form of short-term credit lines and cash funds. The total unused credit lines and cash funds ("free liquidity") at the end of the year were €23,366 thousand (previous year: €27,495 thousand). We refer to the comments on net financial debt in section 12 (f) "Disclosures on capital management in accordance with IAS 1" for an explanation of the decline in free liquidity.

In principle, the companies in the euromicron Group are financed centrally through euromicron AG.

Liabilities from finance leases

The present value of the liabilities from finance leases and the future interest expense from finance leases are as follows: Tables 062 and 063

Liabilities from finance leases in 2018 062

	Total	Due in		
		Up to 1 year	1 to 5 years	More than 5 years
	€ thou.	€ thou.	€ thou.	€ thou.
Liabilities from finance leases	1,153	363	790	0
Interest	95	37	58	0
Minimum lease payments	1,248	400	848	0

Liabilities from finance leases in 2017 063

	Total	Due in		
		Up to 1 year	1 to 5 years	More than 5 years
	€ thou.	€ thou.	€ thou.	€ thou.
Liabilities from finance leases	1,664	521	1,139	4
Interest	151	61	90	0
Minimum lease payments	1,815	582	1,229	4

Liabilities from current income taxes

There were liabilities from current income taxes of €1,165 thousand in fiscal 2018 (previous year: €1,385 thousand), of which €833 thousand (previous year: €1,152 thousand) resulted from liabilities for anticipated tax arrears payable as a result of tax audits. Of this, an amount of €255 thousand (previous year: €1,152 thousand) is attributable to euromicron AG, mainly from subsequent effects in connection with securities lending transactions from the tax audit for the years 2010 to 2012. The remainder of €578 thousand (previous year: €0 thousand) is attributable to liabilities from tax audits at other Group companies.

Personnel obligations

The personnel obligations (€9,727 thousand; previous year: €9,795 thousand) are made up of financial obligations totaling €5,996 thousand (previous year: €5,676 thousand) and non-financial obligations totaling €3,731 thousand (previous year: €4,119 thousand). The financial personnel obligations mainly comprise obligations from wages and salaries, severance payments and bonuses. The non-financial personnel obligations mainly comprise obligations from vacation and flexitime credit balances that have been not been used by employees.

Other financial liabilities

The other financial liabilities are composed as follows: Table 064

Other financial liabilities 064

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Obligations from preemptive tender rights	0	523
Purchase price liabilities	0	80
Miscellaneous	0	7
Other noncurrent financial liabilities	**0**	**610**
Customers' monies to be passed on	1	126
Dividend/profit shares for minority interests	184	182
Obligations from preemptive tender rights	774	251
Purchase price liabilities	–	575
Liability from the continuing involvement	210	312
Miscellaneous	126	116
Other current financial liabilities	**1,295**	**1,562**
Total of other financial liabilities	**1,295**	**2,172**

In the euromicron Group, financial liabilities from the put option for the remaining shares in KORAMIS GmbH not held by telent GmbH, which are carried under "Obligations from preemptive tender rights", are measured at fair value. Changes to fair value are carried in the period they occur in the income statement. All other financial liabilities are assigned to the category "Other financial liabilities at amortized cost" at the balance sheet date and measured at amortized costs using the effective interest method. Loan commission, which is not included as a transaction cost as part of the effective interest method, totaled €123 thousand (previous year: €314 thousand) and was recognized in the income statement.

Other liabilities

The other liabilities are composed as follows: Table 065

Other liabilities 065

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Liabilities from rent smoothing	114	160
Liabilities from retained security	0	10
Other liabilities (noncurrent)	**114**	**170**
Payments on account*	0	1,009
Liabilities from social security (incl. mutual indemnity association)	1,044	1,007
Deferred income	614	767
Liabilities from compensation for members of the Supervisory Board	137	135
Liabilities from rent smoothing	31	31
Miscellaneous	429	420
Other current liabilities	**2,255**	**3,369**
Total for other liabilities	**2,369**	**3,539**

* Carried in 2018 under "Contract liabilities"

15. Deferred tax liabilities

In accordance with IAS 12.39, no deferred tax liabilities were recognized on taxable temporary differences between the shares in subsidiaries compared with the tax carried of €1,161 thousand (previous year: €823 thousand), since euromicron AG is able to control the time at which the differences are reversed and it is likely that the temporary differences will not be reversed in the foreseeable future ("outside basis differences").

The deferred tax liabilities result from measurement differences in the following balance sheet items: Table 066

Deferred tax liabilities 066

	Dec. 31, 2018	Dec. 31, 2017
	€ thou.	€ thou.
Intangible assets	9,664	8,743
Property, plant and equipment	759	948
Inventories	11	15
Other receivables and other assets	28,510	27,916
Provisions	678	586
Other liabilities	2	9
Total before netting off	**39,624**	**38,217**
Netting off	–36,900	–32,619
Total after netting off	**2,724**	**5,598**

There are long-term deferred tax liabilities (after netting off) totaling €1,886 thousand (previous year: €3,198 thousand); as in the previous year, they result from deferred tax liabilities on measurement differences for intangible assets and property, plant and equipment.

Notes on the consolidated income statement

16. Sales

The sales are composed as follows: Table 067

Composition of sales 067

	2018	2017
	€ thou.	€ thou.
Type of business		
Revenue from project business	162,416	180,417
Revenue from the sale of goods	105,521	100,144
Revenue from the provision of services	50,075	52,347
	318,012	**332,908**
Fulfillment of the performance obligation and recognition of the sales		
Recognition at a specific point in time	105,521	N/A
Recognition over time	212,491	N/A

As part of project business, €2,273 thousand was included in the balance of the contract liabilities at the beginning of the period.

The table below presents the unfulfilled performance obligations from contracts with customers and anticipated revenue to be recognized from them: Table 068

Revenue recognition from remaining performance obligations 068

	Project business	Sales of goods	Services	Total
	€ thou.	€ thou.	€ thou.	€ thou.
Recognition				
within one year	62,111	30,495	20,312	112,918
within one to two years	26,328	158	3,965	30,451
after two years and more	1,614	0	4,155	5,769
Total	**90,053**	**30,653**	**28,432**	**149,138**

We refer to the segment reporting in section 29 for a breakdown of sales by segment.

17. Own work capitalized

Own work capitalized totals €3,362 thousand (previous year: €3,389 thousand) and results to an amount of €2,770 thousand (previous year: €2,705 thousand) from capitalization of development costs, to an amount of €54 thousand (previous year: €130 thousand) from own work capitalized for software and IT solutions and to an amount of €538 thousand (previous year: €554 thousand) from own work capitalized for property, plant and equipment.

18. Other operating income

The other operating income is composed as follows: Table 069

Other operating income 069

	2018	2017
	€ thou.	€ thou.
Foreign currency gains	384	673
Income from property and rent	235	248
Income from derecognition of value-added tax liabilities	166	0
Income from the reversal of a conditional purchase price payment	155	0
Compensation paid from insurance	134	179
Income from derecognition of liabilities	105	0
Income from claims for reimbursement of litigation and legal costs	99	0
Reduction in allowances for doubtful accounts	63	474
Refunds for health insurance/reintegration/passed-on charges	55	113
Income from retirement of noncurrent assets	29	60
Income from payment of damages	17	14
Income from public funding	13	0
Income from cash received from written-down receivables	3	24
Miscellaneous	321	405
Total	**1,779**	**2,190**

19. Cost of materials

The cost of materials is composed as follows: Table 070

Cost of materials 070

	2018	2017
	€ thou.	€ thou.
Cost of raw materials and supplies and goods purchased	109,876	118,949
Cost of purchased services	55,236	53,483
Total	**165,112**	**172,432**

20. Personnel costs

The personnel costs are composed as follows: Table 071

Personnel costs 071

	2018	2017
	€ thou.	€ thou.
Wages and salaries	96,604	95,257
Social security	17,700	17,294
Total	**114,304**	**112,551**

Average number of employees per year at the Group: Table 072

Employees 072

	2018	2017
Hourly-paid employees	929	905
Salaried employees	917	863
Trainees	71	65
Total	**1,917**	**1,833**

21. Other operating expenses

Other operating expenses are composed as follows: Table 073

Other operating expenses 073

	2018	2017
	€ thou.	€ thou.
Vehicle and travel expenses	12,535	12,458
Rent/room costs, including ancillary costs of tenancy	7,316	7,205
Legal and consulting costs	5,790	5,708
IT costs	2,865	2,497
Cost of goods consignment	2,172	2,454
Trade fair/advertising costs	1,910	1,717
Commission	1,414	1,053
Communication expenses	1,253	1,665
Running costs	914	837
Further training costs	782	1,003
Foreign currency losses	468	936
Maintenance and repair	464	589
Administrative expenses	374	390
Personnel leasing	265	859
Expenses incidental to monetary transactions	96	114
Allocation of allowances for receivables	48	612
Losses of receivables	27	100
Loss from deconsolidation of euromicron NBG Fiber Optics GmbH	0	70
Write-down of current assets/telecommunications business	0	238
Miscellaneous	2,488	2,884
Total	**41,181**	**43,389**

22. Depreciation/amortization

Amortization and depreciation is composed as follows: Table 074

Depreciation/amortization 074

	2018	2017
	€ thou.	€ thou.
Amortization of intangible assets	4,512	4,380
of which write-downs	65	150
Depreciation of tangible assets	5,124	4,025
of which write-downs	0	0
Total	**9,636**	**8,405**

Intangible assets were written down by an amount of €65 thousand in fiscal 2018 (previous year: €150 thousand). In the previous year, intangible assets (before deferred taxes) totaling €144 thousand were identified and carried as part of purchase price allocation in the company acquisitions/acquisitions of business operations in fiscal 2017. The amortization and depreciation for this in fiscal 2018 was €65 thousand.

23. Net interest income/loss and other financial income and expenses

Net interest/income loss is composed as follows: Table 075

Net interest income/loss 075

	2018	2017
	€ thou.	€ thou.
Interest income	23	313
Interest expenses	–6,282	–4,943
Net interest income/loss	**–6,259**	**–4,630**

The total interest income and expense for financial assets and financial liabilities calculated using the effective interest method and measured at amortized costs are shown in the table below: Table 076

Total interest revenue and expense 076

	2018	2017
	€ thou.	€ thou.
Total interest expense	–5,946	–4,483
Total interest income	12	213

The other financial expenses (€34 thousand; previous year: €219 thousand) comprise the cost from the impairment to the value of assets measured at fair value through profit or loss (shares in Track Group Inc.: €33 thousand; previous year: €212 thousand) and the decline in value of the call option on the minority interests in KORAMIS GmbH (€1 thousand; previous year: €7 thousand).

24. Income taxes

In fiscal 2018, an increase in deferred tax assets totaling €44 thousand (previous year: a reduction of €2 thousand) was recognized directly in equity. As in the previous year, it results in 2018 solely from deferred tax assets that had to be recognized in the other comprehensive income as part of the application of IAS 19 R. In 2018 there are no deferred taxes that were taken directly to equity from company acquisitions (previous year: €43 thousand). Application of the net interest method resulted in the year under review in deferred tax expenses of €89 thousand (previous year: €88 thousand) which did not result in recognition of deferred tax liabilities in the balance sheet, since there was a balancing entry in the other comprehensive income.

The income taxes are composed as follows: Table 077

Income taxes 077

	2018	2017
	€ thou.	€ thou.
Current taxes in Germany	–755	1,309
Deferred taxes in Germany	4,794	–2,648
Current taxes abroad	–1,281	–1,047
Deferred taxes abroad	138	2,431
Total	**2,896**	**45**

The items "Current taxes in Germany" and "Current taxes abroad" (totaling € –2,036 thousand; previous year: €262 thousand) include income tax expenses for previous years of €804 thousand (previous year: €356 thousand) and tax income for previous years of €81 thousand (previous year: €1,878 thousand). They are mainly due to effects from tax audits.

The table below presents a reconciliation of the tax expense expected in the fiscal year to the tax expense actually disclosed. Table 078

Tax reconciliation 078

	2018	2017
	€ thou.	€ thou.
Income before income taxes	–14,043	–3,551
Expected tax expense	–4,213	–1,065
Non-deductible expenses	281	270
Tax expenses/income not related to the period	723	–1,503
Effect from adjustment of deferred taxes formed in previous years on loss carryforwards/temporary differences	36	1,635
Non-recognition of deferred taxes on losses of the current year	586	607
Effect from write-downs with no impact on taxes	10	68
Effects of different national tax rates	71	–26
Recognition of deferred taxes on loss carryforwards (not recognized in previous periods)	–305	–6
Deferred taxes on temporary differences that have not been recognized up to now	–107	0
Miscellaneous	22	–25
Actual tax expense	–2,896	–45
Effective tax expenses (–) / tax income (+)	**20.6 %**	**1.3 %**

As in the previous year, the expected tax expense is calculated from a total tax rate of 30.00% and the income before taxes. The total tax rate is calculated from a corporation income tax rate, including solidarity surcharge, of 15.825% and the effective average trade tax rate of 14.175%.

25. Share of non-controlling interests in consolidated net income for the period

The consolidated net income for the period for non-controlling interests relates solely to Qubix S.p.A., Padua, Italy (10%). The non-controlling interests should be regarded as not being material in relation to the consolidated financial statements.

26. Earnings per share

Undiluted earnings per share are calculated as follows: Table 079

Undiluted earnings per share 079

	2018	2017
Earnings for euromicron AG shareholders in € thousand	–11,466	–3,769
Weighted average number of shares issued	7,176.398	7,176.398
Undiluted earnings per share in €	**–1.60**	**–0.53**

The earnings for euromicron AG shareholders correspond to the consolidated net loss for the year minus the earnings for non-controlling interests.

The method of calculating diluted earnings per share is basically the same as that for calculating undiluted earnings per share. However, the quantities included in the calculation must also be adjusted for all equity dilution effects resulting from potential shares. There was no dilution effect at the time the consolidated financial statements were prepared. As a result, both figures are the same.

Appropriation of net income

The annual financial statements of euromicron AG at December 31, 2018, in accordance with the German Commercial Code (HGB) disclose net accumulated losses of € –69,988,648.22 (previous year: € –43,251,861.92).

Other disclosures

27. Notes on the statement of cash flows

The cash provided by operating activities in fiscal 2018 was €3,346 thousand (previous year: cash used of € –1,560 thousand). However, comparison of these figures is not meaningful due to effects from factoring (change in the volume of factoring used at the balance sheet date, the receivables from retained factoring monies and the liabilities from customers' monies to be passed on). A detailed presentation of these effects can be found in section 2.3 "Net assets, financial position and results of operations", subsection "Financial position", in the group management report. Aggregated reconciliation with a cash flow from operating activities adjusted for factoring effects supplies the following comparative figures: Table 080

Adjusted cash flow 080

	Cash flow from operating activities in acc. with the statement of cash flows	Effects from factoring and customers' monies to be passed on included in the above	Adjusted cash flow from operations
	€ thou.	€ thou.	€ thou.
2017	–1,560	1,946	386
2018	**3,346**	**4,184**	**7,530**

After adjustment for factoring effects, there is net cash provided by operating activities in fiscal 2018 totaling €7,530 thousand (previous year: €386 thousand). The cash flow from operating activities in fiscal 2018 thus rose sharply by €7,144 thousand over the previous year. Coupled with a reduction in EBITDA of € –7,617 thousand and a € –651 higher cash outflow from the balance of paid and received income taxes and interest, this is attributable to an amount of €16,245 thousand to effects from the change in working capital: Whereas the slight increase in working capital resulted in negative cash flow effects of € –2,485 thousand in 2017, the cash flow for 2018 was influenced positively by an amount of €13,760 thousand by the decrease in working capital. There were also negative effects of € –833 thousand from the change in other items.

Under the contractual trust agreement, additional trade accounts receivable of €474 thousand were contributed to the plan assets in fiscal 2018. The contributed receivables increased by €165 thousand in the previous year.

Net cash used in investing activities is derived from the net cash from the disposal of assets and the net cash used for investments in property, plant and equipment and intangible assets, as well as company acquisitions. The net cash used in the fiscal year was € –7,803 thousand or €5,668 thousand lower than in the previous year (€ –13,471 thousand). This is mainly the result of lower net cash used in purchasing property, plant and equipment (€ –3,636 thousand; previous year: € –6,380 thousand) and in purchasing intangible assets (€ –3,737 thousand; previous year: € –4,410 thousand). The net cash used in investing ativities was also reduced by a decrease of € –1,548 thousand in net cash used in company acquisitions and due to the fact there were no longer any effects from prior years from the disposal of subsidiaries and other business units (€ –701 thousand).

The net cash provided by financing activities in fiscal 2018 was €6,056 thousand (previous year: €13,141 thousand). The net cash inflow in fiscal 2018 was mainly due to the raising of new loans, which exceeded the net cash used to repay loans by €6,692 thousand (previous year: net cash inflow of €13,945 thousand). On the other hand, there were cash repayments of liabilities from finance leases totaling € –511 thousand (previous year: € –525 thousand) and distributions to non-controlling shareholders and from profit shares of minority interests totaling € –125 thousand (previous year: € –279 thousand).

The table below presents the reconciliation of the changes in debt with the cash flows from financing activities: Table 081

Reconciliation of the changes in debt with the cash flows from financing activities 081

	Note	Liabilities to banks	Liabilities from finance leases	Other financial liabilities	Total
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Balance sheet as of January 1, 2018		**90,549**	**1,664**	**2,172**	**94,385**
Changes in the cash flow from financing activities					
Proceeds from raising of financial loans	(23)	12,590	0	0	12,590
Cash repayments of financial loans	(23)	–5,898	0	0	–5,898
Cash repayments of liabilities from finance leases	(23)	0	–511	0	–511
Distributions to/withdrawals by non-controlling interests and profit shares of minority interests	(3)	0	0	–125	–125
Total change in the cash flow from financing activities		**6,692**	**–511**	**–125**	**6,056**
Changes from the acquisition of subsidiaries and other business operations	(3)	**0**	**0**	**0**	**0**
Other changes					
Addition of liabilities from accrued interest due to banks	(9)	350	0	0	350
Disposal of liabilities from purchase price payments due to derecognition	(3, 9)	0	0	–155	–155
Disposal of customers' monies to be passed on due to factoring	(3, 9)	0	0	–125	–125
Disposal of liabilities from preemptive tender rights and purchase price payments due to exercise of rights/options	(3, 9)	0	0	–500	–500
Addition from adopted distributions to non-controlling shareholders		0	0	150	150
Effects from accrued interest on options	(3)	0	0	1	1
Other effects (accumulated)	(9)	48	0	–123	–75
Total for other changes		**398**	**0**	**–752**	**–354**
Balance sheet as of December 31, 2018		**97,639**	**1,153**	**1,295**	**100,087**

↓ Continuation of the reconciliation of the changes in debt with the cash flows from financing activities, table 081 on P. 142

Continuation of the reconciliation of the changes in debt with the cash flows from financing activities, table 081

Reconciliation of the changes in debt with the cash flows from financing activities

081

	Note	Liabilities to banks	Liabilities from finance leases	Other financial liabilities	Total
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Balance sheet as of January 1, 2017		**76,501**	**1,309**	**1,774**	**79,584**
Changes in the cash flow from financing activities					
Proceeds from raising of financial loans	(23)	18,720	0	0	18,720
Cash repayments of financial loans	(23)	–4,775	0	0	–4,775
Cash repayments of liabilities from finance leases	(23)	0	–525	0	–525
Distributions to/withdrawals by non-controlling interests and profit shares of minority interests	(23)	0	0	–279	–279
Total change in the cash flow from financing activities		**13,945**	**–525**	**–279**	**13,141**
Changes from the acquisition of subsidiaries and other business operations	(3)	**59**	**0**	**0**	**59**
Other changes					
Addition of liabilities from new finance lease agreements	(9)	0	880	0	880
Addition of liabilities from preemptive tender rights and purchase price payments	(3, 9)	0	0	878	878
Fair value changes in liabilities from preemptive tender rights	(3, 9)	0	0	–200	–200
Disposal of liabilities from preemptive tender rights and purchase price payments due to exercise of rights/options	(3, 9)	0	0	–251	–251
Addition from adopted distributions to non-controlling shareholders		0	0	125	125
Effects from accrued interest on options	(3)	0	0	14	14
Other effects (accumulated)	(9)	44	0	111	155
Total for other changes		**44**	**880**	**677**	**1,601**
Balance sheet as of December 31, 2017		**90,549**	**1,664**	**2,172**	**94,385**

28. Other financial obligations, contingent assets and contingent liabilities

(a) Contingencies

The euromicron Group does not have any contingencies in favor of third parties.

(b) Other financial obligations

There are the following other financial obligations on the balance sheet date: Table 082

Other financial obligations in 2018 082

	Total	Up to 1 year	1 to 5 years	More than 5 years
	€ thou.	€ thou.	€ thou.	€ thou.
Bill commitments	3,287	3,287	0	0
Operating lease	24,662	7,463	15,242	1,958
Purchase obligation	38,453	38,295	158	0
Total	**66,403**	**49,045**	**15,400**	**1,958**
Previous year	**48,136**	**31,161**	**14,542**	**2,433**

The purchase obligation relates to orders for order-related goods and services; orders of intangible assets or tangible assets were insignificant.

Obligations as part of operating lease agreements comprise the future minimum lease payments from unterminable agreements and mainly relate to rental and leasing agreements for operating and office equipment, such as cars, office machines or PC workstations, and communications technology; these obligations total €24,662 thousand (previous year: €24,883 thousand). In fiscal year 2018, payments from these leasing relationships totaling €10,250 thousand (previous year: €9,411 thousand) were recognized in the income statement. Conditional lease payments of €38 thousand (previous year: €25 thousand) were recognized.

(c) Contingent claims

In fiscal year 2017, the company took legal action to claim damages totaling €4.2 million from a former Executive Board member due to breaches of duty. Due to uncertainty as to when they might arise and their amount, these contingent claims were not recognized at December 31, 2018.

The Executive Board member in question disputes the claims and has brought a cross-action claiming compensation of €1.6 million for unfair dismissal. Based on the assessment of external lawyers, who consider the dismissal to be effective and the claims of the former Executive Board member to be unjustified, this contingent liability has not been recorded in the balance sheet to date. The possible risk of the claims being payable is assessed as low.

In the fiscal year, there are also contingent claims totaling €661 thousand (previous year: €0 thousand) from subsidiaries, mainly from legal action.

(d) Contingent liabilities

In fiscal year 2018, there was a contingent liability in connection with securities lending transactions. There is also a risk that amounts of tax withheld as part of dividend payments (capital gains tax and solidarity surcharge) might no longer be able to be offset by euromicron AG due to the change in jurisdiction on the issue of securities lending transactions. This would result in payment of tax arrears of €5.8 million plus interest. An appeal has been lodged and suspension of execution applied for. The fiscal authorities granted the suspension of execution. In addition, this issue means that euromicron AG has contingent claims to the same amount due to claims from rights of recourse against the securities lender and former board members of euromicron AG, which are currently being asserted by means of legal action. All in all, the Executive Board does not therefore expect a negative impact on the Group's liquidity as a result of this matter.

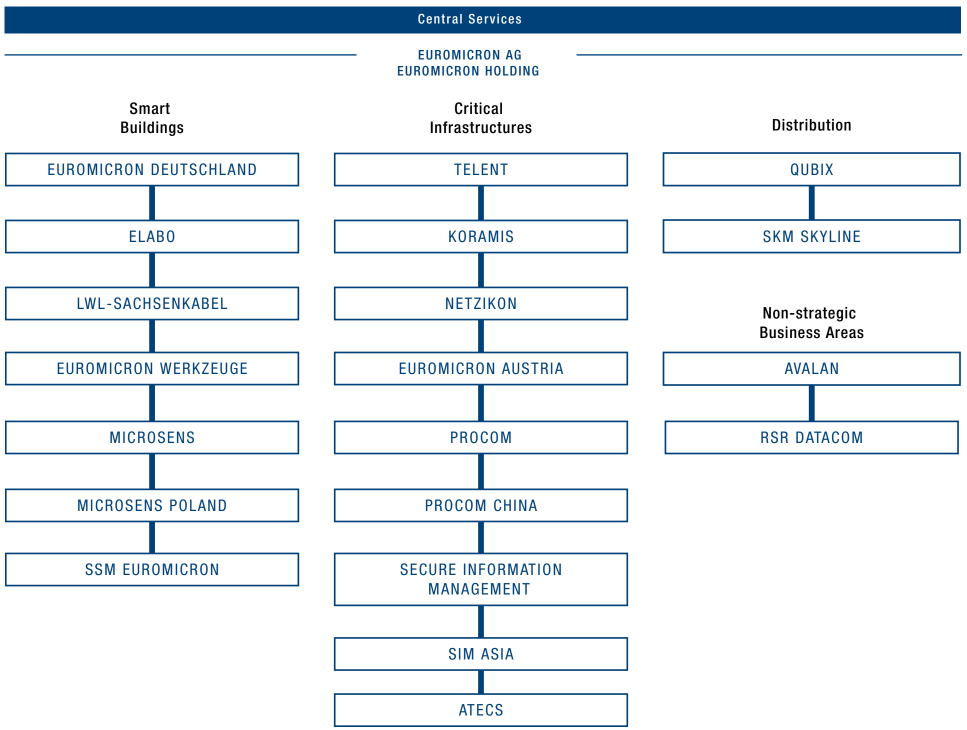
There are also contingent liabilities at subsidiaries totaling €175 thousand (previous year: €0 thousand) from legal disputes in fiscal year 2018.

29. Segment reporting

The Executive Board is the main decision-maker in the Group. The business segments were identified on the basis of the internal reporting the Executive Board uses to allocate resources and assess earnings strength.

Under its strategic alignment, the euromicron Group focuses on the three main business areas of "Smart Buildings", "Critical Infrastructures" and "Distribution". Controlling and the reporting structure are in line with the orientation toward the target markets and the underlying value chain within the Group.

Segment reporting



Description of the segments:
All the activities of the euromicron Group in the target markets of "Digital Buildings" and "Smart Industry" are pooled in the **Smart Buildings** segment.

In the target market of "Digital Buildings", euromicron provides infrastructure-related intelligent solutions, such as "Smart Office", "Smart Energy" or "Smart Lighting". Services relating to building or process automation, light control, access control, video surveillance, fire prevention or support services as part of efficient energy and building management are planned, implemented and operated as part of that.

The focus in the target market of "Smart Industry" is on digitizing and networking development, production and service processes in industry. The euromicron Group develops holistic approaches and the related processes for and with its customers and implements them in a forward-looking way that protects investments.

This segment also includes services relating to the equipment of data centers with innovative connector systems.

The **"Critical Infrastructures"** segment deals with vital business infrastructures whose failure is highly problematic. Such infrastructures may be the digital mobile radio system at an airport or the communications network of Deutsche Bahn or a power utility, for example. System integration comprises the planning, production and operation of digitized critical infrastructures. In addition, the technology manufacturing companies in this segment round out the product portfolio in this target market with their professional video, audio and special technology solutions for sensitive security restricted areas.

The **"Distribution"** segment advises and supplies customers in a vendor-independent manner in all matters relating to active and passive network components in the fiber-optic and copper arena.

"All other segments" consists of the "Non-strategic Business Areas" and "Central Services".

The Non-strategic Business Areas include the business units that have been identified by the Executive Board as no longer being of relevance at Avalan GmbH (in liquidation), RSR Datacom Verwaltungs GmbH and RSR Datacom GmbH & Co. KG, whose business operations were discontinued.

The "Central Services" area mainly includes euromicron AG as the strategic management holding company. euromicron AG also pools the corporate departments of financing, group controlling and accounting, taxes, legal affairs, human resources, purchasing, IT, corporate marketing, investor relations and innovation management, which act as service providers within the Group.

The reconciliation contains the consolidation of the cross-segment network of services and various other items that cannot be assigned to the individual areas, since the Executive Board believes they do not reflect the services provided by the areas.

Control factors

The Executive Board assesses the earnings strength of the business segments on the basis of new orders, operating EBITDA and the operating EBITDA margin (operating EBITDA relative to sales). Operating EBITDA excludes effects from one-off expenses in the business segments, such as special costs (previous year: reorganization costs) due to personnel measures. Apart from these key figures, sales and the working capital ratio (working capital used relative to sales) are the most important control factors.

The sales and earnings, as well as the current assets and liabilities included in the working capital, that are reported to the main decision-maker are measured in accordance with the same principles and standards as in euromicron's consolidated financial statements. Transactions within and between the segments are reflected at market prices.

The working capital is calculated from the total of inventories, trade accounts receivable and contract assets (previous year: gross amount due from customers for contract work) minus trade accounts payable and contract liabilities (previous year: gross amount due to customers for contract work and received prepayments). Table 083

Segment reporting

of the euromicron Group for the period January 1 to December 31, 2018 (IFRS)

Segment reporting 083

	Smart Buildings		Critical Infrastructures		Distribution		Total for all reportable operating segments	
	2018	2017	2018	2017	2018	2017	2018	2017
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
External sales	172,635	190,021	120,047	119,706	25,101	22,448	317,783	332,175
Sales within the Group	1,017	1,902	793	1,280	870	1,105	2,680	4,287
Total sales	**173,652**	**191,923**	**120,840**	**120,986**	**25,971**	**23,553**	**320,463**	**336,462**
EBITDA	–1,285	5,981	5,450	6,829	4,963	3,988	9,128	16,798
EBITDA margin	–0.7 %	3.1 %	4.5 %	5.6 %	19.1 %	16.9 %	2.8 %	5.0 %
of which special costs	1,420	915	0	0	0	0	1,420	915
Operating EBITDA	**135**	**6,896**	**5,450**	**6,829**	**4,963**	**3,988**	**10,548**	**17,713**
Operating EBITDA margin	**0.1 %**	**3.6 %**	**4.5 %**	**5.6 %**	**19.1 %**	**16.9 %**	**3.3 %**	**5.3 %**
Amortization and depreciation	–5,744	–5,162	–3,369	–2,491	–157	–313	–9,270	–7,966
Write-downs of property, plant and equipment, intangible assets and goodwill	–65	–150	0	0	0	0	–65	–150
EBIT	–7,094	669	2,081	4,338	4,806	3,675	–207	8,682
of which special costs (previous year: reorganization costs)	1,420	915	0	0	0	0	1,420	915
Operating EBIT	–5,674	1,584	2,081	4,338	4,806	3,675	1,213	9,597
Order books	82,713	75,764	64,115	49,077	2,160	1,863	148,988	126,704
New orders	179,551	205,271	131,744	113,620	25,400	22,305	336,695	341,196
Working capital	41,085	54,054	6,407	6,560	3,424	3,654	50,916	64,268
Working capital ratio	**23.7 %**	**28.2 %**	**5.3 %**	**5.4 %**	**13.2 %**	**15.5 %**	**15.9 %**	**19.1 %**

Continuation of table 083 on P. 147

Continuation of table 083

Segment reporting

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	All other segments									
	Non-strategic Business Areas		Central Services		Total for the segments		Reconciliation		Group	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
External sales	229	733	0	0	318,012	332,908	0	0	318,012	332,908
Sales within the Group	2	85	0	0	2,682	4,372	–2,682	–4,372	0	0
Total sales	**231**	**818**	**0**	**0**	**320,694**	**337,280**	**–2,682**	**–4,372**	**318,012**	**332,908**
EBITDA	–258	–443	–6,951	–6,852	1,919	9,503	–33	0	1,886	9,503
EBITDA margin					0.6 %	2.8 %			0.6 %	2.9 %
of which special costs	258	341	2,931	2,727	4,609	3,983	0	0	4,609	3,983
Operating EBITDA	**0**	**–102**	**–4,020**	**–4,125**	**6,528**	**13,486**	**–33**	**0**	**6,495**	**13,486**
Operating EBITDA margin					**2.0 %**	**4.0 %**			**2.0 %**	**4.1 %**
Amortization and depreciation	–2	–1	–299	–288	–9,571	–8,255	0	0	–9,571	–8,255
Write-downs of property, plant and equipment, intangible assets and goodwill	0	0	0	0	–65	–150	0	0	–65	–150
							0			
EBIT	–260	–444	–7,250	–7,140	–7,717	1,098	–33	0	–7,750	1,098
of which special costs (previous year: reorganization costs)	260	341	2,931	2,727	4,611	3,983	0	0	4,611	3,983
Operating EBIT	0	–103	–4,319	–4,413	–3,106	5,081	–33	0	–3,139	5,081
Order books	280	601	0	0	149,268	127,305	–129	–210	149,139	127,095
New orders	–93	11	0	0	336,602	341,207	0	0	336,602	341,207
Working capital	–230	–300	–1,788	–1,385	48,898	62,583	–20,226	–19,604	28,672	42,979
Working capital ratio					**15.2 %**	**18.6 %**			**9.0 %**	**12.9 %**

The table below presents a breakdown of the revenue from contracts with customers in accordance with IFRS 15 "Revenue from Contracts with Customers": Table 084

Breakdown of revenue by type of customer 084

	Reportable operating segments					
	Smart Buildings	Critical Infrastructures	Distribution	**Total for all reportable operating segments**	All other business areas and reconciliations	**Group**
	€ thou.	€ thou.	€ thou.	**€ thou.**	€ thou.	**€ thou.**
Sales of the segment	173,652	120,840	25,971	**320,463**	–2,451	**318,012**
Type of business						
Revenue from project business	97,950	65,466	0	**163,416**	–1,000	**162,416**
Revenue from the sale of goods	56,685	24,192	25,971	**106,848**	–1,327	**105,521**
Revenue from the provision of services	19,017	31,182	0	**50,199**	–124	**50,075**
Fulfillment of the performance obligation and recognition of the sales						
Recognition at a point in time	56,685	24,192	25,971	**106,848**	–1,327	**105,521**
Recognition over time	116,967	96,648	0	**213,615**	–1,124	**212,491**

Explanation of selected items

The reconciliation with the working capital item includes offsetting and netting off of the plan assets, consisting of trade accounts receivable, with the relevant provisions for pensions. For an explanation of the composition of the special costs (previous year: reorganization costs), we refer you to our comments in the management report (section 2.2 "Course of business", subsection "Development of the segments", and section 2.3 "Net assets, financial position and results of operations", subsection "Results of operations").

Sales by region

Sales in Germany were €264.5 million (previous year: €277.8 million), in the Euro zone €37.9 million (previous year: €37.3 million) and in the rest of the World €15.6 million (previous year: €17.8 million). The sales relate to the geographical location of the customers.

Sales by customer

There are sales exceeding the thresholds defined by IFRS 8.34 with one customer (previous year: one customer). These sales total €38,663 thousand (previous year: €33,857 thousand) and were generated in the segments "Smart Buildings", "Critical Infrastructures" and "Non-strategic Business Areas".

Noncurrent assets

In accordance with IFRS 8.33b, noncurrent assets are €121,120 thousand in Germany (previous year: €121,186 thousand), €24,051 thousand (previous year: €24,727 thousand) in other European countries, and €430 thousand (previous year: €648 thousand) in non-European countries. They are composed of:

- Goodwill
- Intangible assets
- Property, plant and equipment
- Other financial assets
- Other assets

30. Financial instruments

The following presents the carrying amounts and fair values by class of financial instruments and the carrying amounts by the measurement categories of IFRS 9 at December 31, 2018, and of IAS 39 at December 31, 2017: Tables 085 and 086

Classification of financial instruments and their fair value at December 31, 2018 085

	Carrying amount for each measurement category: Financial assets – Fair value through profit or loss	Financial assets – Amortized cost	Financial liabilities – Fair value through profit or loss	Financial liabilities – Amortized cost	Not in scope of IFRS 7	Carrying amount at Dec. 31, 2018	Fair value at Dec. 31, 2018
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Assets							
Cash and cash equivalents	0	6,553	0	0	0	6,553	1)
Trade accounts receivable	1,051	10,886	0	0	0	11,937	1)
Contract assets	0	0	0	0	40,755	40,755	1)
Other financial assets	25	4,569	0	0	303	4,897	1)
Equity and liabilities							
Trade accounts payable	0	0	0	48,631	0	48,631	1)
Liabilities to banks	0	0	0	97,639	0	97,639	97,547
Other financial liabilities	0	0	523	772	0	1,295	1,292
Financial personnel obligations	0	0	0	5,996	0	5,996	1)
Liabilities from finance leases	0	0	0	0	1,153	1,153	1)

Classification of financial instruments and their fair value at December 31, 2017 086

	Measurement category acc. to IAS 39	Value carried in the balance sheet acc. to IAS 39: Amortized acquisition cost	Acquisition cost	Fair value recognized in profit or loss	Fair value recognized directly in equity	Carrying amount at Dec. 31, 2017	Fair value at Dec. 31, 2017
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Assets							
Cash and cash equivalents	LaR 2)	0	4,954	0	0	4,954	1)
Trade accounts receivable	LaR 2)	8,994	0	0	0	8,994	1)
Gross amount due from customers for contract work	LaR 2)	52,518	0	0	0	52,518	1)
Other financial assets 5)	AfS 3) LaR 2) FVtPoL 4) IAS 17	0 3,910 0 162	0 0 0 0	0 0 0 3	0 55 0 0	4,130	1)
Equity and liabilities							
Trade accounts payable	FLAC 6)	46,996	0	0	0	46,996	1)
Liabilities to banks	FLAC 6)	90,549	0	0	0	90,549	90,600
Gross amount due to customers for contract work	FLAC 6)	2,014	0	0	0	2,014	1)
Other financial liabilities	FLAC 6) FVtPoL 4)	1,494	0	678	0	2,172	1)
Financial personnel obligations	FLAC 6)	5,676	0	0	0	5,676	1)
Liabilities from finance leases	IAS 17	1,664	0	0	0	1,664	1)

1) The carrying amount corresponds approximately to the fair value.
2) LaR = Loans and receivables.
3) AfS = Available-for-sale financial assets.
4) FVtPoL = At fair value through profit or loss.
5) The continuing involvement (€301 thousand) carried in the other financial assets is not included in the table, since this cannot be assigned to the categories defined by IAS 39.
6) FLAC = Financial Liabilities Measured at Amortised Cost.

The reconciliation of financial instruments by measurement categories from December 31, 2017, with January 1, 2018, is presented in section 2.1.

Financial instruments are measured at fair value in accordance with IFRS 13 on three levels:

Level 1: Input factors in level 1 are (not adjusted) prices listed for identical assets or liabilities in active markets to which the company has access on the measurement date.

Level 2: Input factors in level 2 are market price listings other than those stated in level 1 which can be observed either directly or indirectly for the asset or liability.

Level 3: Input factors in level 3 are input factors that cannot be observed for the asset or liability.

The level model was applied for measuring the financial instruments reported at fair value at the euromicron Group. The fair values of the shares in Track Group Inc. (balance sheet item: "Other financial assets") were measured on the basis of level 1, since the share price can be observed on an active market.

The fair values for the fixed-interest long-term debt presented in section 14 "Liabilities" were measured on the basis of level 2. The fair value is derived from the present values of the future interest payments and repayments, discounted at the current market interest rates, taking into account the credit risk of euromicron AG.

The liabilities from the opposite put/call options for the remaining shares in MICROSENS GmbH & Co. KG and Microsens Beteiligungs GmbH not held by euromicron were measured on the basis of level 3. They are carried as "Obligations from preemptive rights" under the other current financial liabilities.

The liabilities from the put/call option for the remaining shares in KORAMIS GmbH not held by telent GmbH were measured on the basis of level 3. The Black-Scholes formula was used to determine the fair value of the put/call options. The main model parameters are the value of the underlying instrument, the exercise price, the anticipated volatility of the underlying instrument, any dividend payments, the risk-free interest rate, and the anticipated remaining term. The liability from the put option (€523 thousand) is carried as "Obligations from preemptive tender rights" under the other current financial liabilities. The call option (€2 million) is carried under the other current financial assets.

The liabilities from the earn-out clauses under the agreement to purchase the business operations of Elektroanlagen GmbH Dollenchen & Co. KG were measured on the basis of level 3 and were derecognized effective December 31, 2018.

In fiscal year 2018, there were no further changes to the fair value of assets or liabilities assigned to level 3 of the fair value hierarchy.

The changes in fair value for the financial liabilities assigned to level 3 are shown in the table below: Table 087

Changes in fair value for the 3rd level financial liabilities 087

	Earn-out liabilities (asset deal Elektroanlagen GmbH Dollenchen & Co. KG) "Purchase price liabilities" under the other financial liabilities
	€ thou.
Balance at January 1, 2018	**155**
Derecognition of the purchase price liability	– 155
Balance at December 31, 2018	**0**

There were no transfers between the levels during the fiscal year. There is no collateral received for financial instruments at the euromicron Group.

Net gains and losses from financial instruments for the measurement categories at the euromicron Group are presented in the following: Table 088

Net gains and losses on financial instruments 088

	2018	2017
	€ thou.	€ thou.
Financial assets measured at amortized cost	– 16	129
Financial assets measured at fair value through profit or loss*	– 33	– 219
Financial liabilities measured at fair value through profit or loss	0	200
Financial liabilities measured at amortized cost	– 6,125	– 4,771

* Carried in 2017 to an amount of € –212 thousand under the category "Available-for-sale financial assets" of IAS 39.

The net gains and losses from financial instruments comprise measurement gains and losses, discount amortization, the recognition of expenses and income from impairment, gains and losses from currency translation and interest.

31. Financial risk management

The following section explains the euromicron Group's situation as regards financial risks and how they might influence the Group's financial position, net assets and results of operations.

Market risks

The market risk is the risk that the fair value or future cash flows of a financial instrument fluctuate due to changes in market prices. The market risk comprises three types of risk:

a) Risk of change in interest rates,

b) Foreign currency risk and

c) Other prices risks that are of minor importance at the euromicron Group.

The financial instruments exposed to market risks include loans, debt instruments and equity instruments.

In principle, the euromicron Group is dependent on economic trends in the Euro zone; the German market accounts for 83.2% (previous year: 83.4%) of sales and so is crucial to the Group's success. Germany is also the area of activity of most of the euromicron Group's operating units, which are benefiting from investments in communications, security and data networks. Apart from economic risks, euromicron is subject to the fundamental risks relating to pressure on prices and other market players. euromicron tackles these challenges by nurturing intensive contacts with customers and supplying special solutions in niche markets so as to be able to offer top-quality products and services at competitive prices.

Risk of change in interest rates

The risk of change in interest rates is the risk that the fair value or future cash flows of a financial instrument fluctuate due to changes in market interest rates. The risk of fluctuations in market interest rates to which the euromicron Group is exposed results mainly from variable-rate loans. Interest rate risks are restricted exclusively to the Euro zone. The financing that was contractually agreed and utilized at December 31, 2018, will result in interest expenses of around €3.2 million by the end of their term (previous year: €2.0 million). The due dates are presented in the later section "Liquidity risks". A sensitivity analysis is used to assess the interest rate risks. This shows the effects of different market interest rates on interest payments, interest income and interest expenses.

The euromicron Group complies with these stipulations and applies further assumptions:

- Changes in market interest rates for original financial instruments with a fixed rate have an impact on the result only if these instruments are measured at their fair value. All financial instruments with a fixed rate that are measured at their amortized cost are not therefore exposed to the risk of any change in interest rates.
- Changes in market interest rates for original financial instruments that have a variable rate and whose interest payments are not designated as a hedged item as part of cash flow hedges against risks of interest rate changes have an effect on the net interest income/loss and are included in calculation as part of the earnings-oriented sensitivity analysis.

If the average market level for interest rates in 2018 had been 50 base points higher, income before taxes at the euromicron Group would have been €451 thousand lower (previous year: €274). There would have been no effects if the average market level for interest rates had been lower. The hypothetical impact on income is mainly the result of the original financial instruments with a variable rate of interest and factoring.

Foreign currency risk

Foreign currency risks arise from future transactions, and assets and liabilities carried in foreign currency. The euromicron Group is mainly exposed to foreign currency risks as a result of financial instruments denominated in US dollars.

The financial assets include assets in USD totaling €6,011 thousand (previous year: €5,193 thousand). The financial liabilities in USD total €6,121 thousand (previous year: €3,531 thousand). Goods paid for in US dollars are purchased on the basis of short-term, foreign currency-based sales lists, which means that the currency risk can be controlled. The increase in trade accounts payable in foreign currency is mainly due to a higher purchasing volume in USD at individual Group companies at the key date.

If the exchange rate of the euro to the US dollar at December 31, 2018, had been 5% higher, the consolidated net income for the year would have been €5 thousand higher (previous year: € –247 thousand lower). However, if the exchange rate of the euro to the US dollar had been 5% lower, the consolidated net income for the year would have been € –6 thousand lower (previous year: €273 thousand higher). The risk to the Group from other foreign currency fluctuations is insignificant.

Risks of default

The risk of default is the risk that a business partner does not fulfill its obligations as part of a financial instrument or customer master agreement and that results in a financial loss. Due to its broad customer base, the euromicron Group is mainly exposed to the risk of default on trade accounts receivable and contract assets as part of its business operations.

An unusually high risk exposure cannot be discerned. There is no credit risk at the Group as a result of receivables being concentrated on one or a small number of trade debtors. In addition, the risk of default is minimized by Group-wide monitoring of accounts receivable. Moreover, credit sale insurance policies were concluded for specific companies. The maximum risk of default is to the carrying amounts of the financial assets carried on the balance sheet which are not secured by credit sale insurance policies. This risk is reflected by means of allowances for doubtful accounts.

The maximum risk of default is the gross carrying amount of the cash and cash equivalents. No significant risks of counterparty default were identified during the fiscal year. The counterparties were for the most part classified as investment grade.

The euromicron Group uses the simplified approach under IFRS 9 to determine the expected losses. Accordingly, the loss amount is in the amount equal to lifetime expected credit losses. The need for impairment is analyzed at every balance sheet date using a provision matrix to determine the expected credit losses over lifetime. In order to measure the losses expected over the term, trade accounts receivable and contract assets are grouped on the basis of common risk characteristics and the days by which they are overdue. The contract assets relate to current work that has not yet been invoiced and essentially have the same risk characteristics as the trade accounts receivable for the same types of contract. The euromicron Group has therefore drawn the conclusion that the expected likelihood of defaults on trade accounts receivable represent a reasonable approximation of the likelihood of defaults on contract assets.

The expected probability of defaults is based on historic defaults and the due date structure of the trade accounts receivable over the past three years. The probability of defaults is adjusted to reflect current and prospective information that affects the ability of customers to settle their debts.

No impairment was carried for cash and cash equivalents and other financial assets for reasons of materiality.

Trade accounts receivable and contract assets are derecognized if, in a reasonable assessment, there are objective indications that they cannot longer be realized.

Income and expenses from the change in impairment for doubtful accounts are carried in the income statement under the item “Other operating income” or “Other operating expenses”.

There were the following changes in the impairment for trade accounts receivable and contract assets: Table 089

Changes in the impairment for trade accounts receivable and contract assets 089

	Trade accounts receivable	Contract assets	Total
	€ thou.	€ thou.	€ thou.
Balance at January 1, 2018, acc. to IAS 39	**2,387**	**0**	**2,387**
IFRS 9 adjustments	99	54	153
Balance at January 1, 2018, acc. to IFRS 9	**2,486**	**54**	**2,540**
Allocation	57	0	57
Utilization	834	0	834
Reversal	53	18	71
Balance at December 31, 2018	**1,656**	**36**	**1,692**

Unrecoverable receivables for which no allowances had previously been formed were derecognized to an amount of €6 thousand in 2018 (previous year: €100 thousand) due to events that had an impact on their value.

The table below shows the gross carrying amounts (measured at amortized cost) for trade accounts receivable that are due and not due at December 31, 2018, and for which an impairment has been made either on the basis of a provision matrix using the simplified approach under IFRS 9 or by means of individual allowances for doubtful accounts. The table is supplemented by the contract assets: Table 090

Provision matrix for trade accounts receivable and contract assets 090

	Trade accounts receivable								
			Provision matrix						
	No application of the provision matrix, individual allowance for doubtful accounts	Not due	Due in 1–30 days	Due in 31-60 days	Due in 61-90 days	Due in >90 days	Total	Total receivables measured at amortized cost	Contract assets
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Probability of default	N/A	0.088 %	0.296 %	0.296 %	0.937 %	2.715 %	N/A	N/A	0.088 %
Gross carrying amount	2,529	5,092	416	620	263	3,622	10,013	12,542	40,791
Less insured receivables	0	–822	–132	–30	0	0	–984	0	0
Estimated total gross carrying amount in the event of default	2,529	4,270	284	590	263	3,622	9,029	11,558	40,791
Expected credit loss	–1,549	–4	–1	–2	–2	–98	–107	–1,656	–36
Net carrying amount	980	5,088	415	618	261	3,524	9,906	10,886	40,755

Liquidity risks

A further risk for the euromicron Group is the provision of sufficient liquidity for the subsidiaries' business operations. euromicron AG must ensure that the receivables resulting from financing of the operating units through the cash pool retain value. This is achieved by permanent and standardized finance management and reporting that constantly monitors and assesses the subsidiaries' activities and assigns measures to them.

With regard to the measures to secure future liquidity, please refer to the comments in section 3.2 "Risk report and salient features of the risk management system" in the group management report.

The contractually agreed (undiscounted) interest payments and repayments for the financial liabilities of the euromicron Group are shown below: Tables 091 and 092

All financial instruments held on the balance sheet date December 31, 2018, and for which payments have already been contractually agreed were included. The variable interest payments from the financial instruments were calculated on the basis of the interest rates applicable on December 31, 2018 (previous year: December 31, 2017). Financial liabilities that can be repaid at any time have been assigned to the earliest possible time segment.

euromicron uses derivative financial instruments exclusively to hedge interest rate risks resulting from financial transactions. A decision on this is taken on a case-by-case basis. They are not held for the purposes of short-term speculation. No derivative financial instruments were held either at December 31, 2018, or at December 31, 2017.

Cash flow from liabilities in 2018 — 091

	Carrying amount at Dec. 31, 2018	Cash flow up to 6 months	Cash flow 6–12 months	Cash flow in 2020	Cash flow in 2021	Cash flow in 2022	Cash flow 2023 et seq.
		in € thou.	in € thou.	in € thou.	in € thou.	in € thou.	in € thou.
Liabilities to banks	97,639	58,544	1,651	8,141	31,672	20	0
Liabilities from finance leases	1,153	214	155	285	271	191	121
Other financial liabilities	1,295	1,055	246	0	0	0	0
Total	**100,087**	**59,813**	**2,052**	**8,426**	**31,944**	**211**	**121**

Cash flow from liabilities in 2017 — 092

	Carrying amount at Dec. 31, 2017	Cash flow in 2018	Cash flow in 2019	Cash flow in 2020	Cash flow in 2021	Cash flow 2022 et seq.
		in € thou.	in € thou.	in € thou.	in € thou.	in € thou.
Liabilities to banks	90,549	72,031	20,364	0	0	0
Liabilities from finance leases	1,664	581	366	285	271	312
Other financial liabilities	2,172	1,562	610	0	0	0
Total	**94,385**	**74,174**	**21,340**	**285**	**271**	**312**

32. Related parties

Persons and companies are regarded as related parties if they control the euromicron Group or exert a significant influence on its financial and business policy or the euromicron Group has a significant influence over them.

In fiscal year 2018, services totaling €322 thousand (previous year: €0 thousand) were obtained from companies that are controlled by members of management in key positions. At the balance sheet date, there were liabilities from them totaling €264 thousand (previous year: €0 thousand), which are carried under the trade receivables.

Further relations with members of the Executive Board and Supervisory Board are explained in section 36.

33. Declaration on the German Corporate Governance Code in accordance with Section 161 AktG (German Stock Corporation Law)

In fiscal year 2018, euromicron AG largely complied with the recommendations of the German Corporate Governance Code in its version dated February 7, 2017, which was published in the Federal Official Gazette on April 24, 2017. The exceptions are listed in the declaration on conformance by the Executive Board and Supervisory Board dated March 28, 2019, which can be read on the company's homepage at:

www.euromicron.de/en/investor-relations/declaration-on-conformance-2019

34. Stock option program / securities transactions requiring disclosure

There is currently no stock option program or comparable incentive system based on securities. The members of the Executive Board and Supervisory Board do not hold more than 1% of the shares issued by euromicron AG directly or indirectly.

35. Auditors' fees

The independent auditor of euromicron AG is PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft.

The auditing services comprise the fees for auditing the financial statements of the companies and the Group, as well as for reviews of the Group's interim financial statements.

Auditors' fees 093

	2018	2018	2017	2017
	€ thou.	€ thou.	€ thou.	€ thou.
	Total	of which not related to the period	Total	of which not related to the period
Auditing services	548	21	486	12
Other confirmation services	202	2	0	0
Tax consulting services	40	0	41	7
Other services	0	0	159	0
Total	**790**	**23**	**686**	**19**

The fees for other confirmation services relate in particular to services for euromicron AG in preparing the issue of comfort letters. The fees for tax consulting services include in particular fees for advice on special tax-related matters and for preparing tax returns.

36. Supervisory Board and Executive Board

(a) Executive Board

Bettina Meyer
Spokeswoman of the Executive Board

Finance, Legal Affairs, Human Resources, Accounting/Controlling, Investor Relations and Purchasing

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- None

Dr. Frank Schmitt (since February 1, 2019)
Chief Technical Officer

Operations, Technology, Product Development and IT

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- None

Jörn Trierweiler (since April 30, 2018)
Business Transformation

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- ATRUS Cement Holding AG (in liquidation), Ohlsdorf, Austria (until May 26, 2018)
- Joint Libyan Cement Manufacturing Company, Tripoli, Libya, as part of a professional restructuring solution

Jürgen Hansjosten (until April 30, 2018)
Operations, Strategy, IT and Purchasing

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- Chairman of the Supervisory Board of AMS Technologies AG, Planegg

(b) Supervisory Board

The members of the Executive Board of euromicron AG are or were:

Evelyne Freitag, Chairwoman
Graduate in Business Management, Chief Financial Officer
Germany/Switzerland/Austria
of Sanofi-Aventis Deutschland GmbH, Frankfurt/Main

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- Chairwoman of the Supervisory Board of the Pensionskasse der Mitarbeiter der Hoechst-Gruppe VVaG, Frankfurt/Main
- Foreign trade advisor to France in Germany

Klaus Peter Frohmüller, Deputy Chairman (since May 29, 2018)
Graduate in Economics
Advisor to brain-in-transAction GmbH, Hanau

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- Ziemann Sicherheit GmbH, Schallstadt
- 67rockwell Consulting GmbH, Hamburg
- PerformanceDNA GmbH, Neu-Isenburg

Dr. Martina H. Sanfleber (since June 5, 2018)
Doctor of Business Economics
Full-time member of the Supervisory Board of the RWE/Innogy Group, Meerbusch

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- Essent N.V., 's-Hertogenbosch, Netherlands
- Stadtwerke Duisburg AG, Duisburg
- Goodyear Dunlop Tires Germany GmbH, Hanau

Rolf Unterberger, Deputy Chairman (until May 22, 2018)
Graduate in Industrial Engineering,
business consultant and Managing Director of RMU Capital GmbH, Munich

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- Managing Director of Executive Interim Partners GmbH, Munich
- Member of the Advisory Board of Melboss Music, Palo Alto (CA), U.S.

Dr. Alexander Kirsch (until May 29, 2018)
Businessman,
Managing Partner of Renusol Europe GmbH, Cologne

Membership of legally mandated Supervisory Boards or other comparable German or foreign supervisory bodies of business enterprises:

- Chairman of the Supervisory Board of SKW Stahl-Metallurgie Holding AG, Munich (until May 18, 2018)

The term of office of Ms. Freitag expires at the end of the General Meeting that decides on discharge of the Supervisory Board for fiscal year 2020. The term of office of Mr. Frohmüller and Dr. Sanfleber expires at the end of the General Meeting that decides on discharge of the Supervisory Board for fiscal year 2018.

(c) Remuneration of the board members
In total, the members of the Supervisory Board received compensation of €135 thousand (previous year: €135 thousand) in accordance with the Articles of Association; it consists solely of fixed compensation. The fixed compensation for members of the Supervisory Board is €30 thousand, with the Chairman/Chairwoman of the Supervisory Board receiving twice and his/her deputy one-and-a-half times the fixed compensation. Apart from that, the members of the Supervisory Board did not receive any further payments in the year under review.

The compensation for the Supervisory Board members for fiscal year 2018 has not yet been paid out.

In the fiscal year, the Executive Board received a total remuneration of €956 thousand (previous year: €604 thousand); the variable payment made up €97 thousand of this (previous year: €180 thousand) and the components with a long-term incentive effect made up €191 thousand (previous year: €0 thousand).

The total compensation for former Executive Board members in the fiscal year was €200 thousand (previous year: €0 thousand). This relates to severance pay awarded to an Executive Board member who left in fiscal year 2018.

As in 2017, no expenses from the pension commitments to Executive Board members were recognized in fiscal year 2018.

The disclosures required for listed stock corporations pursuant to Section 314 (1) No. 6 a Sentences 5 to 8 of the German Commercial Code (HGB) are contained in the Compensation Report, which is part of the management report. Additional presentation of the information included in that report in the notes is therefore dispensed with.

37. Declaration by the legal representatives

"We affirm to the best of our knowledge that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group in compliance with the applicable accounting principles and that the group management report gives a true and fair presentation of the course of business, including the business results, and the position of the Group and accurately describes the main opportunities and risks of the Group's anticipated development."

Frankfurt/Main, April 8, 2019

Bettina Meyer Spokeswoman of Board the Executive Board	Dr. Frank Schmitt Executive Board member	Jörn Trierweiler Executive Board member

Auditor's Report

Following the final results of our audit, we have issued the following unqualified audit report dated April 8, 2019:

Independent auditor's report

Audit opinions

We have audited the consolidated financial statements of euromicron AG, Frankfurt/Main, and its subsidiaries (the Group), consisting of the consolidated balance sheet as of December 31, 2018, the consolidated statement of comprehensive income, the consolidated income statement, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from January 1 to December 31, 2018, as well as the notes on the consolidated financial statements, including a summary of significant accounting methods. We have also audited the group management report of euromicron AG for the fiscal year from January 1 to December 31, 2018. In accordance with German statutory requirements, we did not audit the contents of the components of the group management report specified in the section "Other information" of our auditor's report.

In our opinion pursuant to the findings gained during the audit,

- the enclosed consolidated financial statements comply, in all material respects, with the IFRS, as are to be applied in the EU, and in addition to the German statutory regulations to be applied pursuant to Section 315e (1) of the HGB (German Commercial Code) and give a true and fair view of the net assets and financial position of the Group as of December 31, 2018, and of its results of operations for the fiscal year from January 1 to December 31, 2018, taking into account these regulations, and

- the enclosed group management report conveys overall an accurate picture of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German statutory requirements, and accurately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the contents of the components of the group management report specified in the section "Other information".

In accordance with Section 322 (3) Sentence 1 HGB, we declare that our audit did not result in any objections to the legal compliance of the consolidated financial statements and the group management report.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the Group companies in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from January 1 to December 31, 2018 These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

In our opinion, the following matters were of most significance in our audit:

1. Recoverability of goodwill (impairment test)

2. Accounting of project contracts that have to be recognized over time and first-time application of IFRS 15

We have structured our presentation of these particularly key audit matters as follows:

1. Matter and statement of the problem

2. Audit approach and findings

3. Reference to further information

We present the particularly key audit matters in the following:

1. Recoverability of goodwill (impairment test)

1.1 Goodwill totaling €110.6 million (45.4% of total assets or 167.1% of equity) is carried under the balance sheet item "Goodwill" in the consolidated financial statements of euromicron AG. Goodwill is tested for impairment every year and as warranted (in an event-driven test) by the company to determine any need for it to be written down. The impairment test is conducted at the level of the group of cash-generating units to which the goodwill is assigned. In the impairment test, the carrying amount of each cash generating unit, including the goodwill, is compared with the recoverable amount. The recoverable amount is determined in principle on the basis of the fair value minus costs of sale. The basis of measurement here is usually the present value of the future cash flows of the respective group of cash-generating units. The present values are determined by means of discounted cash flow models. In this, the medium-term planning adopted by the Group forms the starting point and is updated by assumptions relating to long-term growth rates. Expectations of future market development and assumptions on the development of macroeconomic factors are also taken into account. The plausibility of the budgeting on which the impairment test is based – including the in-depth estimates and assumptions of the legal representatives – was examined by an external expert engaged by the company. Discounting is carried out using the weighted average cost of capital for the respective group of cash-generating units. The result of the impairment test revealed that there was no need to recognize an impairment on the goodwill.

The result of this assessment depends to a great extent on the estimate by the legal representatives as regards future cash inflows for the respective group of cash-generating units, the discount rate used, the rate of growth, and other assumptions and so is subject to considerable uncertainty. In view of that and the complexity of such an assessment and the issue's significance for the company's net assets and results of operations, this matter was of particular importance in our audit.

1.2 As part of our audit, we gained an understanding of the methodological approach applied in the impairment test, among other things. After comparing the future cash inflows used for calculation with the medium-term planning adopted by the Group, we assessed the reasonableness of the calculation. Accompanying that, we also assessed the usability of the report created by the external expert. That also included an evaluation of the professional qualifications of the external expert. In particular, we also gained an understanding of the original data used, and the assumptions made or applied, in the report and assessed their reasonableness. We also examined whether the costs of Group functions were taken into account properly. Knowing that just relatively small changes in the applied discount rate and growth rate may have significant impacts on the company's value determined in this way, we looked intensively at the parameters used to determine the applied discount rate and the growth rate and gained an understanding of the calculation scheme. In order to reflect the existing uncertainties in forecasting, we gained an understanding of the sensitivity analyses created by the company. As part of that, we found that the carrying amounts of the cash-generating units, including the assigned goodwill, are sufficiently covered by the discounted future cash surpluses, taking into account the information available. The measurement parameters and assumptions applied by the legal representatives match our expectations as a whole and are also within fluctuation margins that we believe to be acceptable.

1.3 The company's disclosures on goodwill can be found in section 1 (a) of the notes on the consolidated financial statements.

2. Accounting of project contracts that have to be recognized over time and first-time application of IFRS 15

2.1 Sales totaling €318.0 million are reported in the consolidated income statement in the company's consolidated financial statements. The company has established extensive systems and processes throughout the Group to ensure accurate revenue recognition and accrual. There were significant effects on revenue recognition and accrual in this fiscal year due to first-time adoption of the new accounting standard for revenue recognition (IFRS 15). Sales to an amount of €162.4 million (51.1% of sales) must be ascribed to project contracts that have to be recognized over time. The percentage of completion of project contracts is estimated on the basis of the ratio of order costs that have actually already been incurred to the planned total costs. First-time adoption of IFRS 15 resulted in a change in sales totaling €461 thousand (0.1% of sales), mainly due to change in the time that the sales are realized. Adoption of IFRS 15 resulted in a significant expansion in disclosure obligations. In addition, IFRS 15 necessitates estimates and discretionary decisions for certain areas, and we had to assess the reasonable of them as part of our audit. In particular, the planned total costs of project contracts that had to be recognized over time and appropriate allocation of the incurred costs to the contracts are based on estimates and assumptions by the legal representatives. Accurate revenue recognition and accrual with Group-wide adoption of the new accounting standard IFRS 15 is also complex. In view of that, recognition of sales was of special importance in our audit.

2.2 As part of our audit, we assessed among other things the processes and controls relating to revenue recognition that have been established by the Group and adjusted to IFRS 15. In addition, our audit assesses the effects of adoption of IFRS 15; we were supported in that task by our internal specialists from our Capital Markets and Accounting Advisory Services division. In connection with the disclosure obligations from first-time adoption of IFRS 15, we assessed among other things the appropriateness of the methods and approaches applied in switching to IFRS, including the impact analyses conducted within the Group, and evaluated the estimates and discretionary decisions by the legal representatives relating to revenue recognition and accrual for the various business models of the Group companies. In relation to project contracts that have to be recognized over time, we examined randomly selected projects to determine whether the requirements for recognition of profits over time in accordance with IFRS 15 were met. In addition, we evaluated how their percentage of completion had been determined and the pro-rata recognition of sales and profits based on that. In this connection, we gained an understanding of how the planned total costs and the actually incurred costs are determined. That also included assessing the progress of the respective projects through talks with project managers and by inspecting project documents. We also assessed the continuity and consistency of the methods applied to calculate the incurred costs. We also addressed the audit risk inherent in this area by consistent Group-wide audit procedures. We satisfied ourselves that the systems and processes that have been set up and adjusted to IFRS 15, as well as the controls that have been established, are appropriate and that the estimates and assumptions made the legal representatives are adequately documented and substantiated so as to ensure proper recognition of sales as part of first-time adoption of IFRS 15.

2.3 The disclosures by the company on first-time adoption of IFRS 15 are contained in section 2.1 "Accounting principles" and the disclosures on revenue from project contracts that have to be recognized over time are contained in section 2.19 "Revenue from contracts with customers" and section 16 "Sales" in the notes on the consolidated financial statements.

Other information

The legal representatives are responsible for the other information. The other information comprises the following components of the group management report whose contents were not audited:

- The corporate governance declaration in accordance with Section 289f and Section 315d HGB (German Commercial Code) contained in section 5 of the group management report
- The Corporate Governance Report in accordance with Section 3.10 of the German Corporate Governance Code
- The separate non-financial report in accordance with Section 289b (3) HGB and Section 315b (3) HGB

The other information also comprises the other parts of the Annual Report – excluding further cross-references to external information –, with the exception of the audited consolidated financial statements, the audited group management report, and our auditor's report.

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

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

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

Responsibilities of the legal representatives and the Supervisory Board for the consolidated financial statements and the group management report

The legal representatives are responsible for the preparation of consolidated financial statements that comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the Group's net assets, financial position and results of operations. In addition, the legal representatives are responsible for such internal controls as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

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

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

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

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

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

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

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the Group's net assets, financial position and results of operations in compliance with the IFRSs as adopted in the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB;

- Obtain sufficient appropriate audit evidence regarding the accounting information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions;

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Company's position it provides;

- Perform audit procedures on the prospective information presented by the legal representatives in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the legal representatives as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and discuss with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, related safeguards.

From the matters discussed with those charged with governance, we determine those matters that are of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as the group auditor by the General Meeting on June 13, 2018. We were engaged by the Supervisory Board on December 6, 2018. We have been the group auditor of euromicron AG, Frankfurt/Main, without interruption since fiscal year 2010.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public auditor responsible for the engagement

The German public auditor responsible for the engagement is Thomas Heck.

Frankfurt/Main, April 8, 2019

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Wirtschaftsprüfungsgesellschaft

Thomas Heck German public auditor	ppa. Diana Plaum German public auditor