6.1 Consolidated financial statements

6.1.1 Consolidated financial statements for the financial year ending on December 31, 2017 and 2018

Consolidated income statement

In millions of euros	Notes	Dec 31, 2018	Dec 31, 2017
SALES		**2,421.3**	**2,288.2**
Cost of sales		(1,119.1)	(1,076.4)
GROSS PROFIT		**1,302.2**	**1,211.8**
OTHER OPERATING INCOME AND EXPENSES	**19**	**31.2**	**31.2**
Selling and marketing expenses		(480.3)	(447.5)
General and administrative expenses		(165.2)	(156.4)
Research and development expenses		(326.9)	(304.4)
TOTAL OPERATING EXPENSES		**(972.4)**	**(908.3)**
CONTRIBUTIVE OPERATING INCOME BEFORE NON-R		**361.0**	**334.7**
BioFire acquisition fees and depreciation costs[(a)]	23	(17.5)	(18.2)
OPERATING INCOME BEFORE NON-RECURRING ITEMS		**343.5**	**316.5**
Other non-recurring income and expenses from operations	24	0.2	(1.6)
OPERATING INCOME		**343.6**	**314.9**
Cost of net financial debt	22.2	(18.5)	(16.2)
Other financial income and expenses, net	22.3	(4.5)	(6.2)
Income tax	25	(65.2)	(54.5)
Share in earnings (losses) of equity-accounted companies		0.2	(0.4)
NET INCOME OF CONSOLIDATED COMPANIES		**255.6**	**237.6**
Non- controlling interests		(1.1)	(0.6)
ATTRIBUTABLE TO OWNERS OF THE PARENT		**256.6**	**238.1**
Basic earnings per share		€2.18	€2.02
Diluted earnings per share		€2.17	€2.01

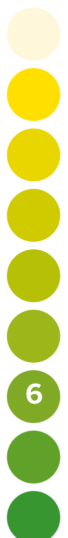
(a) In order to improve the understanding of operating income and in view of BioFire's size, the amortisation of the assets acquired and valued during the purchase price allocation, are presented on a separate line of operating income before non-recurring items.

Total comprehensive income

In millions of euros	Notes	Dec 31, 2018	Dec 31, 2017 restated[(e)]
Net income for the period		**255.6**	**237.6**
Items to be reclassified to income		**24.1**	**(80.0)**
Fair value gains (losses) on financial hedging instruments	(a)	(3.1)	2.4
Tax effect		0.7	(0.9)
Movements in cumulative translation adjustments	(b)	26.5	(81.5)
Items not to be reclassified to income		**9.4**	**(0.5)**
Fair value gains (losses) on financial assets	(c)	2.4	6.9
Tax effect		(0.4)	0.4
Remeasurement of employee benefits	(d)	10.1	2.6
Tax effect		(2.7)	(10.4)
TOTAL OTHER COMPREHENSIVE INCOME		**33.5**	**(80.6)**
TOTAL COMPREHENSIVE INCOME		**289.1**	**157.0**
Non- controlling interests		(1.3)	(0.6)
ATTRIBUTABLE TO OWNERS OF THE PARENT		**290.4**	**157.5**

(a) Variation in the effective share of financial hedging instruments
(b) The change in translation differences in 2018 is mainly related to the increase in the euro rate against other currencies and in particular the dollar.
(c) Changes in the fair value of financial instruments concern shares in non-consolidated companies for which the Group has opted for a change in the fair value in other comprehensive income not recyclable in profit and loss (see Note 7).
(d) See Note 15.3.
(e) The Group has applied the IFRS 9 standard since January 1, 2018 (see Note 2). The application has not had an impact on consolidated net income, but on other components of comprehensive income. The statement of comprehensive income above presents the impact of the retrospective application of the standard on the classification of changes in fair value of non- consolidated equity investments in non-recyclable components.

The first application of IFRS15 had no impact on the consolidated income statement.



Consolidated balance sheet

Assets

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017
Intangible assets	4	507.3	430.7
Goodwill	5	616.5	442.7
Property, plant and equipment	6	807.5	711.4
Non-current financial assets	7	71.8	57.9
Net income for the period - Investments in associates		0.3	0.1
Other non-current assets		16.2	14.1
Deferred tax assets	25.3	74.3	51.6
NON-CURRENT ASSETS		**2,093.9**	**1,708.5**
Inventories and work-in progress	8	414.9	380.3
Trade receivables and assets related to contracts with customers	9	490.0	460.1
Other operating receivables	11	61.7	75.1
Current tax receivables	11	39.2	36.1
Non-operating receivables	11	9.6	15.7
Cash and cash equivalents	12	280.1	312.1
CURRENT ASSETS		**1,295.6**	**1,279.4**
ASSETS HELD FOR SALE	**13**	**0.1**	**2.1**
TOTAL ASSETS		**3,389.6**	**2,990.0**

Shareholders' equity and liabilities

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017
• Share capital	14	12.0	12.0
• additional paid-in capital and reserves	14	1,660.6	1,487.5
• Attributable net income for the period		256.6	238.1
EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT		**1,929.3**	**1,737.6**
NON-CONTROLLING INTERESTS		**74.0**	**(0.9)**
TOTAL EQUITY		**2,003.3**	**1,736.7**
• Long-term borrowings and debt	16	446.8	391.1
• Deferred tax liabilities	25.3	136.0	103.8
• Impairment	15	47.1	106.7
NON-CURRENT LIABILITIES		**629.9**	**601.5**
• Short-term borrowings and debt	16	100.2	76.9
• Impairment	15	45.0	34.1
• Trade payables	17	176.9	161.3
• Other operating payables	17	345.1	300.7
• Current tax payables	17	33.5	24.2
• Non-operating payables	17	55.8	54.6
CURRENT LIABILITIES		**756.4**	**651.8**
LIABILITIES RELATED TO ASSETS HELD FOR SALE	**13**	**0.0**	**0.0**
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**3,389.6**	**2,990.0**

The first application of the IFRS 9 and 15 standards had no impact on the consolidated balance sheet.

Consolidated statement of cash flows

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017
Net income of consolidated companies		**255.5**	**237.5**
• Net income for the period - Investments in associates		(0.2)	0.4
• Cost of net financial debt		18.5	16.2
• Other financial income and expenses, net		4.5	6.2
• Income tax expense		65.2	54.5
• Operating depreciation and provisions on assets		157.9	140.5
• Non-recurring items and BioFire acquisition fees and depreciation costs		17.4	19.9
EBITDA (before non-recurring items)	**16**	**518.8**	**475.2**
Other non-recurring income and expenses from operations *(excluding non-recurring provisions for impairment and capital gains and losses on disposal of capital assets)*		0.1	(1.1)
Other financial income and expenses, net *(excluding provisions and disposals of non-current financial assets)*		(4.6)	(6.1)
Net additions to operating provisions for contingencies and losses		(47.8)	5.5
Fair value gains (losses) on financial instruments		0.3	2.3
Share-based payment		6.7	7.5
Elimination of other non-cash/non-operating income and expenses		**(45.3)**	**8.1**
Change in inventories		(27.3)	(4.3)
Change in trade receivables		(30.3)	(25.6)
Change in trade payables		13.7	(4.1)
Change in other operating working capital		41.1	(3.8)
Change in operating working capital requirement[(a)]		**(2.8)**	**(37.8)**
Other non-operating working capital		2.7	1.5
Change in non-current non-financial assets and liabilities		(1.5)	2.0
Change in working capital requirement		**(1.6)**	**(34.3)**
Income tax paid		**(66.5)**	**(91.5)**
Cost of net financial debt	**22**	**(18.5)**	**(16.2)**
NET CASH FROM OPERATING ACTIVITIES		**386.9**	**341.3**
Purchases of property, plant and equipment and intangible assets		(226.8)	(183.5)
Proceeds from disposals of property, plant and equipment and intangible assets		5.4	7.9
Proceeds from other non-current financial assets		0.0	(0.4)
FREE CASH FLOW[(b)]		**165.5**	**165.3**
Disbursement / collection related to taking non-controlling interests		(5.4)	(13.7)
Impact of changes in Group structure		(191.4)	9.3
NET CASH USED IN INVESTING ACTIVITIES		**(418.2)**	**(180.4)**
Purchases and sales of treasury shares		(22.6)	(0.9)
Dividends paid to owners		(40.2)	(39.4)
Dividends paid to non-controlling interests		0.0	(0.1)
Change in committed debt		115.5	(0.6)
Change in interests without gain or loss of controlling interest		0.0	(11.5)
NET CASH USED IN FINANCING ACTIVITIES		**52.7**	**(52.5)**
NET CHANGE IN CASH AND CASH EQUIVALENTS		**21.4**	**108.4**
Net cash and cash equivalents at beginning of year		**260.4**	**146.6**
Impact of currency changes on net cash and cash equivalents		(11.8)	5.4
Net cash and cash equivalents at end of year		**270.0**	**260.4**

(a) Including allocations (reversals) of short-term provisions.
(b) Corresponds to the sum of flows related to the activity and those related to investments excluding the impact of changes in the scope of consolidation. It also includes flows on treasury shares and those relative to the cost of debt.

6

The first application of IFRS 9 has not had an impact on the consolidated statement of cash flows. Indeed, changes to the fair value of non-consolidated securities were already recognised in other comprehensive income and no impact was recognised in profit/loss in 2017.

The presentation of the consolidated cash flow statement has changed in order to better reflect the Group's cash generation. The comparative table is presented in Note 16.1.

Net cash generated from operating activities

The EBITDA reached €519 million at the end of December 2018, representing 21.4% of revenue, up by 9% compared to €475 million for 2017. This increase reflects the increase in the contributive operating income before non-recurring items and depreciation, amortisation and provisions for operation.

Income tax paid amounted to €66 million, a sharp drop from the €91 million paid in the prior year, following the implementation of the U.S. tax reform, which lowered federal tax rates from 35% to 21%.

During 2018, the operating working capital requirement only increased by €3 million, in spite of the sustained growth of the Group's activity over the period. Primarily as a result of the following factors:

- the level of stock increased at the same rate as the activity with an increase of €27 million in 2018 and with practically stable rotation periods;
- customer credits increased by €30 million, mainly reflecting the growth in the activity and sustained collection deadlines;
- variations related to trade payables increased by €14 million, in line with the activity;
- the other elements of the working capital requirement improved by €41 million, mainly due to the increase in tax and social-security debts, which now include the provision for variable compensation indexed on the price of the share (Phantom shares) as part of liabilities to personnel, while they were previously recorded under borrowings.

Furthermore, in the first half of 2018, bioMérieux recorded an exceptional payment to the American pension fund for €56 million, classified in "other variations related to the activity".

At the end of the 2018 financial year, cash generated from operating activities reached €387 million, up by nearly 13.3% compared to the €341 million recorded in the previous financial year, including the cost of financial debt reclassified as flows related to the activity.

Net cash used in investing activities

As expected, disbursements related to investments represented about 9.4% of revenue, namely €227 million in 2018, against €183 million during the previous financial year.

In this context, the free cash flow excluding the exceptional payment to the American pension fund reached €221 million in 2018, compared to €165 million in 2017, representing an increase of nearly 40%. Taking into account this exceptional payment, the published free cash flow stood at €165 million.

Net cash used in financing activities

Acquisitions of non-current financial assets, net of disposals, stood at €192 million in 2018, mainly related to the acquisition of Astute Medical Inc. and the majority stake in the capital of Hybiome in China.

Furthermore, the Company paid a dividend of €40 million, almost stable from one year to the other, and spent €23 million on its share buyback programme to cover the share grant plans, compared to €1 million the previous year.

Statement of changes in consolidated equity

	Attributable to owners of the parent										Non-controlling interests
In millions of euros	Share capital	Additional paid in capital and consolidated reserves[a]	Cumulative translation adjustments	Changes in fair value[b]	Actuarial gains and losses[c]	Treasury shares	Share-based payment	Total additional paid-in capital and reserves	Net income	Total	Total
EQUITY AT DECEMBER 31, 2016	**12.0**	**1,423.6**	**49.0**	**7.4**	**(46.3)**	**(14.2)**	**8.5**	**1,428.0**	**179.1**	**1,619.1**	**2.2**
Total comprehensive income for the period			(81.5)	8.7	(7.7)			(80.6)	238.1	157.5	(0.6)
Appropriation of prior-period net income		179.1						179.1	(179.1)	0.0	
Dividends paid[d]		(39.4)						(39.4)		(39.4)	(0.1)
Treasury shares		(1.4)				3.3		1.9		1.9	
Share-based payment[e]							7.5	7.5		7.5	
Changes in ownership interests[f]		(9.1)						(9.1)		(9.1)	(2.4)
Other changes[g]		5.5					(5.5)	0.0		0.0	
EQUITY AT DECEMBER 31, 2017	**12.0**	**1,558.4**	**(32.5)**	**16.1**	**(54.0)**	**(10.9)**	**10.5**	**1,487.5**	**238.1**	**1,737.6**	**(0.9)**
Total comprehensive income for the period			26.7	(0.4)	7.4			33.7	256.6	290.4	(1.3)
Appropriation of prior-period net income		238.1						238.1	(238.1)	0.0	
Dividends paid[d]		(40.2)						(40.2)		(40.2)	
Treasury shares		(2.7)				(21.9)		(24.6)		(24.6)	
Share-based payment[e]							6.7	6.7		6.7	
Changes in ownership interests[f]		(0.9)						(0.9)		(0.9)	76.1
Other changes[g]		(39.6)					(0.2)	(39.8)		(39.8)	
EQUITY AT DECEMBER 31, 2018	**12.0**	**1,713.2[h]**	**(5.9)[i]**	**15.7**	**(46.6)**	**(32.8)**	**17.0**	**1,660.6**	**256.6**	**1,929.3[h]**	**74.0[j]**

(a) Of which paid-in capital: €63.7 million
(b) Including changes in the fair value of Quanterix, Labtech and GNEH shares and hedging instruments
(c) Actuarial gains and losses on employee benefit obligations arising since the effective date of the revised IAS 19R
(d) Dividends per share: €0.34 in 2018 and €1 in 2017 (before stock split). Shares not qualifying for dividends amounted to 569,443 at December 31, 2018, compared with 234,074 at December 31, 2017.
(e) The fair value of benefits related to share grants is being recognised over the vesting period.
(f) The variation in percentages of interests corresponded in 2017 to the repurchase of shares of bioMérieux Japan from Sysmex, in 2018 to the acquisition of Hybiome and the repurchase of the minority interests of RAS Lifesciences
(g) Essentially corresponds to the recognition of the debt relating to the put on the Hybiome minority interest
(h) Of which distributable reserves of bioMérieux SA, including earnings for the financial year: €989.5 million
(i) See Note 14.2 Cumulative translation adjustments
(j) The variation in the share of minority interests comes from the repurchase of shares of RAS Lifesciences from minority shareholders and the acquisition of Hybiome, of which 45.52% goes to minority interests

The first application of IFRS 9 has not had an impact on the statement of changes in consolidated equity.

6.1.2 Notes

bioMérieux is a leading international diagnostics group that specialises in the field of *in vitro* diagnostics for clinical and industrial applications. The Group designs, develops, manufactures and markets diagnostic systems, *i.e.* reagents, instruments and software. bioMérieux is present in more than 160 countries through 43 subsidiaries and a large network of distributors.

These consolidated financial statements were approved by the Board of Directors on February 26, 2019.

The financial statements will only be considered definitive after approval by the Annual General Meeting on May 23, 2019.

The consolidated financial statements are presented in millions of euros.

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Note 1. Changes in the scope of consolidation during the financial year and significant events

1.1 Changes in the scope of consolidation

1.1.1 Acquisition of Astute Medical Inc.

On April 4, 2018, bioMérieux acquired 100% of the shares in Astute Medical Inc., based in San Diego (USA). Astute is a company specialising in the identification and validation of biomarkers.

This acquisition follows an initial agreement signed in 2014 to develop and market the NephroCheck® test (identification of Acute Kidney Injury) for the VIDAS® platform.

The acquisition was carried out for an amount of €75.2 million in cash. The subsidiary was consolidated by the full consolidation method from the takeover date, giving mainly rise to the recognition of the technologies net of deferred tax liabilities for €25.9 million, deferred tax assets of €16.2 million and provisional goodwill of €28.4 million. This goodwill reflects the human capital acquired as well as the specific synergies expected by bioMérieux.

Since the acquisition date, Astute has generated an operating loss of €17.2 million including the depreciation of the technologies recognised during the purchase price allocation work.

1.1.2 Acquisition of Suzhou Hybiome Biomedical Engineering Co. Ltd

On November 3, 2018, bioMérieux took a 54.48% stake in the capital of Suzhou Hybiome Biomedical Engineering Co. Ltd, giving it exclusive control. Based in Suzhou (China), the Company specialises in automated immunoassay tests.

The acquisition was made for €115.6, of which €105.9 million came within the context of the business combination and €9.7 million was relative to the acquisition of the installed base from the main distributor.

Furthermore, the contract specifies cross call and put options relating to 37.32% of the interests of the Company. These options can be exercised in 5 years providing certain conditions are fulfilled. In this context, the Group considers that the exercise of the put by the minority interests is reasonably certain. Consequently, a debt to the minority interests was recognised for its current value, namely €39.2 million.

The consolidation of the Company through full consolidation gave rise to the recognition of a technology subject to amortisation for a provisional amount of €41.9 million after the tax effect, as well as provisional goodwill, recognised according to the full goodwill method, of €139.3 million, of which €83.1 million returns to the Group. This goodwill reflects the ability of the Group to grow market share in China.

The contributions to the revenue and contributive operating income before non-recurring items of the Group in 2018 are not significant.

1.2 Significant events of the financial year

1.2.1 Exceptional contribution to the US retirement plan

During the first half of 2018, bioMérieux Inc. made an exceptional payment of $67 million, representing €56 million to the fund for covering American post-employment benefit obligations. The liability was thus reduced from €56.2 million on December 31, 2017 to €5.1 million on December 31, 2018. The tax treatment of this payment generated tax savings of €4.9 million, recorded for the financial year.

1.3 Summary of significant events in 2017

The significant events for 2017 were the following:

- an additional stake was taken in Sysmex bioMérieux for €11.5 million, thus bringing bioMérieux's percentage of interest in its subsidiary to 100%;
- a stake was taken in Banyan Biomarkers for $7 million;
- took part in raising funds for Qvella for €6 million;
- impact of American tax reform on the valuation of deferred tax generating savings of €30 million in profit/loss and an expense of €10.5 million in other elements of comprehensive income;
- stock split by three.

These events had no significant impact on the annual financial statements for the 2018 financial year.

1.4 Pro forma information on changes in the scope of consolidation

No *pro forma* income statement information is given, since the acquisitions carried out in 2018 did not have a material impact on the Group's financial statements.

The impact of changes in the scope of consolidation is shown on a separate line of the statement of cash flows and tables showing year-on-year changes in the notes.

Note 2. General accounting principles

Standards, amendments and interpretations

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), including all standards, amendments and interpretations adopted by the European Commission at December 31, 2018. These can be consulted on the European Commission's website at http://ec.europa.eu/internal_market/accounting/ias/index_fr.htm.

The new standards, amendments and interpretations adopted by the European Commission and applicable from January 1, 2018 are presented below.

Standard IFRS 15: The Group has retrospectively applied IFRS 15 including the amendments "Clarifications to IFRS 15 - Revenue from contracts with customers".

The standard establishes the principles for recognising revenue on the basis of a five-step analysis:

- identification of the agreement;
- the identification of the different performance obligations, *i.e.* the list of separate goods and services that the seller has undertaken to provide to the buyer;
- the determination of the overall price of the agreement;
- the allocation of the overall price of each performance obligation;
- the recognition of revenue when a performance obligation is satisfied.

The analysis carried out by the Group has not had an impact on the consolidated revenue, net income or consolidated equity. The analysis led to special attention being paid to the treatment of contracts for the provision of equipment when they are related to other services (provision of reagents, maintenance services, extended product warranties). For example, the Group studied the impacts of the standard on the criteria used for distinguishing contracts regarding the provision of equipment that have the characteristics of lease contracts. The application of the standard led to the statement in the notes to the consolidated financial statements of a breakdown of sales based on the various components of a multiple-element arrangement (reagent sales, implicit rent, etc.), without having to change the amount of revenue.

The breakdown of revenue as well as a reminder of the rules applied in terms of recognition of revenue according to contract types (disposals, provision, rental), are indicated in Note 3.1.1 of the appendix.

The other specific points of IFRS 15 have not had a material impact.

Consequently, bringing the Group into compliance with IFRS 15 has not had a material impact on the aggregates of the consolidated financial statements.

The analysis of IFRS 15 also led to the re-examination of the expected useful life of equipment provided, which in practice turns out to be significantly longer than the term of the contract which has the characteristics of a rental. The increased expected useful life was recognised prospectively in 2018 (see Note 6.1 hereafter).

Standard IFRS 9: bioMérieux also applies, from January 1, 2018, the IFRS 9 standard "Financial instruments". The standard was applied retrospectively.

Application of the standard led the Group to reallocate shares in non-consolidated companies from the "Assets available-for-sale" category, not taken up by IFRS 9, to the category of securities whose fair value is recognised in other comprehensive income not recyclable in profit and loss (see Note 7.2). This reclassification on January 1, 2017 was carried out without an impact on net income and consolidated equity. The reconciliation between the adjusted financial statements presented for comparison in the financial statements and the published financial statements is indicated in Note 7.2.

IFRS 9 did not have any other impacts. The analysis carried out did not lead to the recognition of any additional impairment of trade receivables in respect of expected losses (see Note 7.2), hedging contracts in the form of options are not significant, and the Company has not carried out any restructuring of borrowings.

The other amendments and interpretations applicable from January 1, 2018 for the financial years from January 1, 2018 have not had a significant impact on the consolidated financial statements or are not applicable. They mainly concern:

- amendments to IFRS 2 "Classification and evaluation of share-based payment transactions";
- IFRIC 22 - "Foreign currency transactions and advance consideration";
- 2014-2016 annual improvements cycle (amendments to IFRS 1 "First adoption of IFRS" and IAS 28 "Long-term interests in associates and joint ventures").

bioMérieux did not opt for the early application of the standards, amendments and interpretations adopted or awaiting adoption by the European Union, which will become effective after December 31, 2018 but which could have been applied early. They mainly concern:

Standards, amendments and interpretations applicable for the financial years open from January 1, 2019:

- IFRS 16 "Leases" (adopted in November 2017 by the European Commission);
- IFRIC 23 "Uncertainty over income tax treatments" (adopted in October 2018 by the European Commission);
- amendments to IFRS 9 "clause on prepayment features with negative compensation" (adopted in March 2018 by the European Commission);
- annual cycle of improvements 2015-2017 (IFRS 3, IFRS 11, IAS 12) subject to adoption by the European Commission, planned for the 1st quarter of 2019;
- amendments to IAS 19 "plan amendment, curtailment or settlement" subject to adoption by the European Commission, planned for the 1st-quarter 2019.

Amendments applicable for financial years open from January 1, 2020, subject to their adoption by the European Commission, planned for 2019:

- amendments to IFRS 3 "Definition of a business";
- amendments to IAS 1 and IAS 8 "Change to the definition of the term materiality".

Lastly, the Group has continued its analysis of the impact of IFRS 16 "Leases", adopted by the European Commission on November 9, 2017. This standard will be effective for the first time for periods beginning on or after January 1, 2019.

The application of this standard should lead to the recognition of assets concerning the usage rights for the leased assets, estimated at between €88 and €92 million on December 31, 2018 and between €84 and €88 million on December 31, 2017, as well as the recognition of a debt for estimated rents of between €94 and €98 million for 2018 and between €88 and €92 million on December 31, 2017. The rental expenses will be cancelled and replaced by depreciation, amortisation and provisions and financial expenses. The impact on the consolidated net earnings and the Group's equity should not be material.

For the record, the amount of leases recognised in expenses and commitments to pay are provided in Note 29.3.1. The Group has opted for a transition according to the full retrospective method.

The analysis of any impact of the application of IFRIC 23 is in progress.

The Group is not expecting the other standards, amendments and interpretations to have a material impact on the Group's consolidated financial statements.

There are no standards, amendments and interpretations published by the IASB, with mandatory application for the financial years opened on January 1, 2019, but not yet approved at the European level (and for which early application is not possible on a European level), which would have had a significant impact on the annual financial statements.

The financial statements of consolidated Group companies that are prepared in accordance with local accounting principles are restated to comply with the principles used for the consolidated financial statements.

General presentation methods used for the financial statements

The balance sheet is presented based on the distinction between "current" and "non-current" assets and liabilities as defined in the revised version of IAS 1. Consequently, the short-term portion of provisions, borrowings and financial assets (due within one year) is classified as "current" and the long-term portion (due beyond one year) is classified as "non-current".

The consolidated income statement is presented by function, with the exception of the presentation on a specific line, in the current operating income, of the net impact of expenses and accumulated depreciation of the acquisition price paid for BioFire.

The Group applies the indirect method of presenting cash flows.

Judgments and estimates

When preparing the consolidated financial statements, estimates and assumptions are made that affect the carrying amount of certain assets, liabilities, and income and expense items. They particularly concern the measurement and impairment of intangible assets (including goodwill); the measurement of employee benefit obligations; the measurement and impairment of non-current financial assets; provisions; deferred taxes; share-based payment; as well as the disclosures provided in certain notes to the financial statements. These estimates and assumptions are reviewed on a regular basis, taking into consideration past experience and other factors deemed relevant in light of prevailing economic conditions. Changes in those conditions could therefore lead to different estimates being used for the Group's future financial statements.

bioMérieux has not observed a significant change in the level of uncertainty related to these estimates and assumptions, except for the volatile discount rate used to measure employee benefit obligations (see Note 15.3), and assumptions related to translation adjustments.

2.1 Presentation of the consolidated income statement

The Group's key financial performance indicator is contributive operating income before non-recurring items. It corresponds to recurring income less recurring expenses. Non-current expenses and income are not included. As stated above, acquisition-related costs and valuation differences recognised for the BioFire purchase price allocation are presented on a specific line, in current operating income.

2.2 Basis of consolidation

Companies over which bioMérieux has exclusive control are fully consolidated.

The Group determines whether it controls an investee based on the criteria set out in IFRS 10 (direct or indirect power over the investee to direct the financial and operating policies of the relevant activities, exposure to variability of returns and ability to use its power to affect the amount of the returns). Control is generally deemed to exist when the Group directly or indirectly owns more than one half of the voting rights of the investee. In determining whether control exists, the Group considers any currently exercisable potential voting rights, including those held by another entity.

Companies over which bioMérieux exercises significant influence are accounted for by the equity method. Significant influence is the power to participate in the financial and operating policy decisions of an entity, without exercising control. It is deemed to exist when the Group holds between 20% and 50% of the voting rights either directly or indirectly.

The analysis of partnerships made according to the criteria defined by the IFRS 11 standard did not identify any joint ventures or joint operations. Joint ventures are accounted for using the equity method.

Subsidiaries are fully consolidated from the date on which control is effectively transferred to the Group.

The list of consolidated companies is provided in Note 33.

All significant intra-group balances and transactions are eliminated in consolidation (notably dividends and internal gains on inventories and non-current assets).

2.3 Financial year-end

All Group companies have a December 31 year-end, except for the Indian subsidiaries, for which interim accounts are drawn up and audited at the Group's reporting date.

2.4 Foreign currency translation

The reporting currency of bioMérieux is the euro and the consolidated financial statements are presented in millions of euros.

2.4.1 Translation of the financial statements of foreign companies

The financial statements of foreign subsidiaries whose functional currency is not the euro or the currency of a hyper-inflationary economy are translated as follows:

- balance-sheet items (except for equity) are translated using the official year-end exchange rate;
- income statement items are translated using the average exchange rate for the year;
- equity items are translated using the historical rate;
- cash flow statement items are translated using the average exchange rate for the year.

The main conversion rates used were the following:

Differences resulting from the translation of subsidiaries' financial statements are recognised in a separate heading in the statement of changes in equity ("cumulative translation adjustments") and movements during the year are presented on a separate line within other comprehensive income.

Argentina has been considered as a country subject to hyper-inflation since July 1, 2018 with regard to the criteria defined by the IAS 29 standard. Consequently, the Group analysed the treatment required by the standard, namely:

- retroactive restatement of January 1, 2018 without modification of the comparative financial year;
- conversion of the 2018 balance sheet and consolidated income statement at closure prices.

The impact of the restatement of the financial statements of bioMérieux Argentina was not significant at the consolidated level; the Group did not perform restatement.

When a foreign subsidiary is sold and the sale leads to a loss of control, translation differences previously recognised in other comprehensive income relating to that company are recognised in net income for the year. If shares in a subsidiary are sold without any loss of control over the subsidiary, the translation differences are reclassified between non-controlling interests and translation differences attributable to owners of the parent.

AVERAGE RATES

1 EURO =	USD	JPY	GBP	CNY	BRL
2018	**1.18**	**130**	**0.88**	**7.81**	**4.33**
2017	1.13	127	0.88	7.62	3.61
2016	1.11	120	0.82	7.35	3.86

YEAR-END RATES

1 EURO =	USD	JPY	GBP	CNY	BRL
2018	**1.15**	**126**	**0.89**	**7.88**	**4.44**
2017	1.20	135	0.89	7.80	3.97
2016	1.05	123	0.86	7.32	3.44

2.4.2 Translation of transactions in foreign currencies

As prescribed by IAS 21 "The Effect of Changes in Foreign Exchange Rates", each Group entity translates foreign currency transactions into its functional currency at the exchange rate prevailing on the transaction date. Exchange rate gains or losses resulting from differences in rates between the transaction date and the payment date are recognised under the corresponding lines in the income statement (sales and purchases for commercial transactions).

Foreign currency payables and receivables are translated at the year-end exchange rate and the resulting currency translation gain or loss is recognised in the income statement at the end of the reporting period.

Derivatives are recognised and measured in accordance with the general principles described in Note 27.1 "Recognition and measurement of financial instruments". Foreign exchange derivatives are recognised in the balance sheet at their fair value at the end of each reporting period.

Note 3. Operating income before non-recurring items and segment information

3.1 Recurring income

Revenue is recognised in application of the IFRS 15 standard "Income from contracts with customers". As specified above, the Company applied this standard retrospectively, including its amendments.

3.1.1 Sales

The principles for revenue recognition defined by the standard IFRS 15 are defined based on an analysis in five successive stages:

- identification of the agreement;
- the identification of the different performance obligations, *i.e.* the list of separate goods and services that the seller has undertaken to provide to the buyer;
- the determination of the overall price of the agreement;
- the allocation of the overall price of each performance obligation;
- The recognition of revenue when a performance obligation is satisfied.

In practice, the rules for the recognition of revenue according to the main performance obligations identified are presented below:

- Sales of reagents:

  Revenue from the sales of reagents is recognised when the Company has transferred control of assets which, in practice, corresponds to the date of dispatch;
- Sales of equipment:

  Revenue from sales of equipment is recognised when the Company has transferred control of the assets which, in practice, corresponds to the date of delivery or installation, depending on the complexity of the equipment.
- Equipment rental:

  Equipment rental is recognised as revenue in a straight-line manner over the period of the contract, for the updated value at the date of establishment of the contract.

  For information, the contracts have an average period of between 3 and 5 years.
- Finance leases:

  When the Group provides goods to third parties under leases with terms equivalent to a sale, the goods concerned are accounted for as if they had been sold, as prescribed by IAS 17 "Leases" (see Note 6.4).
- Contracts for the provision of equipment:

  Contracts for the provision of equipment are related to other services (supply of reagents, maintenance services, guarantee extensions). They are considered as multiple elements contracts.

  The analysis of the criteria defined by the standard led to contracts for the provision of equipment being considered as rental and not transfer contracts, without any change compared to the previous treatment.

  The application of the standard led to the statement in the notes to the consolidated financial statements of a breakdown of sales based on the various components of a multiple-element arrangement (reagent sales, implicit rent, etc.), without having to change the amount of revenue.
- Contracts for the provision of services:

  The services essentially correspond to training, after-sales service and maintenance. The training and after-sales services are recognised in revenue when the services are provided. The analysis performed according to the IFRS 15 standard led to maintenance services being recognised linearly over the period of the maintenance contract, without change in relation to the previous treatment. Deferred income is recognised when the maintenance services are invoiced in advance.
- Guarantees:

  The analysis of contracts did not show any performance obligations separate from the guarantees given. Consequently, the cost related to guarantees given is recognised in provisions for risks, in accordance with the provisions of the standard IAS 37 (see Note 15.2).
- Returns:

  There are no specific obligations in terms of returns when the products sold are not defective.
- Payment conditions:

  Operations related to sales of reagents and sales of equipment are paid for under the conditions defined in the contract, which may vary from one country to another. Payment deadlines are usually between 2 and 3 months.

  Customer contracts which have a financing component are operating leases, financial leasing and the provision of equipment. In these cases, the payments are made according to the payment schedule defined contractually.

The procedures for the recognition of revenue do not require significant judgements.

Also, the analysis carried out by the Group did not identify any assets in relation to marginal costs of obtaining the contract or contract performance costs, nor specific points pursuant to the distinction between agent and principal.

The Group acts as principal in its relationships with customers.

The table below presents the breakdown of sales according to the different revenue categories, in accordance with IFRS 15.

In millions of euros	Dec 31, 2018	Dec 31, 2017 Adjusted
Sales of equipment	217.4	213.6
Sales of reagents	1,989.1	1,877.2
Sales of services	157.8	146.9
Equipment rental*	34.9	31.8
Other revenue	22.2	18.7
SALES	**2,421.3**	**2,288.2**

* *Equipment leasing includes rent and the share of revenue due to the sale of the reagents reclassified as rent for equipment provision contracts (see above).*

Sales are measured at the fair value of the consideration received or receivable, net of any discounts and rebates granted to customers. Sales taxes and value-added taxes are not included in sales.

The sectoral breakdown of the revenue is given in Note 3.5. The breakdown by technology is given in Note 3.6. The analysis performed according to IFRS 15 did not lead to presenting other breakdowns of revenue.

3.1.2 Other operating income

The other income is essentially composed of licence fees and subsidies. The rules on the recognition of other income are presented below:

- other income related to customer contracts: it is composed of reassigned royalties; the analysis of licence contracts according to the IFRS 15 standard led to them being considered as giving a right of access to intellectual property. As the obligation for performance is fulfilled gradually, the revenue is recognised over the period of the contract;
- other income not related to customer contracts: this mainly corresponds to research subsidies received and research tax credits, considered equivalent to subsidies according to the IAS 20 standard (see Note 19).

3.2 Recurring expenses

Cost of sales includes the following:

- the cost of raw materials consumed, including freight, direct and indirect personnel expenses for production personnel, the depreciation of assets used in production, all external expenses related to manufacturing (utilities, maintenance, tools, etc.), as well as indirect expenses (the Group's share of expenses such as purchasing, human resources and IT). Expenses relating to areas such as quality control, production quality assurance, engineering, business processes and logistics are included in production costs;
- royalties paid in relation to marketed products;
- distribution expenses, including shipping and warehousing, as well as the cost of shipping finished products to distribution centres or end customers;
- depreciation of instruments placed with or leased to customers;
- technical support expenses, including the cost of installing and maintaining instruments placed or sold, irrespective of whether such services are billed separately. Also included under this heading are personnel expenses, travel expenses and the cost of spare parts, as well as movements in provisions for warranties granted at the time instruments are sold.

Operating expenses

Selling and marketing expenses include expenses incurred by the Strategy, Marketing, Sales and Sales Administration Departments. They also include sales bonuses and commissions paid to employees in the Group's Sales Departments and to independent sales agents. Advertising and promotional costs are also classified as selling and marketing expenses.

General and administrative expenses comprise the cost of general management and support services (Human Resources, Legal, Finance), excluding the portion of costs incurred by these departments that is allocated to the other departments that directly use their services.

Research & development expenses include all costs concerning in-house and outsourced research & development work on new products other than software (design costs) as well as expenses related to regulatory affairs, intellectual property, technological monitoring and research & development quality assurance. Subsidies received in connection with research programs are shown in other operating income (see Note 3.1.2).

Royalty payments (fixed or proportional) are included in the cost of sales of the corresponding products. If no product is marketed or marketable in the short term, these payments are classified as research & development expenses.

Other information relating to recurring expenses

Variable compensation (performance-related bonuses, commissions, discretionary and non-discretionary profit-sharing) as well as share-based payments are included in the personnel expenses of the departments concerned.

In the context of long-term employee benefits, current service costs and the interest cost net of the return on plan assets are recognised within operating income before non-recurring items.

CICE tax credits (*crédit d'impôt pour la compétitivité et l'emploi*) designed to promote competitiveness and employment in France are recognised as a deduction from personnel costs.

The C.V.A.E. Corporate value added tax (*cotisation sur la valeur ajoutée des entreprises*) and the C.F.E. Corporate real estate tax (*cotisation foncière des entreprises*) are classified under operating expenses given that the added value generated by the Group's French operations significantly exceeds their taxable income.

Foreign exchange gains and losses related to transactions are included in the income statement line corresponding to the category of the transaction concerned (primarily sales, cost of sales and financial expenses). The presentation of foreign exchange gains and losses related to derivative instruments is given in Note 28).

3.3 Contributive operating income before non-recurring items and operating income before non-recurring items

The Group uses contributive operating income before non-recurring items as one of its key financial performance indicators. It corresponds to recurring income less recurring expenses as defined in Notes 3.1 and 3.2. It excludes non-recurring income and expense from operations (as defined in Note 24.1) as well as acquisition fees and amortisation of the assets acquired and valued as part of the BioFire purchase price allocation.

The expenses relative to the acquisition of Biofire and amortisation of goodwill are presented on a separate line in current operating income. Depreciation and amortisation charges relating to other prior acquisitions have not been restated as they are not deemed to be material.

In 2018, operating income before non-recurring items is the sum of contributive operating income before non-recurring items and costs related to the amortisation of goodwill related to BioFire (see Note 23).

3.4 Segment information

Pursuant to IFRS 8 “Operating Segments”, the Group has identified only one operating segment: the *in vitro* diagnostics segment and no geographic segments.

In accordance with IFRS 8, in Note 3.5 the Group discloses information on sales and assets broken down by geographical area, which has been prepared using the same accounting policies as those applied to prepare the consolidated financial statements.

3.5 Information by geographic area

Geographical areas have been determined by combining countries with similar economic characteristics and similar risk, profitability, strategy, and regulatory profiles. Group sales in the Middle East – Africa region are generated in a heterogeneous set of countries, mainly through distributors or agents, and in certain countries via local distribution subsidiaries. The distributors and agents are for the most part in direct contact with the French Company bioMérieux SA, which explains their being grouped with the Europe region.

The information by geographic area shown in the tables below has been prepared in accordance with the accounting principles used to prepare the consolidated financial statements.

DECEMBER 31, 2018 *In millions of euros*	Americas	EMEA	Aspac	Corporate	Group
Consolidated sales	**1,069.4**	**916.6**	**429.5**	**5.8**	**2,421.3**
Cost of sales	(396.0)	(420.1)	(208.8)	(94.2)	(1,119.1)
Gross profit	**673.4**	**496.5**	**220.7**	**(88.4)**	**1,302.2**
% of sales	*63%*	*54%*	*51%*		
Other operating income and expenses	(239.4)	(164.5)	(83.9)	(453.5)	(941.3)
CONTRIBUTIVE OPERATING INCOME BEFORE NON-RECURRING ITEMS	**434.0**	**331.9**	**136.8**	**(541.9)**	**360.9**
% of sales	*41%*	*36%*	*32%*		

DECEMBER 31, 2017 *In millions of euros*	Americas	EMEA	Aspac	Corporate	Group
Consolidated sales	**1,007.1**	**879.7**	**398.3**	**3.1**	**2,288.2**
Cost of sales	(411.8)	(448.1)	(182.3)	(34.2)	(1,076.4)
Gross profit	**595.3**	**431.6**	**216.0**	**(31.1)**	**1,211.8**
% of sales	*59%*	*49%*	*54%*		
Other operating income and expenses	(224.9)	(148.8)	(78.0)	(425.4)	(877.1)
CONTRIBUTIVE OPERATING INCOME BEFORE NON-RECURRING ITEMS	**370.4**	**282.8**	**138.0**	**(456.5)**	**334.7**
% of sales	*37%*	*32%*	*35%*		

DECEMBER 31, 2018 *In millions of euros*	Americas	EMEA	Aspac	Corporate	Group
Non-current assets					
Intangible assets	20.7	34.5	4.6	447.5	507.3
Goodwill				616.5	616.5
Property, plant and equipment	338.1	231.1	38.3	199.9	807.5
Working capital requirement					
Inventories and work-in progress	175.1	176.2	63.7		414.9
Trade receivables and assets related to contracts with customers	183.0	248.7	58.2		490.0
Trade payables	(42.2)	(39.1)	(95.6)		(176.9)
ASSETS HELD FOR SALE			**0.1**		**0.1**

DECEMBER 31, 2017 *In millions of euros*	Americas	EMEA	Aspac	Corporate	Group
Non-current assets					
Intangible assets	13.3	36.0	5.1	376.4	430.7
Goodwill				442.7	442.7
Property, plant and equipment	283.2	217.7	29.1	181.4	711.4
Working capital requirement					
Inventories and work-in progress	163.4	167.3	49.5		380.3
Trade receivables and assets related to contracts with customers	169.8	239.7	50.6		460.1
Trade payables	(63.1)	(39.8)	(58.3)		(161.3)
ASSETS HELD FOR SALE			**2.1**		**2.1**

The regional data include the commercial activities, corresponding mainly to the sales made in each of the geographic areas, the related cost of sales and the operating expenses necessary for these commercial activities. The regional data also include the non-allocated costs of the production sites in these geographical areas. The revenue is a net consolidated contribution (it does not include inter-company revenue with the other zones).

Corporate data mainly include the research costs incurred by the Clinical and Industrial units, as well as the costs incurred by the Group's Corporate functions and revenue from companion test research & development partnership agreements.

Intangible assets recorded in the Corporate column mainly correspond to goodwill and to technologies acquired by the Group.

3.6 Information by technology and application

The table below provides a breakdown of sales by technology and application:

In millions of euros	Dec 31, 2018	Dec 31, 2017
Clinical applications	**1,987.8**	**1,875.7**
Microbiology	964.9	946.4
Immunoassays	441.8	457.3
Molecular biology	549.0	440.4
Other lines	32.1	31.6
Industrial applications	**433.5**	**412.5**
TOTAL	**2,421.3**	**2,288.2**

The other ranges mainly include the activity of the subsidiary BioFire Defense for which the revenue stood at €21.1 million in 2018 and €19.7 million in 2017.

Note 4. Intangible assets

4.1 Accounting principles

4.1.1 Research & development expenses (excluding software development costs)

In accordance with IAS 38 "Intangible Assets", research expenses are not capitalised.

Under IAS 38, development expenses must be recognised as intangible assets whenever specific conditions are met, related to technical feasibility and marketing and profitability prospects. Given the high level of uncertainty attached to development projects carried out by the Group, these recognition criteria are not met until the regulatory procedures required for the sale of the products concerned have been finalised. As most costs are incurred before that stage, development expenses are recognised in the consolidated income statement in the period during which they are incurred.

Development costs are recognised as part of a business combination at the fair value of the projects identified in the balance sheet at acquisition, in accordance with the provisions of IFRS 3 (revised). These costs are amortised from the date of marketing of the lines affected by the projects in a linear fashion over their expected useful life.

Development expenses related to projects on going at the acquisition date continue to be capitalised until the date the corresponding product lines are marketed.

Development expenses incurred after the business combination date and related to new projects are recognised in accordance with IAS 38 as described previously. In practice, all subsequent costs are expensed.

4.1.2 Other intangible assets

Other intangible assets mainly include patents, licenses, elements of intellectual property and computer software. They all have finite useful lives and are initially recognised as follows:

- if purchased: at their purchase price;
- in the case of business combinations: at fair value, generally based on the price paid (where the price of the intangible asset is identified), or based on the discounted value of estimated future cash flows;
- in the case of internal production: at their cost price for the Group.

Significant costs directly attributable to the creation or improvement of software developed in-house are capitalised if it is considered probable that they will generate future economic benefits. Other development costs are expensed as incurred. In the case of software, only in-house and outsourced development costs related to organic analyses, programming, tests, trials and user documentation are capitalised.

Intangible assets are amortised in accordance with the expected pattern of consumption of future economic benefits embodied in the asset concerned, generally on a straight line basis over periods of:

- 5 to 20 years for patents, licences, technologies;
- 10 years for major integrated management software (such as ERP systems);
- 3 to 6 years for other computer software.

Software is amortised when it comes into operational effect in each subsidiary, on a phased basis where applicable.

Intangible assets are carried at their initial cost less accumulated amortisation and any accumulated impairment losses. Amortisation is recognised in the consolidated income statement based on the assets' function. Impairment losses are recognised under "Other non-recurring income and expenses from operations, net" if they meet the applicable definition (see Note 24.1). For ERP-type management software, any termination of a project or batch constitutes an indication that the asset is impaired.

4.2 Changes

Gross value *In millions of euros*	Patents Technology	Software	Other	Total
DECEMBER 31, 2016	**588.3**	**170.9**	**24.2**	**783.5**
Translation adjustments	(49.9)	(7.3)	(2.0)	(59.1)
Acquisitions/Increases	1.4	3.8	18.4	23.6
Changes in Group structure	0.0	0.0	0.0	0.0
Disposals/Decreases	0.0	0.1	(0.2)	0.0
Reclassifications	(1.0)	11.8	(7.4)	3.4
DECEMBER 31, 2017	**538.8**	**179.4**	**33.1**	**751.3**
Translation adjustments	18.5	1.7	1.0	21.2
Acquisitions/Increases	0.6	7.7	23.0	31.3
Changes in Group structure	90.3	0.0	0.0	90.3
Disposals/Decreases	(6.4)	(0.7)	(0.8)	(7.9)
Reclassifications	0.0	17.0	(15.1)	1.9
DECEMBER 31, 2018	**641.9**	**205.2**	**41.2**	**888.2**

Accumulated depreciation and impairments *In millions of euros*	Patents Technology	Software	Other	Total
DECEMBER 31, 2016	**176.5**	**111.6**	**2.8**	**291.0**
Translation adjustments	(14.4)	(5.1)	0.1	(19.4)
Additions	29.6	18.5	1.0	49.1
Changes in Group structure	0.0	0.0	0.0	0.0
Reversals/Disposals	0.0	-0.1	0.0	-0.1
Reclassifications	0.0	0.0	0.1	0.1
DECEMBER 31, 2017	**191.7**	**125.0**	**3.9**	**320.7**
Translation adjustments	5.4	1.4	0.1	6.9
Additions	40.8	19.7	0.8	61.3
Changes in Group structure	0.0	0.0	0.0	0.0
Reversals/Disposals	(6.3)	(0.8)	(0.8)	(8.0)
Reclassifications	0.0	0.0	0.0	0.0
DECEMBER 31, 2018	**231.5**	**145.3**	**4.0**	**380.9**

Carrying amount *In millions of euros*	Patents Technology	Software	Others[(d)]	Total
DECEMBER 31, 2016	**411.8**	**59.4**	**21.5**	**492.6**
DECEMBER 31, 2017	**347.1**	**54.4**	**29.2**	**430.7**
DECEMBER 31, 2018	**410.2**	**59.9**	**37.2**	**507.3**

The line “reclassifications” mainly corresponds to assets under construction put into service during the financial year.

The gross value of intangible assets increased by €144.4 million, mainly due to the entry into scope of Hybiome (€55.3 million) and Astute (€37.1 million).

The gross value of intangible assets in progress represents €41.6 million at December 31, 2018 compared to €26.5 million in 2017.

The review of impairment indices on assets with defined useful lives as defined in Note 5.2 led the Group to recognise depreciation on technology assets of €9.9 million in order to bring the net value of these assets to 0, given the development prospects for the Group.

Note 5 Goodwill

5.1 Accounting principles

In application of the revised version of IFRS 3, goodwill represents the excess of the cost of a business combination (excluding acquisition-related costs) and the fair value of the Group's share of the acquiree's identifiable assets, liabilities and contingent liabilities on the acquisition date. Goodwill is measured in the acquiree's functional currency. Provisional values may be assigned to fair values and goodwill during a "measurement period" which may not exceed one year from the acquisition date. Any changes made to provisional values after the end of the measurement period are recognised in income, including those concerning deferred tax assets.

The purchase price of a business combination includes the estimated impact of any contingent consideration. This consideration is measured by applying the criteria included in the acquisition agreement, such as sales or earnings targets, to forecasts that are deemed to be highly probable. It is then remeasured at the end of each reporting period, and any changes are recorded in income after the acquisition date (including during the measurement period). They are discounted if the impact is material. Any discounting adjustments to the carrying amount of the liability are recognised in "Cost of net debt".

Non-controlling interests are measured at the time of the acquisition either at fair value (full goodwill method) or at the non-controlling interest's proportionate share of the acquired Company's net assets (partial goodwill method). The option is taken for each acquisition.

When the Group purchases an additional interest in an acquired entity after the acquisition date, the difference between the consideration paid and the Group's share in the acquiree's net assets is recognised directly in consolidated reserves. Similarly, if the Group sells an interest in an acquired entity without losing control, the resulting impact is also recognised directly in consolidated reserves.

In case of a put option on minority interests, borrowing is recognised for its present value against reserves. At each closure, variations in fair value of the debt, determined according to contractual provisions, are recognised in financial profit/loss, including the impact of accretion. The minority interests currently subject to puts retain all of the rights and benefits associated with the shares until the possible exercise of the option. Recognition of the debt related to the put was done without changing the value of goodwill.

Goodwill is recognised on a separate line of the balance sheet at cost less any accumulated impairment losses. Any negative goodwill is recognised directly in income during the year in which the controlling interest was acquired.

In compliance with IFRS 3 "Business Combinations", goodwill is not amortised. On the acquisition date they are attached to a cash-generating unit depending on the synergies expected for the Group (see Note 5.2). They are tested at least once a year for impairment and whenever there is an indication that they may be impaired. The methods used for performing the tests and recognising any identified impairment losses are described in Note 5.2 "Impairment of non-current assets".

5.2 Impairment of non-current assets

The Group systematically carries out annual impairment tests on goodwill and other intangible assets with an indefinite useful life (the Group did not have any such assets in the years presented in these consolidated financial statements).

Property, plant and equipment and intangible assets with a finite useful life are tested for impairment whenever there is an indication that they may be impaired.

A cash-generating unit (CGU) corresponds either to a legal entity or to a product line (a group of property, plant and equipment [mainly production plants] and intangible assets [essentially technology] which generate cash flows as a result of products based on the same technology).

Impairment testing is used to determine the recoverable amount of a CGU or group of CGUs, representing the higher of their value in use and fair value less costs to sell.

In practice, the value in use of a CGU or group of CGUs is determined primarily on the basis of discounted operating cash flow projections covering a period of five years and based on the most recent business plan, and a terminal value.

The growth assumptions used to calculate the value in use for the business plan projection time horizon are consistent with available market information and conservative assumptions have been used for determining the terminal value, including a perpetuity growth rate typically corresponding to 1.5%, except for the molecular business for which a 2% growth rate was used.

Cash flow projections do not include any expansion investments or restructurings that have not already commenced.

The discount rate applied to cash flows corresponds to the Weighted Average Cost of Capital (WACC), calculated using a risk-free rate (French government OAT bond rate), the equity market risk premium and the beta ratio (which adjusts the overall equity market risk in relation to the specific industry risk). In certain cases, a specific risk premium is included, chiefly to reflect technology risk and the individual market risk, like a country risk premium to take account of the exposure of each CGU to macroeconomic risks. The WACC determined by the Group is compared with the figure calculated by analysts who track the Company's stock. The discount rates calculated for the main CGUs (technological product lines) were between 7.5% and 9.4% in 2018, and between 7.4% and 9.8% in 2017. These rates are understood after tax. The application of a pre-tax WACC to pre-tax cash flows would give an identical result.

Tests were performed to assess the sensitivity of the recoverable amounts to changes in certain actuarial and operating assumptions (see Note 5.3).

The Group recognises an impairment loss where the value in use of these CGUs falls below the carrying amount. The impairment loss is allocated first to reduce the carrying amount of any goodwill, with the

residual amount allocated to the other assets of the unit, except if this reduces the carrying amount of those assets below their fair value.

Impairment losses are recognised under "Other non-recurring income and expenses from operations, net" if they meet the applicable definition (see Note 24.1). Impairment losses against goodwill in respect of fully consolidated entities may not be reversed unless the asset is sold.

5.3 Changes

In 2018, in response to the expectations of its customers, the Group developed its commercial offering by including predictive Data Analytics solutions in the Bacteriology offer. Consequently, the "Data Analytics" CGU was merged with the Bacteriology CGU.

Movements in this caption can be analysed as follows:

CGU	*In millions of euros*	Dec 31, 2018	Dec 31, 2017
Hybiome	Hybiome*	**138.2**	**0.0**
Molecular biology		**156.8**	**150.6**
	BioFire	137.1	130.9
	Argène	19.3	19.3
	RAS Lifesciences	0.4	0.5
Industrial applications		**143.5**	**143.9**
	AES	117.1	117.1
	PML (US)	11.8	11.8
	BTF (Australia)	5.5	5.8
	Hyglos	5.7	5.7
	Advencis	2.9	2.9
	CEERAM	0.5	0.5
Bacteriology		**142.9**	**143.5**
	AB bioMérieux (Sweden)	60.2	62.7
	Organon Teknika	51.9	51.3
	Applied Maths	11.4	11.4
	Bacterial Barcodes (US)	8.5	8.1
	bioMérieux Inc. (Vitek)	5.8	4.9
	MDI (US)	1.9	1.9
	bioMérieux Spain	1.8	1.8
	bioMérieux Biological products	1.4	1.4
	Micro Diagnostics (Australia)[b]	0.0	0.0
Immunoassays	Astute Medical Inc.*	**30.5**	**0.0**
Entities		**4.6**	**4.8**
	bioMérieux Poland	1.7	1.7
	bioMérieux Greece	1.7	1.7
	bioMérieux South Africa	1.2	1.3
CARRYING AMOUNT		**616.5**	**442.7**

* *Provisional goodwill on December 31, 2018.*

Movements in this caption can be analysed as follows:

In millions of euros	Carrying amount
DECEMBER 31, 2016	**470.6**
Translation adjustments	(26.2)
Reclassifications[(a)]	(1.7)
DECEMBER 31, 2017	**442.7**
Translation adjustments	6.0
Changes in scope of consolidation[(b)]	167.7
DECEMBER 31, 2018	**616.5**

(a) A portion of the "Bacteriology" goodwill from the acquisition of Micro Diagnostics in Australia was reclassified as Assets held for sale for an amount of €1.7 million (see Note 13.2).
(b) Related to the acquisition of 100% of Astute Medical Inc. (€28.4 million) and 54.48% of Hybiome (€139.3 million). Goodwill calculated according to the full goodwill method.

There was no provisional goodwill in 2017. The provisional goodwill on December 31, 2018 corresponded to the goodwill for Hybiome and Astute Medical Inc. (see Note 1.1).

No impairment losses were recognised in 2018 or 2017 as a result of the impairment tests carried out as described in Note 5.1.

The inputs used in the impairment tests carried out on the Group's main CGUs are set out below:

	2018			2017		
CGU	Value net[(a)]	Rate Discount rate	Perpetual growth rate	Value net[(a)]	Rate Discount rate	Perpetual growth rate
Molecular biology	156.8	9.4%	2.0%	150.6	9.8%	2.0%
Industrial applications	143.5	7.5%	1.5%	143.9	7.4%	1.5%
Bacteriology	142.9	7.5%	1.5%	132.1	7.5%	1.5%
Immunoassays	30.5	7.8%	1.5%	0.0	8.0%	1.5%

(a) Net value of goodwill assigned to the CGU.

Sales and operating margin growth assumptions are set for each CGU in accordance with the best estimates at the test date. They take into account the level of maturity of our products and target markets, and also forecast development and innovation for our ranges.

An analysis was carried out to assess the sensitivity of the impairment tests to changes in discount rates (adverse change of 100 basis points), perpetuity growth rates (adverse change of 50 basis points) and the operating margin (fall of 500 basis points in the ratio of operating income before non-recurring items to terminal value). This analysis will not lead to the recognition of additional impairment losses for the cash generating units Molecular Biology, Immunoassays and Industrial Applications. Concerning the Bacteriology cash generating unit, depreciation will be recognised in the case of a drop in profitability greater than 318 basis points. This hypothesis is not reasonably probable

Note 6 Property, plant and equipment – finance lease receivables

6.1 Accounting principles

As prescribed by IAS 16 “Property, Plant and Equipment”, items of property, plant and equipment are initially recognised at their purchase or production cost or at their acquisition-date fair value if acquired as part of a business combination. They are not revalued. Any revaluations carried out by Group companies in their individual accounts are eliminated when preparing the consolidated financial statements.

Property, plant and equipment are recorded using the component approach. Under this approach, each component of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the asset and which has a different useful life to that of the asset as a whole is recognised and depreciated separately. The only Group assets to which this method is applied are buildings.

The Group’s application of IAS 23 “Borrowing Costs” did not lead to the capitalisation of material borrowing costs as the Group does not have a material level of debt resulting from purchases of property, plant and equipment.

Routine maintenance and repair costs of property, plant and equipment is expensed as incurred. Other subsequent expenses are capitalised only if they satisfy the applicable recognition criteria, such as the replacement of an identified component.

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

The depreciable value of property, plant and equipment corresponds to their acquisition cost as they are not considered to have any material residual value. The straight-line method of depreciation is used for these assets.

The assets are depreciated over their estimated useful lives as follows:

- machinery and equipment: 3 to 10 years
- instruments: 5 to 10 years
- shell: 30 to 40 years
- finishing work, fixtures and fittings: 10 to 20 years

Depreciation periods in respect of buildings are calculated separately for each component.

The useful lives of items of property, plant and equipment are reviewed periodically. The impact of any adjustments is accounted for prospectively as a change in accounting estimates.

In 2018, this review led the Group to extend the depreciation periods on instruments from durations of between three and ten years to durations of between five and ten years. The impact of this change is a reduction in the depreciation expense for instruments of around €11 million on the consolidated financial statements.

Impairment tests are carried out for property, plant and equipment whenever events or market developments indicate that an asset may have declined in value. If an asset’s recoverable amount (see Note 5.2) is less than its carrying amount, either its useful life is adjusted or an impairment loss is recorded in “Other non-recurring income and expenses from operations, net”, if the applicable definition is met (see Note 24.1).

Finance leases

As lessee: leases are classified as finance leases whenever they transfer to the lessee substantially all of the risks and rewards incidental to ownership. Leases qualify as finance leases based on the substance of each contract, and notably when:

- ownership of the leased asset is transferred to the lessee at the end of the lease term;
- the lessee has the option to purchase the asset at a preferential price;
- the lease term covers the major part of the leased asset’s economic life;
- the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset;
- the leased assets are of such a specialised nature that only the lessee can use them without making major modifications.

Whenever the Group leases property under an agreement classified as a finance lease, the fair value of the asset concerned or, if lower, the present value of the minimum lease payments, is capitalised and depreciated over the asset’s useful life. A corresponding liability is recognised in the balance sheet. Lease payments are apportioned between the finance charge and the reduction of the outstanding liability.

Other leases are classified as operating leases and the lease payments are expensed on a straight-line basis over the term of the lease.

As lessor: when the Group leases assets to third parties on terms equivalent to a sale, the assets are recorded as though they had been sold, as prescribed by IAS 17 “Leases”. The long-term portion of the lease payments due is recorded under “Other non-current assets” and the short-term portion are recognised under “Trade receivables”. The corresponding financial income is recognised in the income statement during the period in which it is received, under “Other financial income and expenses”.

6.2 Analysis of movements in property, plant and equipment

GROSS VALUE *In millions of euros*	Land	Buildings	Materials and tools	Capitalised instruments	Other capital assets	Capital assets under construction	Total
DECEMBER 31, 2016	**39.9**	**456.6**	**380.5**	**360.1**	**158.2**	**196.4**	**1,591.7**
Translation adjustments	(1.4)	(23.8)	(24.0)	(15.4)	(10.0)	(13.5)	(88.2)
Changes in scope of consolidation[a]			0.0		0.0		0.0
Acquisitions/Increases	1.6	17.2	18.6	50.7	11.6	57.3	157.0
Disposals/Decreases	(0.1)	(8.1)	(3.8)	(30.9)	(6.7)	(0.3)	(49.9)
Reclassifications	0.7	107.2	54.8	(9.6)	4.8	(173.9)	(16.0)
DECEMBER 31, 2017	**40.6**	**549.2**	**426.1**	**354.8**	**157.9**	**65.9**	**1,594.5**
Translation adjustments	0.4	8.8	9.5	(0.5)	2.7	2.6	23.4
Changes in Group structure					2.5		2.5
Acquisitions/Increases		10.1	24.9	56.8	8.4	101.6	201.8
Disposals/Decreases	(0.1)	(5.9)	(7.1)	(31.5)	(9.9)		(54.4)
Reclassifications	0.4	19.7	13.7	0.1	5.3	(41.1)	(1.8)
DECEMBER 31, 2018	**41.3**	**582.0**	**467.1**	**379.6**	**166.9**	**129.0**	**1,765.9**

ACCUMULATED DEPRECIATION AND IMPAIRMENT *In millions of euros*	Land	Buildings	Materials and tools	Capitalised instruments	Other capital assets	Capital assets under construction	Total
DECEMBER 31, 2016	**1.8**	**233.3**	**248.1**	**263.4**	**110.6**		**857.1**
Translation adjustments	(0.1)	(10.0)	(13.5)	(10.1)	(6.6)		(40.3)
Changes in Group structure			0.0		0.0		0.0
Provisions for impairment[d]	0.2	29.5	34.4	32.1	13.5		109.7
Disposals/Decreases		(4.8)	(3.2)	(26.9)	(6.7)		(41.5)
Reclassifications		0.0	(1.5)	0.1	(0.4)		(1.8)
DECEMBER 31, 2017	**1.8**	**247.9**	**264.3**	**258.6**	**110.4**		**883.1**
Translation adjustments	0.0	3.1	5.1	(0.7)	1.8		9.3
Changes in Group structure					2.2		2.2
Additions	0.2	29.9	38.2	24.1	17.6	2.5	112.6
Disposals/Decreases	0.0	(5.1)	(7.0)	(26.8)	(9.6)		(48.4)
Reclassifications			0.3	(0.1)	(0.4)		(0.1)
DECEMBER 31, 2018	**2.1**	**275.8**	**300.9**	**255.2**	**122.1**	**2.5**	**958.4**

CARRYING AMOUNT *In millions of euros*	Land	Buildings	Materials and tools	Capitalised instruments	Other capital assets	Capital assets under construction	Total
DECEMBER 31, 2016	**38.1**	**223.3**	**132.4**	**96.6**	**47.7**	**196.4**	**734.6**
DECEMBER 31, 2017	**38.7**	**301.2**	**161.8**	**96.2**	**47.5**	**65.9**	**711.4**
DECEMBER 31, 2018	**39.2**	**306.2**	**166.2**	**124.5**	**44.8**	**126.5**	**807.5**

The assets under construction mainly concern the construction of a new warehouse in Salt Lake City, the extension of the Craponne site in France and the construction of a new building at Marcy l'Etoile for the R&D activities, for which commissioning is planned in 2019.

The impairment tests did not lead to the recognition of significant impairment over the financial years presented.

6.3 Property, plant and equipment acquired under finance leases

Where an asset is leased under a finance lease that transfers to the Group substantially all of the risks and rewards incidental to ownership of the leased asset, the asset is accounted for as property, plant and equipment as described in Note 6.1 “Property, plant and equipment”.

The corresponding finance lease liability for these capitalised assets – which is included in the balance sheet under borrowings was €37.7 million at December 31, 2018 and €41.7 million at December 31, 2017 (see Note 16.6).

ASSETS HELD UNDER FINANCE LEASES RECOGNISED AS PROPERTY, PLANT AND EQUIPMENT

In millions of euros	Land	Buildings	Materials & tools	Other	Total
DECEMBER 31, 2016					
Gross value	2.7	52.0	0.8	2.3	57.8
Accumulated depreciation	0.0	(5.1)	(0.6)	(2.2)	(8.0)
Carrying amount	**2.7**	**46.8**	**0.1**	**0.1**	**49.8**
DECEMBER 31, 2017					
Gross value	2.7	53.5	0.7	2.3	59.3
Accumulated depreciation	0.0	(7.9)	(0.6)	(2.2)	(10.7)
Carrying amount	**2.7**	**45.6**	**0.1**	**0.1**	**48.6**
DECEMBER 31, 2018					
Gross value	2.7	53.5	0.7	2.2	59.1
Accumulated depreciation	0.0	(10.8)	(0.5)	(2.2)	(13.5)
CARRYING AMOUNT	**2.7**	**42.7**	**0.1**	**0.0**	**45.6**

The changes to the item come mainly from amortisation concerning the new Campus de l’Etoile site acquired in 2016 and the new building in Italy acquired in 2017.

6.4 Finance lease receivables

Certain instruments are sold *via* finance lease arrangements (see Note 6.1). The usual lease term is five years.

Finance lease receivables totalled €24.5 million at December 31, 2018.

In millions of euros	At least one year	Due in one to five years	At more than 5 years	TOTAL
Gross value of finance lease receivables	9.4	16.9	0.1	26.4
Accrued interest	(0.7)	(0.8)	0.0	(1.6)
Present value of minimum future lease payments	8.6	16.1	0.1	24.8
Impairment losses	(0.3)			(0.3)
NET PRESENT VALUE OF MINIMUM FUTURE LEASE PAYMENTS	**8.3**	**16.1**	**0.1**	**24.5**

The current portion of finance lease receivables is shown in trade receivables (see Note 9), while the non-current portion is carried in other non-current assets for €16.2 million.

The depreciation rules applied are presented in Note 9.

Note 7 Non-current financial assets

7.1 Accounting principles

Non-current financial assets include investments in non-consolidated companies, loans and receivables maturing in more than one year – including pension plan assets whenever these have not been definitively allocated to cover corresponding obligations – and deposits and guarantees. They are recognised and measured in compliance with the rules described in Note 27.

In application of the IFRS 9 standard, non-current financial assets are broken down into 3 categories:

- financial assets assessed at amortised cost:

  It concerns financial assets for which the objective of the economic model is to receive contractual flows, and for which the contractual conditions specify, at particular dates, flows corresponding only to repayments of capital and interest. They correspond to loans, deposits and sureties;
- financial assets valued at fair value, with recognition in other comprehensive income:
  - variations in fair value recyclable to profit/loss: these are financial assets for which the objective of the economic model is both to receive contractual flows and the sale of assets, and for which the contractual conditions specify, at particular dates, flows corresponding only to repayments of capital and interest. The Group has no significant assets within this category,
  - variations in fair value non-recyclable to profit/loss: these are assets that are strategic for the Group. They correspond to non-consolidated equity investments;
- financial assets valued at fair value through profit/loss: these are securities held by the group for transaction purposes. On December 31, 2018, this category was not used, the Group having decided to opt for recognition in other non-recyclable comprehensive income.

Assets valued at amortised cost

The amortised cost is determined according to the effective interest rate method, as defined by the IFRS 9 standard. This rate is determined when putting in place the related contract.

Financial assets valued at fair value

Fair value is determined according to the methodology defined by the standard IFRS 13, according to the 3 levels of fair value defined in Note 27.1.

In exceptional cases where fair value of financial assets cannot be determined reliably (lack of recent information, wide range of valuations...), the cost will be considered as the best estimate of the fair value.

No reclassification between the various categories occurred over the financial years presented.

The breakdown of other financial assets for which the Group has opted for this presentation is presented separately in the table below.

Impact of the application of IFRS 9

The implementation of IFRS 9 led to the disappearance of the concepts of financial assets available- for-sale and financial assets held-to-maturity. No financial asset was previously allocated to this latter category.

7.2 Changes

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Loans and receivables	13.0	7.0
Securities valued at fair value against other comprehensive income	58.9	50.9
TOTAL	**71.8**	**57.9**

The loans and receivables include a deposit on an escrow account made in the context of the acquisition of Hybiome in 2018 for €1.8 million, as well as a deposit guarantee intended to cover post-employment benefit obligations in Germany for €2.5 million.

In millions of euros	Gross value	Variation in fair value against other comprehensive income	Impairment losses	Carrying amount
DECEMBER 31, 2016	**40.5**	**(3.4)**	**(0.1)**	**36.9**
Translation adjustments	(0.6)		0.0	(0.6)
Acquisitions/Increases	15.1		(0.2)	14.9
Disposals/Decreases	(1.9)	0.9	0.0	(1.0)
Reclassifications	0.7			0.7
Changes in fair value of financial instruments		6.9		6.9
DECEMBER 31, 2017	**53.9**	**4.3**	**(0.3)**	**57.9**
Translation adjustments	0.0		0.0	0.0
Acquisitions/Increases	12.7		0.0	12.7
Disposals/Decreases	(1.2)		0.0	(1.2)
Reclassifications and changes in fair value				0.0
Changes in fair value of financial instruments		2.4		2.4
DECEMBER 31, 2018	**65.4**	**6.7**	**(0.3)**	**71.8**

There was no capital gain on sale of financial assets recognised at fair value through comprehensive income non-recyclable to profit/loss over the financial years presented.

There was no change in fair value recognised through profit/loss in 2018.

The acquisitions of the financial year essentially concerned the firm commitment to subscribe to the professional capital investment fund Sino-French Innovation for €5 million, and the deposit granted in the context of the acquisition of Hybiome.

bioMérieux SA contributed its GENEURO securities to GNEH, receiving GNEH securities of equal value in return. The GNEH securities are valued, at December 31, 2018, based on the market price of Geneuro because it is a transparent holding, the aim of which is to hold Geneuro securities.

The change in fair value recorded in other comprehensive income mainly concerns Quanterix, GNEH and Labtech securities.

In practice, the application of IFRS 9 had no impact on the consolidated profit/loss and the comprehensive income, but only on a reclassification within other comprehensive income of the variation in the fair value of non-consolidated securities.

The table below presents the impacts of IFRS 9 on the statement of other comprehensive income over comparable financial years:

In millions of euros	12/31/2017 restated	12/31/2017 reported
Net income for the period	**237.6**	**237.6**
Items to be reclassified to income	**(80.0)**	**(72.9)**
Fair value gains (losses) on financial hedging instruments	2.4	9.3
Tax effect	(0.9)	(0.6)
Movements in cumulative translation adjustments	(81.5)	(81.5)
Items not to be reclassified to income	**(0.5)**	**(7.7)**
Fair value gains (losses) on financial assets	6.9	
Tax effect	0.4	
Remeasurement of employee benefits	2.6	2.6
Tax effect	(10.4)	(10.4)
TOTAL OTHER COMPREHENSIVE INCOME	**(80.6)**	**(80.6)**
TOTAL COMPREHENSIVE INCOME	**157.0**	**157.0**
Non- controlling interests	(0.6)	(0.6)
ATTRIBUTABLE TO OWNERS OF THE PARENT	**157.5**	**157.5**

In the financial statements published in 2017, the change in the fair value of financial assets was brought together in the item “Changes in the fair value of financial hedging instruments” (the associated tax was processed in the same way).

The analysis carried out did not lead to the recognition of securities in the category of changes in fair value recognised in other comprehensive income recyclable in profit and loss.

Consequently, the Group reviewed all shares in non-consolidated companies, in order to define for each one the applicable recognition method. This analysis is presented in the table below:

	Category according to IAS 39	Category according to IFRS 9
In millions of euros	Definition	Definition
Quanterix	Available-for-sale financial assets assessed at fair value against other comprehensive income	Financial assets assessed at fair value against other comprehensive income
Labtech/LBT Innovations	Available-for-sale financial assets assessed at fair value against other comprehensive income	Financial assets assessed at fair value against other comprehensive income
Geneuro/GNEH	Available-for-sale financial assets assessed at fair value against other comprehensive income	Financial assets assessed at fair value against other comprehensive income
QVELLA	Available-for-sale financial assets assessed at cost through profit and loss	Financial assets assessed at fair value against other comprehensive income[(a)]
Banyan Biomarkers	Available-for-sale financial assets assessed at cost through profit and loss	Financial assets assessed at fair value against other comprehensive income[(a)]
Other securities	Available-for-sale financial assets assessed at cost through profit and loss	Financial assets assessed at fair value through profit and loss[(a)]

(a) In the exceptional cases provided by the standard (absence of recent and/or reliable information, estimated range of values too broad), the Group has selected the cost as the most appropriate estimate of fair value.

In the cases provided by IFRS 9 (securities not held for transaction purposes), the option for the recognition of changes in fair value not recyclable in profit and loss was irrevocably taken on January 1, 2017.

The retrospective application of IFRS 9 has not had an impact on consolidated net income and consolidated equity as the changes in the fair value of shares in non-consolidated companies were already mainly recorded in other comprehensive income, and no significant disposals were made after January 1, 2017. As indicated in the summary table below, the share of changes recorded in profit and loss was not significant.

	Jan. 01, 2017			Dec. 31, 2017			Dec. 31, 2018		
In millions of euros	NBV	Of which change in JV through profit and loss	Of which change in fair value through other comprehensive income	NBV	Of which change in JV through profit and loss	Of which change in fair value through other compre-hensive income	NBV	Of which change in JV through profit and loss	Of which change in fair value through other compre-hensive income
Quanterix	17.9			27.6		9.7	32.9		5.3
Labtech / LBT Innovations	2.4		1.7	1.2		(1.2)	0.5		(0.7)
Geneuro / GNEH	7.2		7.1	5.4		(1.8)	3.2		(2.2)
QVELLA				6.0			6.0		
Banyan Biomarkers				6.4			6.4		
Sino French Innovations							5.0		
Other securities	3.3	(0.9)		4.3	(0.1)		4.8		0.0
TOTAL	**30.7**	**(0.9)**	**8.8**	**50.9**	**(0.1)**	**6.8**	**58.9**	**0.0**	**2.4**

Note 8 Inventories and work-in progress

8.1 Accounting principles

As required under IAS 2 "Inventories", inventories are measured at the lower of cost and net realisable value.

Inventories of raw materials, goods held for resale and consumables are measured at their purchase price plus related expenses using the FIFO method. Work-in-progress and finished products are measured at their actual production cost, including direct and indirect costs.

Inventories are written down where necessary, taking into account selling prices, obsolescence, residual shelf life, product condition, sale prospects and, in the case of spare parts, changes in the corresponding instruments' installed base.

8.2 Changes

In millions of euros	**Dec 31, 2018**	Dec 31, 2017
Raw materials	162.9	143.1
Work-in-progress	45.8	45.6
Finished products and goods held for resale	238.2	222.5
GROSS VALUE	**446.9**	**411.2**
Raw materials	(13.3)	(11.8)
Work-in-progress	(1.6)	(1.5)
Finished products and goods held for resale	(17.1)	(17.6)
PROVISIONS FOR IMPAIRMENT	**(32.0)**	**(30.9)**
Raw materials	149.6	131.3
Work-in-progress	44.2	44.1
Finished products and goods held for resale	221.1	204.9
CARRYING AMOUNT	**414.9**	**380.3**

Inventories relating to instruments account for 29.6% of gross value.

No pledges of inventories had been granted at December 31, 2018.

Note 9 Trade receivables and assets related to contracts with customers

Trade receivables and finance leasing receivables

In millions of euros	**Dec 31, 2018**	Dec 31, 2017
Gross trade receivables	505.9	473.7
Impairment losses	(16.0)	(13.6)
CARRYING AMOUNT	**490.0**	**460.1**

In total, 20.5% of the Group's trade receivables are due from government agencies and may be paid later than the date shown on the invoice.

Trade Receivables are recognised at amortised cost, which in practice corresponds to cost. There are no other financial assets including a financially significant component.

The due dates are mainly below 6 months except for lease contracts, financial lease contracts and contracts for the provision of equipment.

Net receivables overdue by more than 60 days relative to private companies and public organisations represent 8% of outstanding trade receivables in 2018, against 11.5% in 2017.

The weight of net additions to doubtful debts and bad debts represents €5.4 million or 0.22% of revenue.

Trade receivables include the current portion of finance lease receivables (see section 6.4).

RECEIVABLES AND ASSETS RELATED TO CONTRACTS WITH CUSTOMERS	Dec. 31, 2017	Changes in Group structure	Change in gross values	Change in provision	Currency impact	Dec. 31, 2018
Long-term finance lease receivables	14.1		1.5		0.6	16.2
NON-CURRENT ASSETS	**14.1**		**1.5**	**0.0**	**0.6**	**16.2**
Finance lease receivables	10.4		(2.4)	0.0	0.4	8.3
Gross trade receivables	449.7	0.3	35.2	(2.5)	(1.0)	481.7
Other assets related to contracts with custo	0.0					0.0
CURRENT ASSETS	**460.1**	**0.3**	**32.8**	**(2.5)**	**(0.6)**	**490.0**

The share of provisions on financial leasing receivables is not material (see Note 6.4).

Depreciation of trade receivables

Provisions for depreciation of trade receivables are recognised to take into account expected losses and are recognised according to the following model:

- doubtful customers: provisioned case-by-case;
- customers for whom impairment indices have been identified (late payment, litigation…): individual and statistical provision;
- customers with no impairment loss index at the date of closure: a provision for expected losses is recognised case-by-case, taking into account qualitative and quantitative information (*e.g.*: information on the customer, rating of the customer…) in the context of the customer credit risk monthly review process, according to information obtained on the customer.

The credit risk is assessed at each closure, taking into account guarantees received, where applicable.

Netting agreements

N/A

Other assets related to contracts with customers

There are no assets related to the costs of obtaining or implementing contracts.

Note 10 Liabilities related to contracts with customers

Liabilities related to contracts with customers correspond essentially to advances of payment received and maintenance services invoiced in advance on service contracts (see Note 17). The associated revenue is recognised in income over the period that the service is rendered.

LIABILITIES RELATED TO CONTRACTS WITH CUSTOMERS	Notes	Dec 31, 2017	Changes in Group structure	Change in gross values	Change in provision	Changes in translation differences	Dec 31, 2018
Provisions for long-term guarantee	14	1.3			-0.1	0.0	1.2
NON-CURRENT LIABILITIES		**1.3**	**0.0**	**0.0**	**-0.1**	**0.0**	**1.2**
Provisions for short-term guarantee	14	5.1			1.5	0.1	6.8
Advances received on trade receivables	17	6.5		(0.5)		(0.3)	5.7
Credit note to be issued	17	1.4		(0.2)		0.0	1.2
Income invoiced in advance	17	53.3		0.2		1.2	54.7
CURRENT LIABILITIES		**66.3**	**0.0**	**(0.5)**	**1.5**	**1.1**	**68.4**

Note 11 Other receivables

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Advances and downpayments	4.8	6.7
Prepaid expenses	14.2	16.0
Other operating receivables	42.7	52.5
CARRYING AMOUNT OF OTHER OPERATING RECEIVABLES	**61.7**	**75.1**
CURRENT TAX RECEIVABLE	**39.2**	**36.1**
Non-operating receivables	9.6	15.7
CARRYING AMOUNT OF NON-OPERATING RECEIVABLES	**9.6**	**15.7**

The other receivables related to customer contracts are not material.

Other operating receivables chiefly comprise research tax credit receivables (€11.8 million at December 31, 2018 versus €23.1 million at end-2017), and other tax-related receivables.

The non-current portion of other operating receivables totals €5.4 million and includes research tax credits.

Non-operating receivables relate primarily to the fair value of derivative instruments carried in assets (€9.3 million in 2018 versus €15.3 million in 2017), see Note 27.2.

Note 12 Cash and cash equivalents

12.1 Accounting principles

Cash and cash equivalents includes cash and short-term highly liquid investments denominated in euros and subject to an insignificant risk of changes in value and counterparty default.

Investments meeting these criteria are measured at the end of the reporting period at their fair value, with fair value gains or losses recognised in income (see Note 27).

None of the Group's investments are pledged or subject to major restrictions.

Investment securities and other cash equivalents are valued at their fair value at each closure, according to the definition given in Note 7.

There are no other current financial assets.

12.2 Changes

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Cash at bank and in hand	231.7	214.4
Cash pooled with Institut Mérieux	23.6	23.2
Short-term investments	24.8	74.4
CASH AND CASH EQUIVALENTS	**280.1**	**312.1**

Some cash investments are in SICAV money-market funds (€17.6 million at December 31, 2018 versus €67.7 million at end-2017).

Investments are placed with leading credit institutions. No adjustments were recognised in respect of the risk of non-collection associated with these financial assets following the analysis carried out pursuant to IFRS 13 (see Note 28.5).

Cash investments in SICAV money-market funds are as follows:

	Dec 31, 2018	Dec 31, 2017
Designation	BNP Paribas Deposit money-market fund	BNP Paribas Deposit money-market fund
Amount	€17.6 million	€55.6 million
Classification	Short-term money-market fund	Short-term money-market fund
ISIN Code	FR0011046085	FR0011046085
Designation		SICAV AMUNDI
Amount		€12.1 million
Classification		Short-term money-market fund
ISIN Code		FR0007435920

The Group regularly reviews the investments made by each SICAV euro money-market fund as well as their past performance in order to ensure that they qualify as cash and cash equivalents in accordance with the recognition criteria in IAS 7.

Note 13 Assets and liabilities held for sale

13.1 Accounting principles

In accordance with IFRS 5, net assets and liabilities whose recovery is expected through a sale transaction rather than by continuous usage are reclassified as assets held for sale or as liabilities held for sale.

Impairment tests were carried out by comparing the value of the net assets to their fair value less costs to sell (see Note 5.2).

13.2 Changes

In millions of euros	Dec 31, 2018	Dec 31, 2017
ASSETS HELD FOR SALE	**0.1**	**2.1**
including goodwill	0.0	1.7
LIABILITIES RELATED TO ASSETS HELD FOR SALE	**0.0**	**0.0**

In December 2018, the Group signed an agreement to dispose of one of its production and marketing activities in Australia. Consequently, the value of the assets related to this activity was depreciated by €1.9 million, of which €1.7 million was related to goodwill.

Note 14 Shareholders' equity and earnings per share

14.1 Share capital

The Company's share capital amounted to €12,029,370 at December 31, 2018 and was divided into 118,361,220 shares, of which 78,060,118 carried double voting rights. Following a decision taken by the General Meeting of March 19, 2001, the Company's bylaws no longer refer to a par value for its shares.

Other than the free shares (see Note 18.2), there were no valid dilutive rights or securities on December 31, 2018.

There were no changes in the number of outstanding shares during the period.

The Company is not subject to any specific regulatory or contractual obligations in terms of its share capital.

The Group does not have any specific policy concerning equity financing. Decisions on whether to use debt or equity financing are made on a case-by-case basis for each proposed transaction. The equity used by the Group for its own operations corresponds to its consolidated equity.

14.2 Cumulative translation adjustments

In millions of euros	**Dec. 31, 2018**	Dec. 31, 2017
Dollars*	35.6	(2.3)
Latin America	(14.1)	(11.0)
Europe - Middle East - Africa	(30.8)	(23.5)
Other countries	3.3	4.2
TOTAL	**(6.1)**	**(32.6)**

* *U.S. and Hong Kong dollars.*

Cumulative translation adjustments attributable to non-controlling interests total -€0,2 million at December 31, 2018. In 2018, the variation in cumulative translation adjustments was mainly related to the appreciation of the dollar, compensated by the appreciation in the Turkish lira and the Swedish krona.

14.3 Treasury shares

The Company has entered into an agreement with an investment services provider for market-making purposes. It therefore sometimes has to buy, hold and resell a small number of its own shares in connection with this agreement. It also purchases treasury shares for the purpose of allocation under the share grant plans described in Note 18.

Treasury shares held under the liquidity agreement or for the purpose of allocation under share grant plans are recorded as a deduction from equity, and the impacts of all corresponding transactions recorded in the individual financial statements are also recognised directly in equity (disposal gains and losses, impairment etc.).

At December 31, 2018, the parent company held 27 of its own shares as part of this contract. During the financial year, it purchased 740,394 and sold 718,155 treasury shares.

During the financial year, the Company acquired 365 shares to cover free share grants and definitively allocated 143 free shares to employees (see Note 18.2).

At December 31, 2018, the Company held a total of 542 treasury shares intended for free share grants authorised by the Annual General Meeting.

14.4 Minority interests

The minority interests essentially cover the Company Suzhou Hybiome Biomedical Engineering for €74 million, representing 45.52%. The impact of the share of minorities on the key aggregates of the Group is not material over the financial year.

14.5 Other comprehensive income (expense)

The main elements making up comprehensive income are the changes in the fair value of financial instruments for which changes in fair value are recognised in this section (see Note 7), actuarial gains and losses on defined benefit pension plans, changes in fair value of cash flow hedges, changes in translation differences coming from subsidiaries whose accounts are denominated in foreign currencies and changes in the value of tangible or intangible assets (if the option has been exercised for fair value).

The Group presents other comprehensive income showing the components of other comprehensive income that may be subsequently reclassified to income separately from components not subsequently declassifiable.

14.6 Earnings per share

Basic earnings per share is calculated by dividing net income attributable to owners of the parent by the weighted average number of shares outstanding during the period (excluding shares intended for allocation under free share grants and treasury shares held for market-making purposes).

Diluted (net) earnings per share are calculated from the number of shares defined in the basic earnings increased by the weighted average number of potential shares to be issued and which would have a dilutive effect on net income.

Note 15 Provisions – Contingent assets and liabilities

15.1 Accounting principles

In accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", provisions are recognised when the Group has a legal or constructive obligation towards a third party, when it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and no inflow of resources of an equivalent amount is expected in return, and when the amount of the obligation can be reliably estimated.

Provisions for restructuring costs are recognised only when the restructuring has been announced and the Group has drawn up or has started to implement a detailed formal plan. Restructuring provisions notably cover the cost of severance payments.

Long-term provisions are discounted to present value when the impact of discounting is material and the date the underlying event is expected to materialise is known.

Material contingent liabilities are disclosed in Note 15.5, unless the probability of an outflow of resources embodying economic benefits is remote.

Material contingent assets are disclosed in Note 15.5 where an inflow of economic benefits is probable.

15.2 Movements in provisions

In millions of euros	Retirement benefits and other benefits	Guarantees given	Restructuring	Disputes	Other contingencies and losses	Total
DECEMBER 31, 2016	**112.2**	**4.8**	**0.6**	**9.6**	**24.6**	**151.8**
Additions	13.7	10.2	0.2	2.6	6.4	33.1
Reversals (utilisations)	(13.2)	(5.9)	(0.2)	(3.0)	(5.1)	(27.4)
Reversals (surplus)	(0.3)	(2.2)	(0.4)	(0.7)	(0.6)	(4.2)
Net additions (reversals)	0.2	2.1	(0.4)	(1.1)	0.7	1.5
Actuarial (gains) losses	(2.6)	0.0	0.0	0.0	0.0	(2.6)
Changes in Group structure	0.0	0.0	0.0	0.0	0.0	0.0
Other changes	0.0	0.0	0.0	0.0	(0.1)	(0.1)
Translation adjustments	(8.3)	(0.5)	0.0	(0.5)	(0.5)	(9.8)
DECEMBER 31, 2017	**101.5**	**6.4**	**0.2**	**8.0**	**24.7**	**140.8**
Additions	9.9	11.8	0.6	7.7	7.8	37.8
Reversals (utilisations)	(67.7)	(9.1)	(0.1)	(1.1)	(4.4)	(82.4)
Reversals (surplus)	(0.4)	(1.2)	0.0	(0.7)	(1.1)	(3.4)
Net additions (reversals)	(58.2)	1.5	0.5	5.9	2.3	(48.0)
Actuarial (gains) losses	(10.2)	0.0	0.0	0.0	0.0	(10.2)
Changes in Group structure	0.0	0.0	0.0	0.0	0.0	0.0
Other changes	7.4	0.0	0.0	0.0	1.0	8.4
Translation adjustments	0.9	0.1	0.0	0.1	(0.1)	1.0
DECEMBER 31, 2018	**41.4**	**8.0**	**0.7**	**14.0***	**27.9**	**92.0**

* *See Note 15.4.1.*

Provisions for product warranties are recognised based on an estimate of the costs relating to the contractual warranty for instruments sold over the remaining period under warranty (see Note 3.1.1).

Short-term provisions represent €45.0 million at December 31, 2018, versus €34.1 million at December 31, 2017.

Net reversals for the 2018 financial year affect the current operating income for €-48 million and mainly include the reversal related to the exceptional payment of $67 million, representing €56 million, to the fund for covering American post-employment benefit obligations.

15.3 Pension and other long-term benefit obligations

15.3.1 Accounting principles

15.3.1.1 Short-term employee benefits

Short-term employee benefits include wages, salaries and payroll taxes as well as paid vacation and performance-related bonuses. They are expensed during the period in which employees perform the corresponding services. Outstanding payments at the end of the reporting period are included in "Other operating payables".

15.3.1.2 Post-employment benefits

These benefits notably correspond to pensions, contractual retirement payments and post-employment health insurance. They are covered either by defined contribution plans or defined benefit plans.

Defined contribution plans: where required under local laws and practices, the Group pays salary-based contributions to pension and social security organisations. The Group's obligation is limited to the payment of contributions. The contributions are expensed during the financial year in which the employees perform the corresponding services. Outstanding payments at the end of the reporting period are included in "Other operating payables".

Defined benefit plans: These correspond to all plans other than defined contribution plans. They concern:

- regular or supplementary pension plans paid in the form of annuities (primarily in the US, France and Germany) and contractual retirement payments (primarily in France and Japan);
- health insurance for retired employees.

The Group's defined benefit pension obligation is estimated by actuaries, in accordance with the amended IAS 19, as presented hereafter:

Post-employment benefit obligations are calculated in accordance with the projected unit credit method. They take into consideration actuarial assumptions such as discount rates, the rate of future salary increases, employee turnover and mortality rates. The main assumptions used are set out below in Note 15.3.2.

For the purpose of determining the discount rate, the Group analysed various market rates and, as prescribed by the amended IAS 19R, chose an estimated average of the Iboxx Corporate AA and Bloomberg indices (euro, US dollar and pound sterling) at December 31, 2018, taking into account the average durations of the Group's plans where these differ from the observable maturities of the bonds used for those indices.

Post-employment benefit obligations are presented in the balance sheet for their total amount less the fair value of plan assets.

The impact on the service cost for the year and on the interest cost net of the return on plan assets is recognised in operating income before non-recurring items.

The impacts of changes in actuarial gains and losses related to benefit obligations and plan assets (actuarial assumptions and experience adjustments) are immediately recognised under other comprehensive income at their net-of-tax amount. They are not reclassified to income.

The impacts resulting from amendments to and settlements of pension plans are immediately recognised in income.

The expected return on plan assets recognised in income is calculated using the discount rate used to estimate the total benefit obligation.

Tests are performed to measure the sensitivity of the Group's post-employment benefit obligation to changes in certain actuarial assumptions (see Note 15.3.8).

IFRIC 14 "The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction" is not relevant to the Group.

15.3.1.3 Other long-term benefits

Other long-term benefits include long-service awards and jubilee bonuses. The corresponding liabilities are recognised on an actuarial basis whenever they have a material impact. Actuarial gains and losses and past service cost are recognised immediately in income.

15.3.2 Assumptions used

Pension and other benefit obligations are covered by provisions and essentially concern the US and France. These obligations are calculated using actuarial methods based on a certain number of assumptions.

The main assumptions used are as follows:

	France		US	
	Dec 31, 2018	Dec 31, 2017	**Dec 31, 2018**	Dec 31, 2017
Expected salary increase rate	2.00%	2.00%	3.00%	3.00%
Discount rate	2.00%	1.75%	4.50%	3.80%
Average duration of plans	12.0	14.0	14.4	16.4

The expected return on plan assets corresponds to the discount rate applied to the Group's pension obligations, in accordance with the amended IAS 19.

15.3.3 Breakdown of provisions for employee benefits

In millions of euros	**Dec 31, 2018**	Dec 31, 2017
Post-employment benefits	28.3	86.6
Long-service awards	13.1	14.8
TOTAL PROVISIONS FOR LONG-TERM EMPLOYEE BENEFITS	**41.4**	**101.5**

15.3.4 Change in provisions for post-employment benefits

In millions of euros	Present value of obligation	Fair value of plan assets*	Provisions for pensions	Post employment health insurance	Total provisions for post-employment benefits
DECEMBER 31, 2017	**234.0**	**(150.0)**	**84.0**	**2.6**	**86.6**
Current service cost	6.5		6.5	0.0	6.5
Interest cost	7.6	(5.9)	1.8	0.1	1.9
Retirements	(10.8)	9.3	(1.5)	(0.1)	(1.6)
Contributions	0.0	(56.7)	(56.7)		(56.7)
Impact on operating income	**3.4**	**(53.3)**	**(49.9)**	**0.0**	**(49.9)**
Actuarial gains and losses (Other comprehensive inco	**(18.2)**	**9.2**	**(9.0)**	**(1.2)**	**(10.2)**
Other movements (incl. impact of exchange rates)	8.1	(6.4)	1.7	0.1	1.8
DECEMBER 31, 2018	**227.3**	**(200.5)**	**26.7**	**1.6**	**28.3**

* *Plan assets or scheduled payments.*

In millions of euros	Present value of obligation	Fair value of plan assets*	Provisions for pensions	Post employment health insurance	Total provisions for post-employment benefits
DECEMBER 31, 2016	**243.5**	**(148.1)**	**95.4**	**3.0**	**98.4**
Current service cost	7.1		7.1	0.0	7.1
Interest cost	8.2	(5.0)	3.2	0.1	3.4
Retirements	(9.3)	8.1	(1.2)	(0.1)	(1.4)
Change in plan	0.0		0.0		0.0
Contributions	0.0	(9.0)	(9.0)		(9.0)
Impact on operating income	**6.0**	**(5.9)**	**0.1**	**0.0**	**0.1**
Actuarial gains and losses (Other comprehensive inco	**8.8**	**(11.4)**	**(2.6)**	**0.0**	**(2.6)**
Other movements (incl. impact of exchange rates)	(24.3)	15.5	(8.8)	(0.4)	(9.1)
DECEMBER 31, 2017	**234.0**	**(150.0)**	**84.0**	**2.6**	**86.6**

* *Plan assets or scheduled payments.*

During the 2018 financial year, bioMérieux Inc. made an exceptional payment of $67 million, representing €56 million, to the fund for covering American post-employment benefit obligations (see Note 1.2.1). The net post-employment benefit commitment in the United States now represents €5.0 million compared to €56.2 million at December 31, 2017.

15.3.5 Net post-employment benefit expense for the year

In millions of euros	Dec 31, 2018	Dec 31, 2017
Current service cost	6.5	7.1
Return on plan assets	(5.9)	(5.0)
Interest cost	7.6	8.2
TOTAL	**8.3**	**10.3**

15.3.6 Breakdown of net obligation by country

	Dec 31, 2018			
In millions of euros	US	France	Other countries	TOTAL
Present value of obligation	168.4	31.6	27.4	227.4
Fair value of funds*	(164.9)	(24.7)	(11.1)	(200.7)
Provisions for pensions	**3.5**	**6.8**	**16.4**	**26.7**
Post-employment health insurance	1.5	0.0		1.6
TOTAL POST-EMPLOYMENT BENEFITS	**5.1**	**6.9**	**16.4**	**28.3**
Long-service awards		13.4		13.4
TOTAL PROVISIONS FOR PENSIONS AND OTHER LONG-TERM BENEFITS	**5.1**	**20.3**	**16.4**	**41.7**

* *Plan assets and sched uled payments.*

15.3.7 Information on plan assets

15.3.7.1 Allocation of funds

	Dec 31, 2018		Dec 31, 2017	
In millions of euros	France	US	France	US
Equities	1.5	16.6	1.3	42.4
Bonds	21.3	148.3	16.3	68.9
Other	2.0		1.5	1.1
TOTAL	**24.7**	**164.9**	**19.2**	**112.5***

* *Excluding scheduled payments.*

15.3.7.2 Actual return on plan assets

	Return 2018	Return 2017
France	2.2%	2.8%
US	-2.4%	12.9%

The yield of the US funds became negative due to a change in the investment strategy of bioMérieux Inc. following the exceptional contribution of $67 million at mid-year. The Company invested in long-maturity Corporate bonds of the highest rating. Since then, interest rates increased and the valuation of the bonds dropped.

In France, the drop in profitability of the fund over the 2018 financial year is mainly related to an additional contribution of €5 million made in December 2018. Given the payment date, this additional contribution did not generate interest over the 2018 financial year.

15.3.8 Other Information

The timing of future benefit payments at December 31, 2018 is as follows:

In %	Future payments of services (in % of net commitment)
< 1 year	6%
1-5 years	31%
At more than 5 years	63%

A portion of these payments will be funded by the plan assets. Contributions will be decided on a yearly basis.

A 0.5 point increase in the discount rate would have a favourable impact of around 6.8% on the amount of commitments (namely €15.4 million).

15.4 Other provisions

15.4.1 Provisions for claims and litigation

The Group is involved in a certain number of claims arising in the ordinary course of business, the most significant of which are described below. Based on available information, the Group considers that these claims will not have a materially adverse impact on its ability to continue as a going concern. When a risk is identified, a provision is recognised as soon as it can be reliably estimated. The provision for claims and litigation covers all disputes in which the Group is involved and amounted to €14.0 million at December 31, 2018 and €8.0 million at December 31, 2017.

Other than the tax litigation explained below, the litigation mainly included disputes with distributors following the termination of their distribution contracts. A provision has been set aside for the probable amounts that the Group will have to pay based on the plaintiff's claims.

15.4.2 Provisions for tax disputes

Tax audit in Sweden

The tax litigation between the Swedish Company AB bioMérieux Sweden and the Swedish tax administration was closed in November 2018. On September 24, 2018, the administrative Court of Appeal ruled in favour of AB bioMérieux Sweden for the financial years 2013 to 2015. This decision is no longer subject to appeal by the Swedish tax authorities, who have already repaid the amounts wrongly paid by AB bioMérieux (€2.8 million). The adjustment pursuant to the 2016 financial year remains suspended, as it was not part of the procedure. Consequently, a claim in this regard for an amount of about €0.8 million should be sent to the administration during 2019.

Tax audits in Italy

Further to two tax audits in Italy in respect of reporting periods 2004 to 2007 and 2009 to 2010, bioMérieux Italy has received tax deficiency notices relating to transfer prices and the portion of shared costs allocated to this subsidiary.

The total amount is €43 million, breaking down as €23 million in income tax, €15 million in penalties and €5 million in accrued interest.

In the context of this dispute, the Group has requested a mutual agreement procedure to be initiated between the relevant French and Italian authorities based on the European Arbitration Convention of July 23, 1990, as amended by the protocol of May 25, 1999. The aim of these proceedings is to prevent the double taxation of companies by different Member States owing to an upward adjustment of profits of one of the companies in a Member State (as regards transfer pricing). The neutralisation does not apply to penalties or late-payment interest.

During the 2016 financial year, the competent French and Italian authorities reached an amicable agreement for the period 2004 to 2007. This agreement, which was accepted by the Group, eliminates the tax adjustment for 2004 and limits the basis for subsequent adjustments. The corresponding late-payment interest and penalties will be subject to a claim under local Italian law.

The adjustments made for the financial years 2009 and 2010 are in the process of examination by the competent authorities under a similar negotiated procedure.

In parallel, adjustments made to the sales flows between Italy and the Group's American subsidiary continued to be subject to a local Italian law dispute. After an unfavourable ruling in first instance, the Group intends to pursue all available remedies to defend its position. The duration of this procedure cannot be estimated at this stage.

At December 31, 2018, a provision corresponding to its best estimate of the consequences of ongoing proceedings is booked to the Group's financial statements.

Claims in France: contribution on distributed income (3% contribution)

Following the censure by the French constitutional council of the 3% contribution on distributed income, bioMérieux SA has filed claims to obtain the reimbursement of this contribution for the financial years between 2013 and 2017. During 2018, the French tax authorities accepted all claims from bioMérieux. bioMérieux obtained repayment of the amounts paid (€5.9 million) pursuant to this contribution and the corresponding interest on arrears (€0.7 million).

15.4.3 Other provisions for contingencies and losses

Manovra Sanità

This bill, which was passed in Italy in August 2015, requires healthcare providers to cover 40% of the difference between the health budget of each province and the actual expenditure incurred. No implementing decree has yet been adopted. Nevertheless, in accordance with market practice, the provision for risk already recorded in 2016 was updated at December 31, 2018.

Other provisions for risks

These concerns the costs related to the discontinuation of certain product ranges.

15.5 Contingent assets and liabilities

Diagnostic tests for Lyme disease

bioMérieux, like other laboratories, was summoned before the Tribunal de Grande Instance de Paris by more than 90 patients to obtain compensations linked to anxiety allegedly "generated by a lack of reliability of serodiagnostic tests" for Lyme disease.

At this stage of the proceedings, it is impossible to reliably estimate the risk facing the Group.

Note 16 Net debt – Cash

16.1 Consolidated cash flow statement

The consolidated cash flow statement is presented according to the recommendation of the French accounting standards authority No. 2013-03 dated November 7, 2013.

It lists separately:

- cash flows from operating activities;
- cash flows from investing activities;
- cash flows from financing activities.

Cash flows from investing activities include the amount of net cash of companies acquired or sold on the date of their first-time consolidation or their derecognition, as well as amounts due to suppliers of non-current assets and amounts receivable on disposals of non-current assets.

Net cash and cash equivalents correspond to the Group's net debit and credit cash positions.

The consolidated statement of cash flows shows the Group's EBITDA. EBITDA is not defined under IFRS and may be calculated differently by different companies. EBITDA as presented by bioMérieux is equal to the sum of operating income before non-recurring items and net additions to operating depreciation and amortisation.

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Additive method		
• Net income	255.5	237.5
• Non-recurring income and expenditure and acquisition fees and depreciation costs for the acquisition of Biofire	17.4	19.9
• Cost of net financial debt	18.5	16.2
• Other financial income and expenses, net	4.5	6.2
• Income tax expense	65.2	54.5
• Net income for the period - Investments in associates	(0.2)	0.4
• Net additions to operational depreciation	157.9	140.5
EBITDA	**518.8**	**475.2**
Simplified additive method		
• Contributive operating income before non-recurring items	360.9	334.7
• Net additions to operational depreciation	157.9	140.5
EBITDA	**518.8**	**475.2**

The presentation of the consolidated cash flow statement has changed in order to better reflect the Group's cash generation. The table below shows the comparison with the version published in the 2017 annual financial statements.

In millions of euros	Dec. 31, 2017 published	Dec. 31, 2017 restated
EBITDA (before non-recurring items)	475.2	475.2
Elimination of other non-cash/non-operating income and expenses	8.1	8.1
Change in working capital requirement	(34.3)	(34.3)
Income tax paid	(91.5)	(91.5)
Cost of net financial debt	0.0	(16.2)
NET CASH FROM OPERATING ACTIVITIES	**357.5**	**341.3**
Purchases of property, plant and equipment and intangible assets	(183.5)	(183.5)
Proceeds from disposals of property, plant and equipment and intangible assets	7.9	7.9
Purchases/proceeds from acquisitions of non-current financial assets	(14.1)	0.0
Proceeds from other non-current financial assets	0.0	(0.4)
Free cash flow	Not presented	165.3
Disbursement / collection related to taking non-controlling interests	0.0	(13.7)
Impact of changes in Group structure	9.3	9.3
NET CASH USED IN INVESTING ACTIVITIES	**(180.4)**	**(180.4)**
Purchases and sales of treasury shares	(0.9)	(0.9)
Dividends paid to owners	(39.4)	(39.4)
Dividends paid to non-controlling interests	(0.1)	(0.1)
Cost of net financial debt	(16.2)	0.0
Change in committed debt	(0.6)	(0.6)
Change in interests without gain or loss of controlling interest	(11.5)	(11.5)
NET CASH USED IN FINANCING ACTIVITIES	**(68.7)**	**(52.5)**
NET CHANGE IN CASH AND CASH EQUIVALENTS	**108.4**	**108.4**

An in-depth analysis of the nature of the commitments to bonuses deliverable in cash indexed on the price of the bioMérieux share led to the reclassification of debts established on December 31, 2017 from the category "Borrowings" to the category "Other operating payables". Consequently, changes to the value of commitments are presented in the consolidated cash flow statement within the flows related to the activity from the 2018 financial year. Previously, they were presented as changes to financing flows.

Also, in order to facilitate reading the consolidated cash flow statement, the cost of net debt was reclassified from flows related to financing transactions to flows related to the activity.

The available free cash flow is a key indicator for the Group. It is defined as the cash flow coming from operation plus cash flows coming from investment excluding net cash coming from acquisitions and disposals of subsidiaries.

16.2 Changes in net debt

No borrowings are recognised or re-estimated at fair value, with the exception of debts related to price supplements, recognised and re-valued at each closure at their fair value as defined contractually (see Note 27).

No debt restructuring occurred over the presented financial years. Likewise, current debts on December 31, 2017 not restructured in the past.

At December 31, 2018, after the €40.2 million dividend pay-out to bioMérieux SA shareholders, the Group's net debt stood at €266.9 million and mainly comprised the October 2013 bond issue.

At that date, the Group issued €300 million worth of seven-year bonds to institutional investors, redeemable at par at maturity. The bonds pay interest at an annual rate of 2.875%.

The bond issue is shown on the balance sheet at amortised cost calculated using the effective interest rate method for an amount of €299.1 million, reflecting the issue price net of issue fees and premiums. Interest costs were calculated by applying the effective interest rate including issue fees and premiums.

bioMérieux SA also benefits, on December 31, 2018, from a non-drawn syndicated credit facility of €500 million, which was amended in 2018 bringing its maturity to January 2024 (5 years with the option for extension twice for one year, one of which remains to be exercised).

Furthermore, in order to meet the general financing needs of bioMérieux SA and its subsidiaries, the Company can use a program for the issuance of short-term marketable securities. The main characteristics of the program are as follows:

Maximum ceiling of the program	€500,000,000.00
Duration	< 1 year
Minimum amount per issue	€150,000 or the equivalent value of this amount incurrencies determined at the time of the issue
Issue currency	Euros or any other currency authorised by the French regulations applicable at the time of the issue
Domiciliary agent	CACEIS Corporate Trust
Arranger	Credit Agricole Corporate and Investment Bank
Dealers	Aurel BGC BNP Paribas BRED Banque Populaire Credit Agricole Corporate and Investment Bank Crédit Mutuel – CIC Natixis Société Générale ING Belgium Succursale France

The information memorandum pertaining to the short-term marketable securities issuance program can be consulted on the Bank of France website (www.banque-france.fr/en).

16.3 Maturities of borrowings

The maturities schedule indicates the net liabilities or net cash and cash equivalents. This non- standardised schedule corresponds to the sum of cash and cash equivalents with a maturity of less than three months, less committed debt and bank overdrafts and other uncommitted borrowings.

The maturity schedule below refers to balance sheet amounts.

In millions of euros	Dec. 31, 2017	Change	Changes in Group structure	Change in statement of Cash flows	Other movements	Translation adjustments	**Dec. 31, 2018**
Cash at bank and in hand	214.4	14.2	3.4	17.6		(0.3)	231.7
Short-term investments	97.7	(49.2)	0.0	(49.2)		(0.1)	48.4[(a)]
Cash and cash equivalents	**312.1**	**(35.0)**	**3.4**	**(31.6)**	**0.0**	**(0.4)**	**280.1**
Bank overdrafts and other uncommitted debt	(51.7)	53.0	0.0	53.0		(11.4)	(10.1)[(b)]
NET CASH AND CASH EQUIVALENTS (A)	**260.4**	**18.0**	**3.4**	**21.4**	**0.0**	**(11.8)**	**270.0**
COMMITTED DEBT (B)	**416.3**	**115.5**	**0.0**	**115.5**	**5.8**	**(0.6)**	**536.9**
o/w due beyond 5 years	*23.2*						*24.3*
o/w due in 1 to 5 years	*367.9*						*422.5*
o/w due within 1 year	*25.2*						*90.1*
NET DEBT (B) -(A)	**155.9**	**97.5**	**(3.4)**	**94.1**	**5.8**	**11.1**	**266.9**

(a) See Note 12.2.
(b) cash and bank overdrafts comply with the principles of the standard IAS 7, meaning that they are repayable on demand.

New borrowings stand at €91 million. They were subscribed by bioMérieux Shanghai when acquiring Hybiome.

At December 31, 2018, the share of borrowings due beyond five years mainly comprises the share due beyond five years of the debt relating to finance leases for €18.6 million in France.

The borrowings between one and five years include the bond loan contracted to acquire the American company BioFire for €299.1 million, the loan contracted by Shanghai to acquire Hybiome for €52.1 million, the put on Hybiome minority interests for €39.2 million and the debt relating to finance lease contracts for €15.3 million, mainly in France.

The borrowings due within one year mainly include short-term marketable securities for €35 million, the share due within one year of the debt relating to finance leasing contracts for €3.8 million, mainly in France, as well as the accrued interest on the bond issue for €2.3 million.

The other movements of €5.8 million include:

- the classification as liabilities to personnel of the provision for variable compensation indexed on the price of the share (phantom shares) for €33.4 million, even though they were previously recorded in borrowings in the part between one and five years;
- the debt relative to the put option on Hybiome minority interests for an updated value of €39.2 million (see Note 5.1).

At the end of the financial year, the Group had not breached any of its repayment schedules.

No loan agreement was signed prior to December 31, 2018 concerning loans to be set up in 2019.

16.4 Debt covenants

In the event of a change of control of the Company as defined in the issue notice, bondholders may ask for their bonds to be redeemed.

The syndicated credit facility is subject to a single covenant: “net debt to operating income before non-recurring items before depreciation/amortisation and acquisition expenses” may not exceed 3.5. The Group complied with this ratio at December 31, 2018.

The loan subscribed in China is subject to a ratio for “net debt / current operating income before amortisation and provisions for acquisition-related costs” that must not exceed 7.5 until December 31, 2020, then 4.5 from January 1, 2021. The ratio of 7.5 is complied with at the end of 2018.

The other term borrowings at December 31, 2018 primarily correspond to commercial paper, share allocation plans delivered under cash and cash equivalents and finance lease liabilities related to assets in France and Italy. None of these borrowings is subject to financial ratios.

16.5 Interest rates

Before hedging, 56% of the Group’s borrowings are at fixed rates (€299.1 million) and the remainder is at floating rates (€235 million).

Fixed-rate borrowings comprise the €299.1 million bond issue maturing in 2020 and paying a coupon of 2.875%. An interest rate swap was taken out converting the interest on half of the bond issue into a floating rate from the beginning, capped at 1.20% and with a floor of 0.30%. In April 2017, a new swap contract was taken out to cancel the floating rate as from July 18, 2018 with the possibility of a probable increase in interest rates.

Floating-rate borrowings are essentially based on the currency’s interest rate plus a margin.

16.6 Finance leases

16.6.1 Principal amount of the borrowings

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Due within 1 year	3.8	4.0
Due in 1 to 5 years	15.3	15.3
Due beyond 5 years	18.6	22.4
TOTAL	**37.7**	**41.7**

16.6.2 Future lease payments (principal and interest)

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
MINIMUM FUTURE PAYMENTS	**39.1**	**43.4**
Due within 1 year	4.0	4.3
Due in 1 to 5 years	16.2	16.2
Due beyond 5 years	19.0	22.9
Less interest	(1.4)	(1.6)
PRESENT VALUE OF FUTURE LEASE PAYMENTS	**37.7**	**41.7**

16.7 Breakdown of net debt (net cash) by currency

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Euro	271.5	(92.9)
Chinese yuan	74.3	(34.9)
Brazilian real	3.9	(1.3)
Japanese yen	3.4	3.5
Russian rouble	(0.6)	(0.6)
Czech koruna	(1.1)	1.1
Mexican peso	(1.2)	(1.2)
South African rand	(1.8)	(2.4)
Swiss franc	(2.0)	(2.2)
Polish zloty	(2.7)	(3.3)
Swedish krona	(3.8)	(1.6)
Canadian dollar	(4.0)	(1.6)
Hong Kong dollars	(10.1)	(8.8)
Pound sterling	(13.2)	(3.3)
Australian dollars	(13.4)	(3.5)
US dollars[a]	(30.4)	315.3
Other currencies	(2.0)	(6.6)
TOTAL	**266.9**	**155.9**

16.8 Loan guarantees

None of the Group's assets have been pledged as collateral to a bank.

bioMérieux SA may be required to issue a guarantee to banks granting facilities to subsidiaries with recourse to external funding.

Hedging agreements are discussed in Note 27.

Note 17 Trade and other payables

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Trade payables	**176.9**	**161.3**
Advances and downpayments	5.7	6.5
Tax debts and liabilities to personnel*	259.6	219.3
Deferred income	54.7	53.3
Other	25.3	21.7
Other operating payables	**345.1**	**300.7**
Current tax payables	**33.5**	**24.2**
Due to suppliers of non-current assets	25.0	23.7
Other	30.8	30.9
NON-OPERATING PAYABLES	**55.8**	**54.6**

* *Tax debts and liabilities to personnel now include the bonus plan indexed on the share price for €27 million. In 2017, €33.4 million was recognised as borrowing.*

The details of the other liabilities related to customer contracts are presented in Note 10.

Operating and non-operating payables generally fall due within one year, except for certain deferred income. Other non-operating payables relate mainly to the fair value of derivative instruments carried in liabilities (€27 million at end-2018 versus €27.1 million at end 2017, see Note 27.2).

Note 18 Share-based payments

18.1 Share-based payment and share grant plans

The transactions paid in shares concern the bioMérieux SA share grant plans approved by the Annual General Meetings of May 30, 2012; May 29, 2013; May 28, 2014; May 28, 2015; May 26, 2016; May 30, 2017 and May 17, 2018.

A summary of these plans is presented below.

In accordance with IFRS 2 "Share-based Payment", the fair value of the benefits granted is expensed over the vesting period, with a corresponding increase in equity. The expense is based on the value of the underlying shares or options at the grant date, *i.e.* the date on which the list of beneficiaries was approved by the Board of Directors. The probability that the rights will vest is reviewed at the end of each reporting period and until the vesting date, to take into account whether the continuous employment and performance conditions have been met. Any changes are taken to income. At the end of the vesting period, the amount of the cumulative expense is adjusted on the amount effectively vested and held in a specific reserve account. This account is liquidated if the rights are exercised or lapse.

When the share-based payment plan is settled in cash and cash equivalents, the fair value of the plan is updated at each balance sheet date during the vesting period. The counterparty of the expense recognised during the vesting period is recorded as a debt.

In accordance with IFRS 2 "Share-based Payment", the corresponding tax saving recognised in the parent company financial statements is allocated in the consolidated financial statements to the year during which the share-based payment expense is recognised.

18.2 Share grant plans

	Year in which plan opened				
	2014	2015	2016	2017	2018
Number of shares	15,000	53,100	402,300	40,116	169,685
Forfeited shares	0	4,500	25,200	502	0
Shares presented in 2018	15,000	0	0	0	0
Vesting of shares	0	0	0	0	0
Number of shares to be remitted as of Dec. 31, 2018	0	48,600	377,100	39,614	169,685

The number of shares for plans prior to 2017 were tripled after the three-for-one split decided by the Combined General Meeting of June 2017.

Between 2012 and 2018, the Board of Directors granted free shares (out of existing shares) to certain employees and corporate officers.

These plans specify that shares will only be definitively assigned after a vesting period of between three and four years. The conditions for the acquisition of rights are related to presence conditions, and, for certain plans, the definitive acquisition of performance shares is subject to achieving objectives based on revenue and operating income or the achievement of specific objectives. The performance shares are no longer subject to a lock-up period if the vesting period is at least two years. The lock-up period may be waived for shares granted to non-French tax residents provided that the shares concerned are subject to a four-year vesting period.

In 2018, a net expense of €6.6 million was recognised in personnel costs due to compensation in shares, including the expenses related to employers' contributions (against a net expense of €9.9 million in 2017).

On December 31, 2018:

- for 619,849 free shares, the Company considered that the performance criteria were achieved;
- for 15,150 free shares, the Company considered that the performance criteria were not achieved.

At December 31, 2018, bioMérieux SA held 542 of its own shares for allocation under the above-described share grant plans. The Company would have to purchase a maximum of 92,712 additional shares at a cost of €5.3 million based on the share price at December 31, 2018.

The fair value of shares corresponds to the market price on the date of assignment of the plans.

18.3 Share-based payments delivered under cash and cash equivalents

In 2015, 2016 and 2017, the Group set up variable compensation plans in the United States indexed on the price of the bioMérieux share (phantom shares). This additional paid-in capital is comparable to allocation plans for free shares delivered under cash and cash equivalents. Due to the drop in the share price, the impact on the financial statements of the Group of these plans is income of €7.2 million in the 2018 financial year, against an expense of €28.9 million in 2017. The debt relative to these plans on December 31, 2018 stood at €27.0 million, against €33.4 million on December 31, 2017.

18.4 Stock option plans

There is no stock option plan within the Group.

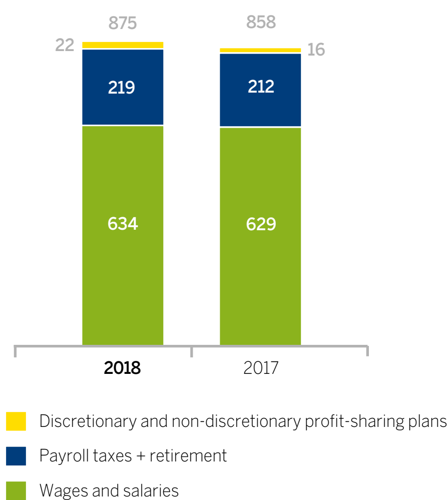
Note 19 Other operating income and expenses

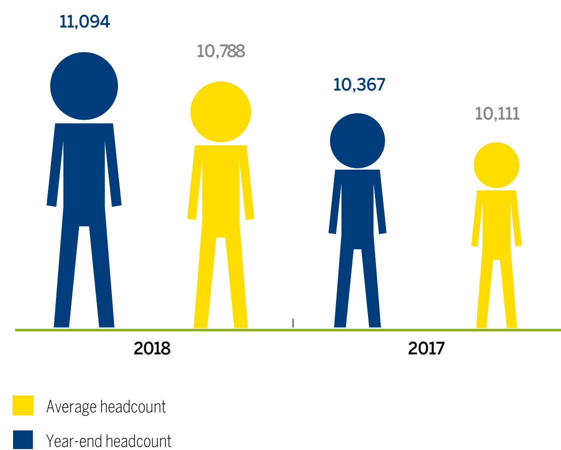
In millions of euros	2018	2017
Net royalties received	4.0	4.5
Research tax credits	24.0	21.9
Research grants	1.4	2.0
Compensation received		1.3
Other	1.8	1.6
TOTAL	**31.2**	**31.2**

The other income related to customer contracts mainly corresponds to licence fees received.

In accordance with IAS 20, bioMérieux presents research tax credits as a subsidy within other operating income.

Note 20 Personnel costs





Wages and salaries take into account the share in the fair value of share-based payment (see Note 18).

Payroll taxes include amounts paid into defined contribution plans for €4.3 million.

CICE tax credits introduced in France to promote competitiveness and employment are recognised as a deduction from payroll taxes (see Note 3.2).

Employee profit-sharing plans (discretionary and non-discretionary) only concern bioMérieux SA.

Note 21 Depreciation, amortisation and provisions, net

	Dec. 31, 2018	Dec. 31, 2017
Depreciation and amortisation of non-current assets	175.4	158.8
Impairment	(48.2)	5.5
Impairment of current assets	2.7	(0.8)
Impairment of non-current financial assets	(0.5)	(0.7)
TOTAL	**129.4**	**162.8**

Depreciation and amortisation expense includes €157.9 million shown within contributive operating income before non-recurring items and €17.5 million relating to the amortisation of the fair value of assets recognised in relation to the acquisition of BioFire.

The net reversals of provisions on December 31, 2018 mainly relate to the American post-employment benefit obligations and follow on from an exceptional payment of $67.1 million, representing €58.7 million, to the fund for covering commitments (see Note 1.2.1).

Note 22 Net finance costs

22.1 Accounting principles

Financial income and expenses are shown on two separate lines:

- **"cost of net debt"** which includes interest expense, fees and foreign exchange gains and losses arising on borrowings, as well as income generated by cash and cash equivalents;
- **"other financial income and expenses, net"** which includes interest income on instruments sold under finance lease arrangements, the impact of disposals and writedowns of investments in non-consolidated companies, late-payment interest charged to customers, discounting gains and losses, and the ineffective portion of currency hedges on commercial transactions.

22.2 Cost of net financial debt

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Finance costs	(16.9)	(16.1)
Interest rate hedging derivatives	(2.7)	(0.1)
Foreign exchange gains (losses)	1.1	0.0
TOTAL	**(18.5)**	**(16.2)**

The cost of borrowing mainly includes interest on the bond loan and interest on repayable advances in the mechanisms for funding research (ADNA)

22.3 Other financial income and expenses, net

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Interest income on leased assets	1.2	1.2
Depreciation and transfer of financial assets at amortised cost	0.0	(0.2)
Result of disposing of non-consolidated equity investments	0.0	0.0
Currency hedging derivatives	(6.6)	(8.1)
Other	1.0	0.8
TOTAL	**(4.5)**	**(6.2)**

The currency hedging derivatives mainly correspond to the ineffective part on commercial transactions.

22.4 Foreign exchange gains (losses)

Foreign exchange gains and losses result from differences between the transaction exchange rate and the settlement rate (or the year-end rate if the payment has not yet been made). These differences only partially reflect the impact of currency fluctuations.

The transaction exchange rate is the rate prevailing on the date the transaction takes place. The settlement exchange rate is either the rate in effect on the date of payment or the hedging rate (excluding time value) if a currency hedge was set up for the transaction.

Foreign exchange gains and losses on commercial transactions are recognised under the relevant headings in the consolidated income statement. The foreign exchange gains and losses impacted the consolidated income statement in the following manner:

In millions of euros	**Jan 2018 Dec 2018**	Jan 2017 Dec 2017
Sales	0.4	(0.8)
Purchases	(8.8)	3.1
Financial items	1.1	0.0
TOTAL	**(7.3)**	**2.3**

Note 23 BioFire acquisition fees and depreciation costs

In order to improve the understanding of operating income and due to the transaction's scale, fees relating to the acquisition of BioFire Diagnostics and BioFire Defense – consolidated for the first time at June 30, 2014 – are shown on a separate line of operating income before non-recurring items.

This line comprises the amortisations of the assets acquired and valued during the purchase price allocation (technologies) for €17.5 million at the end of December 2018.

At the end of 2017, the amount of impairment of acquired assets stood at €18.2 million.

Note 24 Other non-recurring income and expenses from operations

24.1 Accounting principles

Other non-recurring income and expenses from operations, net are items that are material, unusual and non-recurring. They are presented on a separate line of the income statement in order to give a clearer picture of the Group's routine business performance. They chiefly include material amounts of net proceeds from disposals of non-current assets (other than instruments), restructuring costs and impairment losses (see Note 5).

Restructuring costs (which include the cost of severance payments) correspond to the expenses recognised when the Group officially announces the closure of a facility or a scaling down of operations in the ordinary course of business, as well as subsequent adjustments made to reflect the actual costs incurred.

24.2 Changes

Other non-recurring income and expenses from operations represented income of €0.2 million, to be compared with an expense of €1.6 million in 2017.

There are no amounts that are individually material in the other non-recurring income and expenses from operations.

Note 25 Current and deferred income tax

25.1 Accounting principles

The income tax expense for the period comprises current and deferred tax.

Tax credits (excluding research tax credits and CICE tax credits for competitiveness and employment, see Note 3.2, are presented as a deduction from income tax expense.

Deferred taxes are recognised using the liability method for all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. These differences arise in particular from:

- timing differences between the recognition of certain income and expense items for financial reporting and tax purposes (*e.g.*, non-deductible provisions, employee profit-sharing, etc.);
- consolidation adjustments (*e.g.*, accelerated depreciation, provisions, elimination of internal gains included in inventories and non-current assets, etc.);
- forecast withholding tax on dividend payments planned for the following year;
- calculation of the fair value of assets and liabilities relating to companies acquired.

Changes in deferred tax are recognised in profit/loss or in other comprehensive income, according to the recognition of the underlying restatement.

The deferred taxes are calculated using the liability method based on the probable dates of payment. They are recognised at the enacted tax rate (or nearly enacted rate) for their nominal value without discounting.

Deferred tax assets arising on temporary differences are only recognised if they can be utilised against future deductible temporary differences, or where there is a reasonable probability of their utilisation or recovery against future taxable income. In practice, and notably in the case of tax loss carryforwards, this rule is applied based on budget forecasts approved by management using a maximum time horizon of two years. The calculation of deferred taxes takes account of new tax provisions applicable for tax loss carryforwards (utilisation ceilings, etc.).

25.2 Analysis of income tax expense

	2018		2017	
In millions of euros	Tax	Rate	Tax	Rate
Theoretical tax at standard French tax rate	**110.3**	**34.4%**	**100.7**	**34.4%**
• Impact of income tax at reduced tax rates and foreign tax rates	(34.5)	(10.8)%	(12.7)	(4.3)%
• Impact of the US tax reform			(30.2)	(10.3)%
• Impact of permanent differences	(2.4)	(0.7)%	6.0	2.1%
• Impact of tax on the payment of dividends	0.7	0.2%	0.6	0.2%
• Deferred tax assets not recognised on tax losses carried forward	2.0	0.6%	0.8	0.3%
• Impact of research and CICE tax credits presented in operating income	(9.0)	(2.8)%	(9.1)	(3.1)%
• Tax credits (other than research tax credits)	(1.9)	(0.6)%	(1.6)	(0.6)%
ACTUAL INCOME TAX EXPENSE	**65.2**	**20.3%**	**54.5**	**18.6%**

The basic Corporate income tax rate in France is 33.33%. Act No. 99-1140 of December 29, 1999 on social security funding introduced a surtax that raised the statutory rate by 1.1%.

The Group's effective tax rate at December 31, 2018 stood at 20.3%, compared with 18.6% at end 2017. The Group's effective tax rate benefits, on the current income tax expense, from the new tax policy in the United States, leading to a reduction of 21% in the federal tax rate on company profits, against 35% previously, since January 1, 2018. The effective tax rate also benefited, in 2018, from the tax impact of the exceptional contribution to pension funds made in the United States (see Note 1.2.1). Lastly, the Group also recorded a tax income following the favourable resolution of a tax dispute in Sweden (see Note 15.4.2).

Aside from these non-recurring effects, the Group's recurring effective tax rate was approximately 23%, down compared to the previous financial year (28%).

The French deferred tax was adjusted to 32.02% for transfers from January 1, 2019, to take into account the provisions in the 2019 Finance law.

25.3 Change in deferred tax

In millions of euros	Deferred tax assets	Deferred tax shareholders' equity and liabilities
DECEMBER 31, 2016	**92.8**	**167.3**
Translation adjustments	(7.4)	(12.4)
Changes in Group structure	0.0	0.0
Movements recognised in income	(22.6)	(50.9)
Other comprehensive income (expense)	(10.9)	
Other movements	(0.2)	(0.2)
DECEMBER 31, 2017	**51.6**	**103.8**
Translation adjustments	1.8	3.8
Changes in Group structure	16.2	22.8
Movements recognised in income	7.8	4.5
Other comprehensive income (expense)	(0.8)	1.5
Other movements	(2.4)	(0.4)
DECEMBER 31, 2018	**74.3**	**136.0**

Deferred tax assets are mainly generated in the US and result from:

- the activation of losses carried forward and tax benefits recognised for the BioFire purchase price allocation. On December 31, 2018, these activated losses carried forward stood at €0.1 million, compared to €0.9 million on December 31, 2017;
- temporary differences due in particular to the non-deductibility of certain provisions and the elimination of internal margins on inventories;
- deferred taxes on other comprehensive income items correspond to fair value adjustments to financial instruments (€0.3 million in 2018) and deferred taxes on actuarial differences relating to pension obligations (€-2.6 million in 2018).

In 2018, new deferred tax assets were recognised in relation to losses carried forward and tax credits following the acquisition of Astute Medical Inc. for €16.2 million.

At December 31, 2018, deductible timing differences derived from tax losses that have not been recognised as deferred tax assets amounted to €19.2 million (including €17.6 million in respect of unrecognised tax loss carryforwards), representing a potential tax saving of €6.0 million (including €5.5 million in respect of unrecognised tax loss carryforwards).

At December 31, 2017, deductible timing differences derived from tax losses that have not been recognised as deferred tax assets amounted to €9.0 million (including €7.8 million in respect of unrecognised tax loss carryforwards), representing a potential tax saving of €2.9 million (including €2.4 million in respect of unrecognised tax loss carryforwards).

Deferred tax liabilities are primarily from BioFire (€58.5 million), bioMérieux SA (€25.6 million), and Hyglos (€6.7 million), mainly corresponding to the accounting of fixed assets at fair value. Two new deferred tax liabilities were recognised on the latest acquisitions of the Group (€14.0 million relative to Hybiome and €8.3 million relative to Astute Medical Inc.).

Note 26 Fees of Statutory Auditors

In thousands of euros	Dec. 31, 2018							Dec. 31, 2017						
	Ernst &Young		Grant Thornton		Other		Total	Ernst &Young		Grant Thornton		Other		Total
Statutory audit	**1,064**	***91%***	**586**	***97%***	**36**	***100%***	**1,685**	**1,143**	***91%***	**493**	***100%***	**10**	***100%***	**1,647**
• bioMérieux SA	158	*13%*	153	*25%*		*0%*	311	169	*14%*	153	*31%*		*0%*	322
• fully consolidated subsidiaries	906	*78%*	433	*72%*	36	*100%*	1374	974	*78%*	341	*69%*	10	*100%*	1,325
Services other than the statutory audits	**105**	***9%***	**19**	***0%***			**124**	**108**	***9%***	**2**	***0%***		***0%***	**110**
Audit	**1,168**	***100%***	**605**	***100%***	**36**	***100%***	**1,809**	**1,252**	***100%***	**495**	***100%***	**10**	***100%***	**1,758**
Legal, tax, labour-related services	0	*0%*	0	*0%*			0		*0%*	0	*0%*			0
Other	0	*0%*		*0%*			0		*0%*		*0%*			0
Other services	**0**	***0%***	**0**	***0%***	**0**	***0%***	**0**	**0**	***0%***	**0**	***0%***	**0**	***0%***	**0**
TOTAL	**1,168**	***100%***	**605**	***100%***	**36**	***100%***	**1,809**	**1,252**	***100%***	**495**	***100%***	**10**	***100%***	**1,758**

Note 27 Financial instruments: financial assets and liabilities

27.1 Recognition and measurement of financial instruments

Financial instruments include financial assets, financial liabilities and derivatives (swaps, forward contracts, etc.).

Financial instruments appear under several headings in the balance sheet: non-current financial assets, other non-current assets, trade receivables, other receivables and other payables (*e.g.* changes in the fair value of derivatives), short-term and long-term borrowings, trade payables, cash and cash equivalents.

- Financial assets:

  The IFRS 9 standard breaks down the financial assets into 3 categories. These categories are described in Note 7 “Non-current financial assets”.

  Current financial assets (excluding assets related to derivatives) are only assets valued at amortised cost.

- Financial liabilities:

  Borrowings are recognised at amortised cost, with the exception of debts on price supplements, revalued at each closure at their fair value as defined contractually.

  Other financial liabilities included in the other sections of current and non-current liabilities mainly concern trade payables, and are recognised at amortised cost, which in practice corresponds to their cost.

  For information, the only liabilities having a material financing component are the commitments for retirement benefits and liabilities related to termination benefits in Italy.

- Reclassifications of financial assets and liabilities:

  There were no reclassifications of financial assets and liabilities over the financial years presented between the various categories presented above.

- Derivative instruments:

  The Group has set up interest-rate and foreign exchange hedging instruments that meet the definition of hedges as specified in the IFRS 9 standard and coherent with its general policy on risk management (hedging relationship clearly defined and documented at the date of establishment of the hedge, demonstrated efficiency, eligible hedging instrument, no dominant credit risks…).

  In practice, the hedging instruments mainly correspond to simple products covering a single risk (swaps, forward sales, options…), for which the main characteristics (reference rates, interest payment dates…) back the items covered, with the exception of cross-currency swaps, which cover exchange rate risks, and interest rate risks related to the repayment of loans made in dollars by bioMérieux SA to bioMérieux Inc. for financing BioFire.

  The hedging instruments are recognised originally at their fair value. They are subsequently remeasured to fair value at year-end and are recorded in the balance sheet under “Non-operating receivables” and “Non-operating payables”. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement

date (IFRS 13). The fair value of currency derivatives is determined using standard market valuation techniques based on observable market data (interest rates, exchange rates, observable implied volatility). Fair value generally corresponds to a level 2 of fair value.

Accounting for changes in their fair value depends on the type of derivative concerned and whether there is a hedging relationship, and if so what type of hedge is involved:

- fair value gains and losses on derivatives not qualifying as hedging instruments are recognised in the consolidated income statement. Fair value gains and losses on derivatives qualifying and used as cash flow hedges (*i.e.* hedges of foreign currency receivables and payables) are recognised in full in the consolidated income statement on a symmetrical basis with the loss or gain on the hedged item;
- fair value gains and losses on derivatives qualifying and used as cash flow hedges (*i.e.* hedges of future commercial transactions in foreign currencies, mainly in the form of forward transactions and cross-currency swaps) are recognised directly in other comprehensive income for the effective portion, and in the income statement for the non-effective portion (mainly the time value of money in the case of forward currency transactions). Amounts recognised under other comprehensive income are reclassified to income in the same period(s) during which the hedged forecast cash flows affect income.

Presentation of financial assets and liabilities at fair value through income

In accordance with IFRS 13, financial instruments are presented in one of the three levels (see Note 27.2) of the fair value hierarchy:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: market inputs for the asset or liability that are observable either directly (*e.g.*, adjusted level 1 quoted prices), or indirectly (*e.g.*, inputs derived froquoted prices);
- Level 3: non-market inputs for the asset or liability that are not observable (*e.g.* price on an inactive market or valuation based on multiples for unlisted securities).

27.2 Changes

The breakdown of financial assets and liabilities according to the categories specified by the IFRS 9 standard "non-accounted" categories (see Note appendix 27.1), and the comparison between the accounting values and fair values, are given in the table below (excluding receivables, tax debts and liabilities to personnel):

	December 31, 2018						
In millions of euros	Financial assets at fair value through income (excl. derivatives)	Securities not consolidated with variation in fair value by other comprehensive income	Receivables and borrowings at amortised cost	Derivative instruments	Value accounting	Fair value	Level
Financial assets							
Shares in non- consolidated companies		58.9			58.9	58.9	1-3
Other non-current financial assets			12.9		12.9	12.9	-
Other non-current assets			14.6		14.6	14.6	
Derivative instruments (positive fair value)				9.3	9.3	9.3	2
Trade receivables			446.4		446.4	446.4	-
Other receivables			4.8		4.8	4.8	-
Cash and cash equivalents	280.1				280.1	280.1	1
TOTAL FINANCIAL ASSETS	**280.1**	**58.9**	**478.7**	**9.3**	**827.0**	**827.0**	
Financial liabilities							
Bond loan[(a)]			299.1		299.1	318.8	1
Other financing facilities			147.7		147.7	147.7	2
Derivative instruments (negative fair value)				27.0	27.0	27.0	2
Borrowings - current portion			100.2		100.2	100.2	2
Trade payables			176.9		176.9	176.9	-
Other current liabilities			56.0		56.0	56.0	-
TOTAL FINANCIAL LIABILITIES	**-**	**-**	**779.9**	**27.0**	**806.9**	**826.6**	

(a) The carrying amount of the bond issue is shown net of issue fees and premiums.

Levels 1 to 3 correspond to the fair value hierarchy as defined by IFRS 13 (see Note 27.1).

In practice, financial assets and liabilities at fair value essentially concern certain securities, cash investments and derivative instruments. In other cases, fair value is shown in the table above for information purposes only.

No level in the fair value hierarchy is shown when the carrying amount approximates fair value.

bioMérieux enters into derivative instruments as part of master agreements that provide for offsetting in the event of counterparty default. The impact of these master netting agreements on the fair value of derivative instruments at December 31, 2018 was a net negative exposure of €17.7 million versus a net exposure of €11.8 million at end-2017.

No inter-category reclassifications were carried out in 2018. None of the Group's financial assets has been pledged as collateral.

Impairment losses recorded against financial assets primarily relate to write-downs of trade receivables (see Note 9) and non-current financial assets (see Note 7).

In millions of euros	December 31, 2017						
	Financial assets at fair value through income (excl. derivatives)	Securities not consolidated with variation in fair value by other comprehensive income	Receivables and borrowings at amortised cost	Derivative instruments	Value accounting	Fairvalue	Level
Financial assets							
Other shares in non-consolidated companies		50.9			50.9	50.9	1-3
Other non-current financial assets			7.0		7.0	7.0	-
Other non-current assets			14.1		14.1	14.1	
Derivative instruments (positive fair value)				15.3	15.3	15.3	2
Trade receivables			460.1		460.1	460.1	-
Other receivables			6.7		6.7	6.7	-
Cash and cash equivalents	312.1				312.1	312.1	1
TOTAL FINANCIAL ASSETS	**312.1**	**50.9**	**487.9**	**15.3**	**866.2**	**866.2**	
Financial liabilities							
Bond loan[(a)]			298.6		298.6	318.8	1
Other financing facilities			92.5		92.5	92.5	2
Derivative instruments (negative fair value)				27.1	27.1	27.1	2
Borrowings - current portion			76.9		76.9	76.9	2
Trade payables			161.3		161.3	161.3	-
Other current liabilities			51.9		51.9	51.9	-
TOTAL FINANCIAL LIABILITIES	**-**	**-**	**681.2**	**27.1**	**708.3**	**728.5**	

(a) The carrying amount of the bond issue is shown net of issue fees and premiums.

Movements in financial instruments whose fair value was determined using Level 3 inputs under IFRS 13 (see Note 27.1) at December 31, 2018 were as follows:

In millions of euros	Shares in non- consolidated companies
DECEMBER 31, 2016	**30.7**
Change of level 3 to 1	(9.5)
Gains and losses recognised in income	0.7
Gains and losses recognised in other comprehensive income	9.8
Acquisitions	13.8
Disposals	(0.9)
Changes in Group structure, translation adjustments and	(0.3)
DECEMBER 31, 2017	**44.3**
Change of level 3 to 2	(27.7)
Gains and losses recognised in income	
Gains and losses recognised in other comprehensive income	
Acquisitions	5.5
Disposals	0.0
Changes in Group structure, translation adjustments and	0.1
DECEMBER 31, 2018	**22.2**

The “change of level” line corresponds to the reclassification in level 1 or 2 of the fair value of securities that were previously valued on the basis of the share price with a marketability discount. These securities are now valued in direct reference to the share price.

Note 28 Risk management

28.1 Exchange rate risk

28.1.1 Group policy

Since more than half of the Group's operations are conducted outside the eurozone, its sales, earnings and assets and liabilities may be impacted by changes in exchange rates between the euro and other currencies. Sales are particularly affected by euro/US dollar exchange rate fluctuations (with about 42 of sales in 2018 denominated in US dollars) and, more occasionally, by fluctuations in the rate of the euro against other currencies.

In view of the size of the Group's operations in the US, certain operating expenses are settled in US dollars, thereby mitigating the impact of fluctuations in the US dollar on operating income, although this impact remains significant.

Currencies other than the euro and the dollar represent 30% of the Group's revenue. However, as costs incurred in other currencies are limited, the Group is exposed to the risk of fluctuations in these currencies. This exposure is spread over approximately 20 currencies, none of which accounts for more than 7% of the Group's sales. This exposure thus becomes significant only if several of the currencies concerned fluctuate against the euro in the same direction, without any set-off.

The Group's current policy is to seek to hedge the impact of exchange rate fluctuations on budgeted net income. It uses hedging instruments, when they are available at a reasonable cost, in order to mitigate risks relating to currency fluctuations. Its current practice is to put in place global hedges covering similar risks. Hedging contracts are purchased to cover transactions included in the budget and not for speculative purposes.

Distribution subsidiaries are currently mainly billed in their local currencies by manufacturing subsidiaries (except where prohibited by law), so that currency risks can be managed at Corporate level for manufacturing entities.

Whenever possible, the Group hedges currency risks arising on debt denominated in currencies other than those of the country in which operations are located, so as to offset any foreign currency translation risks. However, when these hedges are extended during the loan transaction, the Group recognises foreign exchange gains or losses when the hedges are unwound and simultaneously recontracted. These gains and losses cancel each other out over the term of the loan, but may be material in a given accounting period.

In addition to having an impact on the Group's net income, exchange rate fluctuations can affect its equity: due to its worldwide presence, many of its assets and liabilities are recorded in US dollars or in other foreign currencies. To date, the Group does not hedge these exchange rate risks on its net assets.

Hedges consist mainly of forward currency sales and purchases and options (maturing within 18 months at December 31, 2018). Detailed information on hedging transactions is provided in Note 28.1.3.

28.1.2 Exposure of revenue to exchange rate risks

In millions of euros	Dec. 31, 2018		Dec. 31, 2017	
Euro	**679**	**28%**	**645**	**28%**
Other currencies				
Dollars[(a)]	1,009	42%	930	41%
Chinese yuan	170	7%	151	7%
Indian rupee	59	2%	56	2%
Pound sterling	52	2%	52	2%
Japanese yen	46	2%	46	2%
Canadian dollar	39	2%	38	2%
South Korean won	42	2%	39	2%
Brazilian real	32	1%	50	2%
Australian dollar	33	1%	34	1%
Other currencies	262	11%	249	11%
SUB-TOTAL		**72%**		**72%**
TOTAL	**2,421**	**100%**	**2,288**	**100%**
Sensitivity of revenue	**(17)**		**(16)**	

(a) US and Hong Kong dollars.

The sensitivity analysed above shows the impact on sales of a 1% increase in the euro exchange rate against all currencies.

Consolidated equity

A 10% increase in the euro exchange rate against all currencies would have had the following effect:

	2018	2017
Net income	(38.3)	(36.4)
Shareholders' equity[a]	(128.1)	(70.3)

(a) Translated at the year-end (closing) exchange rate.

Exposure of assets and liabilities

The table below shows the US dollar and the five main currencies to which the Group is exposed at December 31, 2018:

In millions of currency units	USD	CNY	INR	KRW	CAD
Assets denominated in foreign currencies	46	379	839	13,151	10
Liabilities denominated in foreign currencies	(22)	(15)	0	(8)	0
Net exchange exposure before hedging	**24**	**364**	**839**	**13,143**	**10**
Impact of hedging	23	87	0	7,600	0
Net exchange exposure after hedging	**1**	**277**	**839**	**5,543**	**10**
In millions of currency units					
Net exchange exposure after hedging	**1.1**	**35.2**	**10.5**	**4.3**	**6.1**
SENSITIVITY	**(0.1)**	**(3.2)**	**(1.0)**	**(0.4)**	**(0.6)**

The sensitivity analysed above shows the impact of a 10 increase in the exchange rate on the net foreign exchange exposure at December 31, 2018, taking into account hedging transactions.

Exposure of borrowings

The Group's borrowings with third parties are primarily denominated in euros and contracted by bioMérieux SA. However, since these borrowings were contracted in order to finance an acquisition in the US, they were converted into US dollars using a Cross Currency swap (see Note 28.4.1).

The Group's policy is to prefer inter-company financing in the currency of the subsidiary; these loans are generally hedged by currency swap contracts. When it is difficult for the Group to grant loans to its foreign subsidiaries, the subsidiaries borrow from leading banks in their local currency.

28.1.3 Hedging instruments

As part of the currency hedging policy, the following currency hedging instruments were in effect at December 31, 2018:

Currency hedge at December 31, 2018 *In millions of euros*	Expiration date 2018		Market value 2018[a]
	<1 year	1 to 5 years	
Hedges of existing commercial transactions			
• currency forward contracts	70.1	0.0	0.1
• options	0.0	0.0	0.0
TOTAL	**70.1**	**0.0**	**0.1**
Hedges of future commercial transactions			
• currency forward contracts	332.7	1.9	(2.8)
• options	11.8	0.0	0.2
TOTAL	**344.5**	**1.9**	**(2.6)**

(a) Difference between the hedging price and the market price on December 31, 2018.

Currency hedges in effect at December 31, 2017 were as follows:

Currency hedge at December 31, 2017 *In millions of euros*	Expiration date 2017		
	<1 year	1 to 5 years	Market value 2017[(a)]
Hedges of existing commercial transactions			
currency forward contracts	59.6	0.0	(0.7)
options		0.0	0.0
TOTAL	**59.6**	**0.0**	**(0.7)**
Hedges of future commercial transactions			
currency forward contracts	266.4	2.5	(0.3)
options	37.8	0.0	1.1
TOTAL	**304.2**	**2.5**	**0.7**

(a) Difference between the hedging price and the market price on December 31, 2017.

There were no net investment hedges of foreign operations at December 31, 2018.

All of the currency forward contracts and options outstanding at December 31, 2018 had maturities of less than 18 months.

The table below gives the summary of hedging instruments held by the Group, and their variation in fair value:

			Fair value of the hedging instrument at closure		Variation in fair value of the hedging instrument over the financial year	
In millions of euros	Category of the hedge	Notional hedge amount at closure	assets	shareholders' equity and liabilities	of which share recognised in profit/loss	of which share recognised in OCI
FAIR VALUE HEDGE						
EUR interest rate risk						
Debt in EUR	Interest rate swap	300.0	3.5		(2.8)	
Debt in EUR	rate options	-	-	-		
Exchange rate risk					**(0.9)**	
trade receivables in currencies	forward sales	70.7	0.0			
trade debts in currencies	forward purchases	0.7	0.0			
financial receivables in currencies	forward sales	10.4		(0.0)		
borrowings in currencies	forward purchases	155.9		(0.8)		
CASH FLOW HEDGING						
EUR interest rate risk						
Debt in EUR	Interest rate swap					
USD interest rate risk						
loan in $	Cross currency swap	134.3		(17.8)	1.7	(0.6)
Exchange rate risk					**0.8**	**(2.4)**
future commercial sales in currencies	forward sales	331.0		(2.7)		
future commercial purchases in currencies	forward purchases	3.7		(0.1)		
future commercial sales in currencies	options	11.8	0.2			

The Group does not hold instruments coming within the category of net investment hedges.

28.2 Credit risk

Making revenue in more than 160 countries from public organisations of states and private customers, bioMérieux is exposed to a risk of non-payment of debts.

The management of credit risk includes the prior examination of the financial position of customers in order to determine a credit limit, the establishment of specific guarantees or insurance, and monitoring the payment deadline and late payments.

The policy of the group in terms of the depreciation of trade receivables is described in Note 9.

28.3 Liquidity risk

Financial liabilities due in less than one year and in more than one year are classified in the balance sheet as current and non-current liabilities, respectively.

The Group is not exposed to liquidity risk on its current financial assets and liabilities since its total current financial assets far exceed its total current financial liabilities.

Accordingly, the only maturity schedule disclosed pertains to net debt (see Note 16.3).

The table below shows projected cash flows from the bond issue and the hedges related to contractual redemption of the principal at par and to contractual interest payments at December 31, 2018:

In millions of euros	Due within 1 year	Due in 1 to 5 years	Due beyond 5 years
Bond loan[(a)]	(8.6)	(308.6)	0.0
Cross currency swap	(11.6)	(10.4)	0.0
Optional strategies[(b)]	0.0	0.0	0.0
Interest rate swap[(b)]	2.2	2.2	0.0

(a) Contractual flows of principal and interest
(b) Based on the IRS interest rate curve on December 31, 2018

28.4 Interest rate risk

28.4.1 Exposure to interest rate risks

As part of its interest rate risk management policy aimed primarily at managing the risk of an increase in interest rates, the Group splits its debt between fixed and floating interest rates.

The bond issue, after taking account of interest rate derivatives, breaks down as €150 million at fixed rates and €150 million at floating rates capped at 1.20% and with a floor of 0.30%. In April 2017, a new swap contract was taken out to cancel the floating rate as from July 18, 2018.

In order to hedge the exchange rate and interest rate risk on the repayments of the US dollar denominated loan granted by bioMérieux SA to bioMérieux Inc. to finance the acquisition of BioFire, the Group set up a cross currency swap in January 2014 for US$470 million. The instrument thus converts the debt in dollars into a debt in euro, one of the legs of which representing 57% of the notional amount receives the variable interest rate.

An indexed variable-rate real estate lease financing agreement in the amount of €44.4 million was set up in 2016 to finance Campus de etoile. This financing is not backed by any hedging mechanism.

28.4.2 Hedging instruments and sensitivity

At December 31, 2018, the interest rate risk hedging portfolio comprised interest rate swaps for €150 million, options for €150 million and a cross currency swap for US$470 million (see Note 28.4.1).

The market value of these instruments represents a net liability of €13.8 million. It breaks down as follows:

In millions of euros	Market value 2018
Cross currency swap	(18.3)
Options	0.0
Interest rate swap	4.5

Sensitivity of net income to changes in the cost of net debt (excluding the impact of the cross currency swap) attributable to fluctuations in short-term interest rates

The impact on the cost of debt (calculated on a full-year basis) resulting from changes in net debt at year-end attributable to fluctuations in short-term interest rates is shown in the table below including the impact of interest rate hedging:

In millions of euros	Net income
50-bp increase	(0.095)
50-bp decrease	0.000

Sensitivity of equity and net income to changes in the fair value of interest rate derivatives

Changes in the fair value of interest rate derivatives attributable to changes in the interest rate curve adopted at year-end would have the following impact on the Group's equity and net income:

- the impacts recognised in equity relate to the effective portion of the instruments classified as cash flow hedges;
- the impacts recognised in income relate to the ineffective portion of instruments classified as cash flow hedges, and to the impact of changes in the fair value of instruments that do not qualify for hedge accounting.

A change of 50 basis points applied to the entire yield curve at year-end and to transactions in effect at December 31, 2018 would have led to an increase (decrease) in equity and net income for the following amounts (based on constant exchange rates and volatility):

In millions of euros	Equity (excluding profit/loss)	Net income
50-bp increase	0.0	(0.02)
50-bp decrease	0.0	0.02

Sensitivity of equity and net income to changes in the fair value of the cross currency swap

A change of 50 basis points applied to the entire yield curve (euro and US dollar) would have led to an increase (decrease) in equity and net income for the following amounts:

In millions of euros	Shareholders' equity (excl. net income)	Net income
50-bp increase	0.0	0.3
50-bp decrease	0.0	(0.3)

A change of 5% in the euro/U.S. dollar closing rate at year-end (1.1450) as well as to transactions in effect at December 31, 2018 would have led to an increase (decrease) in equity and net income for the following amounts:

In millions of euros	Shareholders' equity (excl. net income)	Net income
Increase of 5%	0.0	5.8
Decrease of 5%	0.0	(6.4)

These impacts on income would have been perfectly offset by the impact that the underlying change would have had if it had been subject to the same changes.

The impact on the cost of debt (calculated on a full-year basis) resulting from a 50 basis point change and a 5% change in the euro/dollar closing rate applied to net debt at year-end attributable to fluctuations in short-term interest rates is shown in the table below including the impact of interest rate hedging on this date:

In millions of euros	Net income
Increase of 50 bp and 5%	3.1
Decrease of 50 bp and 5%	(3.5)

28.5 Counterparty risk

Since there is currently no major financial or economic crisis, the Group is not exposed to a significant credit risk. At December 31, 2018 and 2017, investments were solely in short-term instruments for which a net asset value is calculated daily.

The Group's financial transactions (credit facilities, financial market transactions, financial investments, etc.) are with leading banks and are spread among all of its banking partners in order to limit counterparty risk.

No IFRS 13 adjustments were therefore applied to financial assets in respect of the risk of non-collection.

Still in the context of the IFRS 13 standard, an analysis was carried out to assess the credit risk related to the fair value of financial instruments. Counterparty risk was not considered material given the short-term maturity (less than one year) of the Group's currency hedges, the fair value of interest rate derivatives at December 31, 2018 and the rating of bioMérieux's banking counterparties.

Note 29 Off-balance sheet commitments

Outstanding commitments given or received at December 31, 2018 are described below:

29.1 Off-balance sheet commitments relating to Group companies

- The Group is subject to a number of earn-out clauses relating to acquisitions and disposals. At closure, it was not deemed probable that these clauses would be triggered, or the amount involved could not be reliably estimated.

29.2 Off-balance sheet commitments relating to the Company's financing

- Commitments related to borrowings are described in Note 16.3.
- Commitments related to derivative instruments are described in Note 27.

29.2.1 Commitments given

- Bank guarantees given by the Group in connection with bids submitted totalled €209.1 million at December 31, 2018.

29.2.2 Commitments received

- bioMérieux SA benefits, on December 31, 2018, from a non-drawn syndicated credit facility of €500 million, which was amended in 2018 bringing its maturity to January 2024 (5 years with the option for extension twice for one year, one of which remains to be exercised). (See Note 16.2)

29.3 Off-balance sheet commitments relating to the Group's operating activities

29.3.1 Commitments given

- bioMérieux Inc. and bioMérieux SA are parties to various agreements that provide for payments based on progress in corresponding research projects or a minimum volume of sales (€5.1 million).
- Real estate rent commitments given by Group companies amounted to €71.5 million at December 31, 2018, of which €62.6 million was payable beyond one year. Annual lease costs represented €15.1 million in 2018 and €14.3 million in 2017.
- Within the framework of the share grant plans approved by the Board of Directors, bioMérieux SA, which holds 542 shares as coverage, would need to purchase 92,712 additional shares if all of the promised shares were to be granted. This commitment represents an amount of €5.3 million based on the share price at December 31, 2018.
- bioMérieux SA entered into a ten-year partnership with BIOASTER, a Technological Research Institute in Lyon specialised in infectious diseases. In the period 2012-2015, its contribution to research activities resulted in new partnership agreements being put in place with BIOASTER for almost €4 million. bioMérieux's own employees are also involved in these partnership agreements. A new collaboration cycle was opened for the period between January 1, 2016 and end of July 2020 during which bioMérieux SA has made a commitment to BIOASTER in the same proportions.
- bioMérieux SA participates in a research program coordinated by Institut Mérieux, together with bioMérieux, Transgène, Genosafe and the Genethon association. The aim of this program is to develop a new generation of diagnoses and therapies focusing on cancers, infectious diseases and genetic disorders. This program is known under the acronym "ADNA" (for "Advanced Diagnostics for New therapeutic Approaches"). The program receives financing from the French government's Industrial Innovation Agency (*Agence de l'innovation industrielle*), which merged with OSEO ANVAR in 2007, and was renamed Bpifrance in July 2013. The public financing agreement was approved by the European authorities on October 22, 2008. In this context, and given the addendums that modified the initially-adopted research programme, bioMérieux SA began research and development work for an estimated amount of €67.5 million covering the period 2007 to 2017. The programme ended in December 2017. In return, bioMérieux SA received subsidies (€16.1 million) and repayable grants (€7.5 million). In case of success, bioMérieux SA will have to reimburse the reimbursable aid according to a payment schedule that depends on the revenue made, then pay a profit share until 2029 (3.4% of revenue). Other commitments given (endorsements and guarantees other than real estate rent obligations) amounted to €2.2 million.
- bioMérieux SA has committed to participate in a capital increase of ATI in the amount of €0.2 million.

29.3.2 Commitments received

- Other commitments received amounted to €16.4 million.

Note 30 Transactions with related parties

30.1 Directors' and officers' compensation

The Company's directors and members of the Executive Committee were paid an aggregate €12.2 million in compensation in 2018.

Executive compensation *In millions of euros*	2018	2017
Fixed compensation	4.8	5.4
Variable compensation	4.7	5.3
Benefits-in-kind	0.2	0.2
Free shares	2.4	4.8
Directors' fees	0.0	0.1
Termination benefits	0.0	0.6
TOTAL	**12.2**	**16.4**

30.2 Other transactions with non-consolidated affiliates

- The Institut Mérieux, which holds 58.9% of bioMérieux SA on December 31, 2018, provided services and research for the bioMérieux Group standing at €7.6 million over the financial year, reinvoiced to bioMérieux Inc. for €2.6 million and BioFire for €1.1 million. bioMérieux SA reinvoiced €0.5 million to Institut Mérieux for expenses paid on its behalf.
- During 2018, the Group supplied €10.9 million worth of reagents and instruments to entities of the Mérieux NutriSciences Corp. group, in which Institut Mérieux holds a majority interest.
- Théra Conseil, which is 99.2% owned by Institut Mérieux, billed bioMérieux SA €1.9 million for services in respect of 2018.
- Also during the year, bioMérieux SA contributed €2 million to the Fondation Christophe & Rodolphe Mérieux. Conversely bioMérieux SA reinvoiced the Fondation Mérieux €0.2 million for expenses paid on its behalf.
- ABL, wholly owned by Institut Mérieux, invoiced raw materials to bioMérieux SA for €1.2 million during the 2018 financial year. Also, ABL benefits from a loan of $2.3 million subscribed from bioMérieux Inc. During the 2018 financial year, bioMérieux SA invoiced services for €1.7 million to Mérieux University, which it holds at 40%, the remaining 60% being held by the Institut Mérieux (40%) and Mérieux NutriSciences (20%). Conversely, it paid €4.3 million to Mérieux University for training fees.

Note 31 Subsequent events

In February 2019, bioMérieux acquired the company Invisible Sentinel Inc. The total amount paid stood at $75 million. The company is based in Philadelphia (United States) and develops, manufactures and markets molecular diagnostic solutions for the detection of disease-causing organisms and other contaminants in food and drink.

The company employs 40 persons and had revenue of about $9 million in 2018.

Note 32 Consolidation

bioMérieux is a fully consolidated entity of Compagnie Mérieux Alliance (17 Rue Bourgelat, 69002 Lyon, France).

Note 33 List of consolidated companies at December 31, 2018

Changes in scope that took place in 2018 are described in Note 1.1.

		2018(a)	2017	2016
bioMérieux SA	69280 Marcy-l'Etoile – France R.C.S. Lyon B 673 620 399			Parent company
AB bioMérieux	Dalvägen 10 169,169 Solna, Stockholm – Sweden	100%	100%	100%
ABG STELLA	1105 N Market St Suite 1300 Wilmington, Delaware 19801 – US	100%	100%	100%
Advencis SAS	1 Rue Gambrinus, Parc de la Brasserie 67190 Mutzig – France			100%
AES Canada Inc.	500 boul. Cartier Ouest, suite 262 H7V 5B7 Laval, QC – Canada	100%	100%	100%
AES Chemunex GmbH	Zeiloch 20 – 76646 Bruschal – Germany		100%	100%
Applied Maths Inc.	11940 Jollyville Road, Suite 115N Austin, Texas 78759 – US	100%	100%	100%
Applied Maths NV	Keistraat 120,9830 Sint-Martens-Latem Belgium	100%	100%	100%
Astute Medical Inc.	3550 General Atomics Court Building 02/620 San Diego, CA 92121 - United States	100%		
Bacterial Barcodes Inc.	425 River Road – Athens – GA 30602 – US	100%	100%	100%
BioFire Defense Inc.	79 W 4500 S, Suite 14 Salt Lake City, UT 84107 – US	100%	100%	100%
BioFire Diagnostics Inc.	390 Wakara Way Salt Lake City, Utah 84108 – US	100%	100%	100%
bioMérieux South Africa	1st Floor, 44 on Grand Central, 1 Bond Street, cnr Grand Central Boulevard, Midrand 1682 – South Africa	100%	100%	100%
bioMérieux West Africa	Avenue Joseph Blohorn (08) BP 2634 Abidjan 08 – Ivory Coast	100%	100%	100%
bioMérieux Algeria	Bois des cars 2 – Lot 11 1er étage – 16302 Dely Ibrahim Algiers – Algeria	100%	100%	100%
bioMérieux Germany	Weberstrasse 8 – D 72622 Nürtingen – Germany	100%	100%	100%
bioMérieux Argentina	Edificio Intecons – Arias 3751 3er piso – C1430CRG Buenos Aires – Argentina	100%	100%	100%
bioMérieux Australia	Unit 25B, Parkview Business Centre – 1 Maitland Place Baulkham Hills NSW 2153 – Australia	100%	100%	100%
bioMérieux Austria	Eduard-Kittenberger-Gasse 95-B, A-1230 Wien – Austria	100%	100%	100%
bioMérieux Belgium	Media Square – 18-19 Place des Carabiniers 1030 Brussels – Belgium	100%	100%	100%
bioMérieux Benelux BV	Regus - Amersfoort A1, Databankweg 26, 3821 AL Amersfoort - The Netherlands	100%	100%	100%
bioMérieux Brazil	Estrada Do Mapuá, 491 Jacarepaguá – CEP 22713,320 Rio de Janeiro – RJ – Brazil	100%	100%	100%
bioMérieux Canada	7815 boulevard Henri Bourassa – West – H4S 1P7 Saint Laurent (Québec) – Canada	100%	100%	100%
bioMérieux Chile	Seminario 131 – Providencia – Santiago – Chile	100%	100%	100%
bioMérieux China	19/Floor Billion Plaza8 Cheung Yue Street – Kowloon – Hong Kong	100%	100%	100%

		2018(a)	2017	2016
bioMérieux Colombia	Carrera 7 No. 127–48 – Oficina 806 – Bogota DC – Colombia	100%	100%	100%
bioMérieux Korea	1st and 2nd floor Yoo Sung Building #830-67, Yeoksam-dong, Kangnam ku – Seoul – South Korea	100%	100%	100%
bioMérieux CZ	Hvezdova 1716/2b – Prague 4 – 140 78 – Czech Republic	100%	100%	100%
bioMérieux Denmark	Lautruphøj 1-3, DK-2750, Ballerup – Denmark	100%	100%	100%
bioMérieux Spain	Manuel Tovar 45-47 – 28034 Madrid – Spain	100%	100%	100%
bioMérieux Finland	Tekniikantie 14 FI-02150 Espoo – Finland	100%	100%	100%
bioMérieux Greece	Papanikoli 70 – 15232 Halandri – Athens – Greece	100%	100%	100%
bioMérieux Hong Kong Investment	19/Floor Billion Plaza 8 Cheung Yue Street – Kowloon – Hong Kong	100%	100%	100%
bioMérieux Hungary	Vaci ut 175 – 1138 Budapest – Hungary	100%	100%	100%
bioMérieux Inc.	100 Rodolphe Street – Durham NC 27712 – US	100%	100%	100%
bioMérieux India	A–32, MohanCo-operative Ind. Estate – New Delhi 110,044 – India	100%	100%	100%
bioMérieux International SAS (formerly Stella SAS)	69280 Marcy-l'Etoile – France		100%	100%
bioMérieux Italy	Bagno a Ripoli, Via di Campigliano, 58 – 50012 Ponte a Ema – Florence – Italy	100%	100%	100%
bioMérieux Japan Ltd (formerly Sysmex bioMérieux)	Akasaka Tameike Tower 2F, 2-17-7, Akasaka, Minato-ku, Tokyo	100%	100%	66%
bioMérieux Kenya	Delta Office Suites, Land Reference No. 4393/27, Waiyaki Way, P. O. Box 30333 – 00100 - G.P.O Nairobi - Kenya	100%		
bioMérieux Malaysia	A-15-13A Tower A, Menara Prima Avenue, Jalan PJU 1/39, Dataran Prima 47301 Petaling Jaya, Selangor darul Ehsan - Malaysia	100%	100%	100%
bioMérieux Mexico	Chihuahua 88, col. Progreso – Mexico 01080, DF – Mexico	100%	100%	100%
bioMérieux Middle East	DHCC Al Baker Building 26 - Office 107 - P.O. Box 505 201 Dubai – United Arab Emirates	100%	100%	100%
bioMérieux Norway	Nydalsveien 28 P.B. 4814 Nydalen - N-0484 Oslo - Norway	100%	100%	100%
bioMérieux Poland	ul. Gen. J. Zajączka 9 - 01-518 Warsaw - Poland	100%	100%	100%
bioMérieux Portugal	Av. 25 de Abril de 1974, No. 23-3° – 2795-197 Linda A Velha Portugal	100%	100%	100%
bioMérieux United Kingdom	Grafton Way, Basingstoke Hampshire RG 22 6HY - United Kingdom	100%	100%	100%
bioMérieux Russia	1st Nagatinskiy proezd, 10, str.1, business center "Newton Plaza" - Moscow 115 533 - Russia	100%	100%	100%

		2018[(a)]	2017	2016
bioMérieux (Shanghai) Biotech Co. Ltd (formerly Meikang)	NO. 4633 Pusan Road, Kangqiao Industrial Park – Pudong New District – Shanghai – 201315 – China	100%	100%	100%
bioMérieux Shanghaï Company Ltd	NO. 4633 Pusan Road, Kangqiao Industrial Park – Pudong New District – Shanghai – 201315 – China	100%	100%	100%
bioMérieux Singapore	11 – Biopolis Way – Helios – Unit # 10-04 – 138667 – Singapore	100%	100%	100%
bioMérieux Sweden	Hantverksvagen 15 – 43633 Askim – Sweden	100%	100%	100%
bioMérieux SRB doo	Belgrade Office Park, Djordja Stanojevica 12/III, New Belgrade, 11070 Belgrade - Serbia	100%	100%	100%
bioMérieux Switzerland	51 Avenue Blanc – Case Postale 2150 – 1202 Geneva – Switzerland	100%	100%	100%
bioMérieux Thailand	3195/9 Vibulthani Tower, 4th floor – Rama IV Road – Klongton – Klongtoey – Bangkok 10110 – Thailand	100%	100%	100%
bioMérieux Turkey	Isiklar Cad. NO 29, Atasehir - 34750 Istanbul - Turkey	100%	100%	100%
bioMérieux Vietnam	Floor 10, Vinaconex Tower, 34 Lang Ha, Lang Ha ward, Dong Da District, Hanoi – Vietnam	100%	100%	100%
BTF Pty Limited	PO Box 599 – North Ryde BC – NSW 1670 – Australia	100%	100%	100%
Cambridge Biotech	365 Plantation Street One Biotech Park Worcester, MA 01605 – United States	100%	100%	100%
Huilai	Room 8738, Building 1, No. 1758, Luchaogang Road, Nanhui New Town, Pudong New District - China	100%		
Hyglos Invest GmbH	Am Neuland 3 – 82347 Bernried am Starnberger See Germany	100%	100%	100%
Hyglos GmbH	Am Neuland 3 – 82347 Bernried am Starnberger See Germany	100%	100%	100%
Mérieux Université	113 Route de Paris – 69160 Tassin-La-Demi-Lune – France	40%	40%	40%
Quercus Scientific NV	Keistraat 120,9830 Sint-Martens-Latem Belgium	100%	100%	100%
RAS Lifesciences	Plot NO. 13, 4-7-18/13/2, Raghavendra Nagar, Nacharam, Hyderabad - 500 076 - India	100%	70%	70%
SSC Europe	ul. Gen. J. Zajączka 9 - 01-518 Warsaw - Poland	100%	100%	100%
Suzhou Hybiome Biomedical Engineering Co Ltd	Building 4, No. 8, Jinfeng Road, Suzhou High-tech Zone - China	54%		
Yan Set Invest Development	19/F Billion Plaza, 8 Cheung Yue Street Cheung Sha Wan Kowloon - Hong-Kong	100%	100%	100%

(a) Percentage control is identical to percentage interest, except in the case of Hyglos Invest GmbH, for which the percentage interest is 75%.