				1	EUR
NAT.	Filing Date	Nr.	P.	U.	D.

CONSO 1

CONSOLIDATED ANNUAL ACCOUNTS AND OTHER DOCUMENTS TO BE FILED UNDER BELGIAN COMPANY LAW

IDENTIFICATION DETAILS

NAME OF THE CONSOLIDATING COMPANY ~~OR THE CONSORTIUM~~ (1) (2) :

Materialise GROUP

Legal form: *Public limited company*

Address: *Technologielaan* Nr.: *15* Box:

Postal code: *3000* Municipality: *Leuven*

Country: *Belgium*

Register of Legal persons – commercial court

Website (3): http://www.

Company identification number *BE 0441.131.254*

CONSOLIDATED ANNUAL ACCOUNTS | ANNUAL ACCOUNTS IN EUROS (2 decimals) |

Presented tot he general meeting of *04 / 06 / 2019*

Regarding the period from *01 / 01 / 2018* To *31 / 12 / 2018*

Preceding period from *01 / 01 / 2017* to *31 / 12 / 2017*

The amounts for the preceding period are identical tot he ones previously published: **yes** / ~~no~~

Included with these consolidated accounts are:
- the consolidated annual report
- the auditors report on the consolidated annual accounts

IN CASE THE CONSOLIDATED ACCOUNTS OF A FOREIGN COMPANY ARE SUBMITTED BY A BELGIAN SUBSIDIARY

Name of the Belgian subsidiary which deposits the accounts (article 113, § 2, 4°a of the Company Law)

Company identification number of the belgian subsidiary which deposits the accounts

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Total number of pages deposited: *7* Number of sections of the standard form not deposited because they serve no useful purpose: *4, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8.1, 5.8.2, 5.8.3, 5.8.4, 5.8.5, 5.9.1, 5.9.2, 5.9.3, 5.9.4, 5.9.5, 5.9.6, 5.10.1, 5.10.2, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 7, 8, 9*

Signature (name and position)

Signature (name and position)

P. CEYS
DIRECTOR

(1) Strike out what is not applicable.
(2) A consortium has to fill in disclosure IV (page CONSO 5.4).
(3) Optional information.

OCR9002

LIST OF DIRECTORS AND MANAGERS OF THE CONSOLIDATING COMPANY AND OF THE AUDITORS REGARDING A COMPLIMENTARY REVIEW OR CORRECTION ASSIGNMENT OF THE CONSOLIDATED ANNUAL ACCOUNT

LIST OF THE DIRECTORS, MANAGERS AND AUDITORS

COMPLETE LIST with surname, first names, profession, place of residence (address, number, postal code and municipality) and position within the company

A Trec *Nr.: BE 0456.384.307* *Timmermansstraat 32, 8340 Damme, Belgium* *Represented by:* *Johan De Lille* *Gaversesteenweg 604, 9820 Merelbeke, Belgium*	*Director* *03/06/2008 - 04/06/2019*
Wilfried, Frans, Isidoor Vancraen *Jan Van der Vorstlaan 19, 3040 Huldenberg, Belgium*	*Managing director* *18/11/2003 - 04/06/2019*
Jos Van der Sloten *Langestraat 62, 3190 Boortmeerbeek, Belgium*	*Director* *03/06/2008 - 04/06/2019*
Pol Ingelaere *Hazegoedweg 13, 8800 Roeselaere, Belgium*	*Director* *07/06/2011 - 04/06/2019*
Peter Leys *Strooistraat 57, 1860 Meise, Belgium*	*Director* *28/11/2013 - 04/06/2019*
Jurgen Gino Ingels *Clemenceaustraat 117 box A, 2860 Sint-Katelijne-Waver, Belgium*	*Director* *28/11/2013 - 04/06/2019*
Lieve Verplancke *Dikkemeerweg 54, 1653 Dworp, Belgium*	*Director* *02/06/2015 - 04/06/2019*
Hilde Ingelaere *Jan van der Vorstlaan 19, 3040 Huldenberg, Belgium*	*Director* *18/11/2003 - 04/06/2019*
Bart Luyten *Hanswijkstraat 37 box A, 2820 Bonheiden, Belgium*	*Director* *06/06/2017 - 04/06/2019*
Volker Hammes *Altbachstrasse 25, 67435 Neustadt An der Weinstrasse, Germany*	*Director* *28/11/2018 - 04/06/2019*
BDO Bedrijfsrevisoren CVBA *Nr.: BE 0431.088.289* *Da Vincilaan 9 box E 6, 1930 Zaventem, Belgium* *Membership nr.: B00023* *Represented by:* *Veerle Catry* *Da Vincilaan 9 box E 6, 1930 Zaventem, Belgium* *Membership nr.: A01868*	*Auditor* *07/06/2016 - 04/06/2019*

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Financial Statements for the Years Ended December 31, 2018, 2017 and 2016

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Materialise NV
Leuven, Belgium

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Materialise NV (the "Company") and subsidiaries as of December 31, 2018, 2017 and 2016, the related consolidated income statements, statements of comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and subsidiaries at December 31, 2018, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2018, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Boards.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

BDO Bedrijfsrevisoren CVBA

/s/ Veerle Catry

We have served as the Company's auditor since 2014.

Zaventem, Belgium
April 29, 2019

Consolidated income statements

in 000€, except per share data	Notes	For the year ended December 31, 2018	2017*	2016
Revenue	22.1	184,721	142,573	114,477
Cost of sales	22.2	(82,299)	(62,952)	(46,706)
Gross profit		**102,422**	**79,621**	**67,771**
Research and development expenses	22.3	(22,416)	(19,959)	(17,682)
Sales and marketing expenses	22.4	(46,303)	(38,935)	(36,153)
General and administrative expenses	22.5	(32,310)	(24,876)	(20,041)
Net other operating income	22.6	3,771	4,541	6,212
Operating profit		**5,164**	**392**	**107**
Financial expenses	22.8	(4,864)	(4,728)	(2,437)
Financial income	22.9	3,627	3,210	2,039
Share in loss of joint venture	8	(475)	(469)	(1,018)
Profit (loss) before taxes		**3,452**	**(1,595)**	**(1,309)**
Income taxes	22.10	(425)	(522)	(1,710)
Net profit (loss) for the year		**3,027**	**(2,117)**	**(3,019)**
Net profit (loss) attributable to:				
The owners of the parent		3,027	(2,117)	(3,019)
Non-controlling interest		—	—	—
Earnings per share attributable to the owners of the parent				
Basic	23	0.06	(0.04)	(0.06)
Diluted	23	0.06	(0.04)	(0.06)

* The year 2017 has been restated to reflect certain reclassification adjustments and the final accounting of the ACTech business combination. See Note 2 for more information

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated statements of comprehensive income

in 000€	Notes	For the year ended December 31, 2018	2017*	2016
Net profit (loss) for the year		**3,027**	**(2,117)**	**(3,019)**
Other comprehensive loss				
Exchange differences on translation of foreign operations †		(47)	(691)	(1,833)
Other comprehensive loss, net of taxes		(47)	(691)	(1,833)
Total comprehensive income (loss) of the year, net of taxes		**2,980**	**(2,808)**	**(4,852)**
Total comprehensive income (loss) attributable to:				
The owners of the parent		2,980	(2,808)	(4,852)
Non-controlling interest		—	—	—

† May be reclassified subsequently to profit & loss

* The year 2017 has been restated to reflect the final accounting of the ACTech business combination. See Note 2 for more information.

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated statements of financial position

in 000€	Notes	As of December 31, 2018	2017*	2016
Assets				
Non-current assets				
Goodwill	5	17,491	17,552	8,860
Intangible assets	6	26,326	28,600	9,765
Property, plant & equipment	7	92,537	87,065	45,063
Investments in joint ventures	8	—	31	—
Deferred tax assets	22.10	315	304	336
Other non-current assets	10	7,237	3,667	2,154
Total non-current assets		**143,906**	**137,219**	**66,178**
Current assets				
Inventories and contracts in progress	9	9,986	11,027	7,870
Trade receivables	11	36,891	35,582	27,479
Other current assets	10	6,936	7,675	4,481
Cash and cash equivalents	12	115,506	43,175	55,912
Total current assets		**169,319**	**97,459**	**95,742**
Total assets		**313,225**	**234,678**	**161,920**

* The year 2017 have been restated to reflect the final accounting of the ACTech business combination. See Note 2 for more information.

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated statements of financial position

in 000€	Notes	As of December 31, 2018	2017 *	2016
Equity and liabilities				
Equity				
Share capital	13	3,050	2,729	2,729
Share premium	13	136,637	79,839	79,019
Consolidated reserves	13	(1,848)	(3,711)	(1,603)
Other comprehensive loss		(1,850)	(1,803)	(1,112)
Equity attributable to the owners of the parent		135,989	77,054	79,033
Total equity		**135,989**	**77,054**	**79,033**
Non-current liabilities				
Loans & borrowings	15	92,440	81,788	28,267
Deferred tax liabilities	22.10	6,226	7,415	1,325
Deferred income	18	4,587	3,768	3,588
Other non-current liabilities	16	868	1,904	1,873
Total non-current liabilities		**104,121**	**94,875**	**35,053**
Current liabilities				
Loans & borrowings	15	13,598	12,769	5,539
Trade payables		18,667	15,670	13,400
Tax payables	17	2,313	2,023	926
Deferred income	18	23,195	18,791	17,822
Other current liabilities	19	15,342	13,496	10,147
Total current liabilities		**73,115**	**62,749**	**47,834**
Total equity and liabilities		**313,225**	**234,678**	**161,920**

* The year 2017 have been restated to reflect the final accounting of the ACTech business combination. See Note 2 for more information.

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated statements of changes in equity

in 000€	Notes	Share capital	Share premium	Consolidated reserves	Other comprehensive loss	Total	Non-controlling interest	Total equity
		Attributable to the owners of the parents						
At January 1, 2018		**2,729**	**79,839**	**(3,711)**	**(1,803)**	**77,054**	**—**	**77,054**
IFRS 15—impact on opening reserves**	2	—	—	(1,173)	—	(1,173)	—	(1,173)
Adjusted equity At January 1, 2018		**2,729**	**79,839**	**(4,884)**	**(1,803)**	**75,881**	**—**	**75,881**
Net profit for the year		—	—	3,027	—	3,027	—	3,027
Other comprehensive loss		—	—	—	(47)	(47)	—	(47)
Total comprehensive income (loss)		**—**	**—**	**3,027**	**(47)**	**2,980**	**—**	**2,980**
Capital increase in cash	13	312	59,575	—	—	59,887	—	59,887
Capital increase through exercise of warrants	13	9	593	—	—	602	—	602
Costs from capital increase	13	—	(4,003)	—	—	(4,003)	—	(4,003)
Equity-settled share-based payment expense	14	—	633	9	—	642	—	642
At December 31, 2018		**3,050**	**136,637**	**(1,848)**	**(1,850)**	**135,989**	**—**	**135,989**

** The Group has initially applied IFRS 15 using the cumulative effect method. Under this method, the comparative information is not restated. See Note 2 for more information.

in 000€	Notes	Share capital	Share premium	Consolidated reserves	Other comprehensive loss	Total	Non-controlling interest	Total equity
		Attributable to the owners of the parents						
At January 1, 2017		**2,729**	**79,019**	**(1,603)**	**(1,112)**	**79,033**	**—**	**79,033**
Net loss for the year*		—	—	(2,117)	—	(2,117)	—	(2,117)
Other comprehensive loss		—	—	—	(691)	(691)	—	(691)
Total comprehensive loss*		**—**	**—**	**(2,117)**	**(691)**	**(2,808)**	**—**	**(2,808)**
Equity-settled share-based payment expense	14	—	820	9	—	829	—	829
At December 31, 2017*		**2,729**	**79,839**	**(3,711)**	**(1,803)**	**77,054**	**—**	**77,054**

* The year 2017 has been restated to reflect the final accounting of the ACTech business combination. See Note 2 for more information.

in 000€	Notes	Share capital	Share premium	Consolidated reserves	Other comprehensive income (loss)	Total	Non-controlling interest	Total equity
		Attributable to the owners of the parents						
At January 1, 2016		**2,729**	**78,098**	**1,407**	**721**	**82,955**	**—**	**82,955**
Net loss for the year		—	—	(3,019)	—	(3,019)	—	(3,019)
Other comprehensive loss		—	—	—	(1,833)	(1,833)	—	(1,833)
Total comprehensive loss		**—**	**—**	**(3,019)**	**(1,833)**	**(4,852)**	**—**	**(4,852)**
Equity-settled share-based payment expense	14	—	921	9	—	930	—	930
At December 31, 2016		**2,729**	**79,019**	**(1,603)**	**(1,112)**	**79,033**	**—**	**79,033**

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated cash flow statements

in 000€	Notes	For the year ended December 31, 2018	2017*	2016
Operating activities				
Net profit (loss) for the year		3,027	(2,117)	(3,019)
Non-cash and operational adjustments				
Depreciation of property, plant & equipment	7	12,223	8,754	6,420
Amortization of intangible assets	6	5,064	3,822	1,954
Share-based payment expense	14	1,075	1,033	977
Loss (gain) on disposal of property, plant & equipment	7	(83)	25	(149)
Movement in provisions		5	61	18
Movement reserve for bad debt and slow moving inventory	11	1,293	502	77
Financial income	22.9	(581)	(381)	(172)
Financial expense	22.8	2,172	1,597	983
Impact of foreign currencies		(299)	302	(400)
Share in loss of joint venture (equity method)	8	475	469	1,018
Income taxes and deferred taxes	22.10	425	522	1,712
Fair value adjustment contingent consideration	4	(192)	—	(455)
Other		87	(22)	(78)
Working capital adjustment and income tax paid				
Increase in trade receivables and other receivables		(3,156)	(4,973)	(6,465)
Decrease (increase) in inventories and contracts in progress		812	(417)	(2,482)
Increase in trade payables and other payables		7,341	2,343	9,086
Income tax paid		(1,368)	(1,569)	(530)
Net cash flow from operating activities		**28,320**	**9,951**	**8,495**

* The year 2017 has been restated to reflect the final accounting of the ACTech business combination. See Note 2 for more information.

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated cash flow statements

in 000€	Notes	For the year ended December 31, 2018	2017*	2016
Investing activities				
Purchase of property, plant & equipment	7	(18,270)	(27,733)	(12,237)
Purchase of intangible assets	6	(1,836)	(4,345)	(2,342)
Proceeds from the sale of property, plant, equipment and intangibles (net)	7	281	221	1,928
Acquisition of subsidiary (net of cash)	4	—	(27,173)	—
Investments in joint-ventures	8	—	(500)	—
Other equity investments in non-listed entities	10	(2,671)	—	—
Interest received		363	281	11
Net cash flow used in investing activities		**(22,133)**	**(59,249)**	**(12,640)**
Financing activities				
Proceeds from loans & borrowings	15	32,554	54,319	14,669
Repayment of loans & borrowings	15	(18,820)	(11,904)	(2,796)
Repayment of finance leases	15	(3,102)	(2,947)	(1,898)
Capital increase in parent company	13	60,489	—	—
Direct attributable expense capital increase	13	(4,003)	—	—
Interest paid		(1,733)	(955)	(630)
Other financial expense, net		(150)	(472)	(79)
Net cash flow from financing activities		**65,235**	**38,041**	**9,266**
Net increase/(decrease) of cash and cash equivalents		**71,422**	**(11,257)**	**5,121**
Cash and cash equivalents at beginning of the year	12	43,175	55,912	50,726
Exchange rate differences on cash and cash equivalents		908	(1,480)	65
Cash and cash equivalents at end of the year	12	115,506	43,175	55,912

* The year 2017 has been restated to reflect the final accounting of the ACTech business combination. See Note 2 for more information.

The accompanying notes form an integral part of these consolidated financial statements.

Notes to the consolidated financial statements

1 Corporate information

Materialise NV is a limited liability company with its registered office at Technologielaan 15, 3001 Leuven, Belgium. The consolidated financial statements comprise Materialise NV (the "Company" or "Parent") and its subsidiaries (collectively, the "Group"). See Note 28 for a list of subsidiaries of the Company.

The Group is a leading provider of additive manufacturing (AM) software and of sophisticated 3D printing services. The products and services of the Group are organized in the three segments: Materialise Medical, Materialise Software and Materialise Manufacturing. The Group sells its products in Europe, the Americas, Africa and Asia-Pacific.

The consolidated financial statements of the Group for the year ended December 31, 2018 were approved and authorized for issue on April 29, 2019 in accordance with a resolution of the Parent's Board of Directors.

2 Basis of preparation

The consolidated financial statements of the Group for the three years ended December 31, 2018, 2017 and 2016 were prepared in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) (collectively "IFRS") and with International Financial Reporting Standards (IFRS) as adopted by the European Union ("EU-IFRS").

These consolidated financial statements have been prepared on a historical cost basis, except for the assets and liabilities that have been acquired as part of a business combination which have been initially recognized at fair value and certain financial instruments which are measured at fair value.

The consolidated financial statements are presented in thousands of euros (K€ or thousands of €) and all "currency" values are rounded to the nearest thousand (€000), except when otherwise indicated.

The preparation of financial statements in compliance with adopted IFRS requires the use of certain critical accounting estimates. It also requires Group management to exercise judgment in applying the Group's accounting policies. The areas where significant judgment and estimates have been made in preparing the financial statements and their effect are disclosed in Note 3.

New standards, interpretations and amendments adopted by the Group

The Group has adopted the following new and revised standards and interpretations issued by the IASB and IFRIC that are relevant to its operations and effective for accounting periods beginning on January 1, 2018.

- IFRS 9 *Financial Instruments;*
- IFRS 15 *Revenue from Contracts with Customers*

Several other amendments and interpretations apply for the first time in 2018, but do not have an impact on the consolidated financial statements of the Group. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

The application of the above relevant new standards and interpretations are explained below.

IFRS 9 Financial instruments

In July 2014, the IASB issued the final version of IFRS 9 Financial Instruments, or IFRS 9, that replaces IAS 39 Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. IFRS 9 brings together all three aspects of the accounting for financial instruments project: classification and measurement, impairment and hedge accounting.

We have adopted the new standard on the required effective date retrospectively, with an initial application date of January 1, 2018.

(a) Classification and measurement

The Group did not have a significant impact on its consolidated income statement, consolidated statement of comprehensive income, consolidated statement of financial position or consolidated statement of changes in equity on applying the classification and measurement requirements of IFRS 9. It continues to measure at fair value all financial assets currently measured at fair value. The equity shares in non-listed companies are intended to be held for the foreseeable future and are designated at fair value through OCI.

Current and non-current trade receivables are held to collect contractual cash flows and are expected to give rise to cash flows representing solely payments of principal and interest. The Group continues to measure these at amortized cost under IFRS 9. Following the assessment of the contractual cash flow characteristics of its debt instruments, the Group concluded that the loans and trade receivables can be classified at amortized cost measurement under IFRS 9.

(b) Impairment

IFRS 9 requires us to record expected credit losses on all of our debt securities, loans and trade receivables, either on a 12-month or lifetime basis. We have applied the simplified approach and record lifetime expected losses on all trade receivables. The lifetime expected losses are determined based on a provision matrix applied to each of the trade receivable aging buckets.

We have applied the transition exception as foreseen in IFRS 9 whereby the application of IFRS 9 "impairment" does not need to be recorded retroactively for all reporting periods presented as we cannot avoid the use of hindsight. The application of IFRS 9 resulted in an additional expense/provision of K€340 in 2018 on our consolidated income statement, consolidated statement of comprehensive income, consolidated statement of financial position and consolidated statement of changes in equity. The impact on the initial date of application was not material.

We refer to Note 3 for the accounting policy on the financial assets and liabilities.

(c) Hedge accounting

The Group does not apply hedge accounting for its derivatives. Derivatives are measured at fair value with changes through the consolidated income statement.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 Revenue from Contracts with Customers, or IFRS 15, was issued in May 2014 and establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The standard provides a single, principles based five-step model to be applied to all contracts with customers as follows:

- Identify the contract(s) with a customer;
- Identify the performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price to the performance obligations in the contract; and
- Recognize revenue when (or as) the entity satisfies a performance obligation.

The new revenue standard has superseded all current revenue recognition requirements under IFRS. We have adopted the new standard on the required effective date of January 1, 2018 and have applied the modified retrospective transition method to those contracts that were not completed at January 1, 2018. When applying the modified retrospective transition method, the cumulative effect of initially applying IFRS 15 is recognized as an adjustment to the opening balance of our consolidated reserves in 2018.

The effect of adopting IFRS 15 is as follows:

OEM software license and distribution agreements

We regularly enter into software license and distribution agreements that may include the right for a partner to embed the Materialise software in its own property software or machine, that is marketed and sold to end-customers. Typically, those contracts provide a license to use and market the software, training and one year of maintenance and support service. Those performance obligations are "distinct". Certain contracts may also include development services. Those development services are in general also "distinct" services except in case the customer cannot benefit from the license with readily available resources without the development services and the development services significantly customize/modify the existing license. In that case, those development services are combined with the license and recognized over the term of the license.

Those agreements may also provide for step-based volume discounts when certain sales targets are achieved and discounts when certain development revenue is achieved. Prior to adopting IFRS 15, volume discounts were recognized based on a reasonable estimate of the volume discounts to be paid and deducted from revenue over the contract period (based on sales). Certain other discounts were immediately deducted in full from revenue when they are expected to be met. Under IFRS 15, the transaction price will include an estimate of all the discounts payable under the contract period and will be subsequently allocated to the performance obligations. The impact on revenue was however not material as of January 1, 2018.

Medical partner license, supply and distribution agreements

Medical partner license, supply and distribution agreements generally include a time-based license for online order management system and surgical guide planning software, surgical guide development services and 3D printing, training, set-up and on boarding services and maintenance services. The consideration for the license is in general included within the price for a surgical guide (whether or not via an explicit royalty added to the price). The accounting prior to adoption of IFRS 15 is not significantly different than under IFRS 15, except for:

- The license is in most cases not considered "distinct" and may be combined with the "surgical guide services and printing" as the license as such may not have a significant benefit for the partner without other readily available resources;
- Certain agreements may include significant development services other than the standard set-up and on boarding services, which significantly modify/customize the existing platform for the purpose of the partner and are not considered "distinct" and combined with the license; and
- Allocation of the transaction price over the "distinct" performance obligations may result in higher or lower revenue allocated to a performance obligation than the contractual pricing.

The impact on January 1, 2018 of the above differences on revenue is K€323 additional deferred revenue.

One contract with a non-cancellable contract period of 10 years had an up-front non-refundable fee for exclusivity for a total of €2.25 million. Prior to adopting IFRS 15, this fee has been fully recognized in previous years (from 2010 onwards). Under IFRS 15, this fee will be included in the transaction price and allocated to the "distinct" performance obligations of the contract which are primarily software license, surgical guides services and printing, maintenance, and development services. The impact of this difference on January 1, 2018 is a higher deferred revenue of K€850 with a debit of the accumulated deficit for the same amount. This deferred revenue will be recognized in revenue over the next three years.

Other revenue streams

IFRS 15 is not expected to have significant impacts on our other revenue streams such as 3D print products and software license and related maintenance.

Impact

Based on our above detailed assessment, the cumulative effect recognized in retained earnings as of January 1, 2018 is as follows (positive is a debit):

in 000€	January 1, 2018
Software	—
Medical	1,173
Manufacturing	—
Total catch-up adjustment	**1,173**

The following table summarises the impact of adopting IFRS 15 on the Group's consolidated statement of financial position as at December 31, 2018 and its consolidated income statement for the year then ended. There was no material impact on the Group's statement of cash flows for the year ended December 31, 2018, except on the impact of the deferred income on the line "net profit of the year" fully compensated by the impact on the line "Increase in trade payables and other payables."

	As of December 31, 2018			
Consolidated statement of financial position in 000€	As reported	IFRS 15 Catch-up adjustment	IFRS 15 Adjustments after initial adoption	Amounts without adoption of IFRS 15
Equity and liabilities				
Equity				
Share capital	3,050	—	—	3,050
Share premium	136,637	—	—	136,637
Consolidated reserves	(1,848)	1,173	(410)	(1,085)
Other comprehensive loss	(1,850)	—	—	(1,850)
Equity attributable to the owners of the parent	**135,989**	**1,173**	**(410)**	**136,752**
Total equity	**135,989**	**1,173**	**(410)**	**136,752**
Non-current liabilities				
Loans & borrowings	92,440	—	—	92,440
Deferred tax liabilities	6,226	—	—	6,226
Deferred income (contract liability)	4,587	(763)	410	4,234
Other non-current liabilities	868	—	—	868
Total non-current liabilities	**104,121**	**(763)**	**410**	**103,768**
Current liabilities				
Loans & borrowings	13,598	—	—	13,598
Trade payables	18,667	—	—	18,667
Tax payables	2,313	—	—	2,313
Deferred income (contract liability)	23,195	(410)	—	22,785
Other current liabilities	15,342	—	—	15,342
Total current liabilities	**73,115**	**(410)**	**—**	**72,705**
Total equity and liabilities	**313,225**	**—**	**—**	**313,225**

Consolidated income statement in 000€	As reported	Adjustments	Amounts without adoption of IFRS 15
	For the year ended December, 31 2018		
Revenue	184,721	(410)	184,311
Cost of sales	(82,299)	—	(82,299)
Gross profit	**102,422**	**(410)**	**102,012**
Research and development expenses	(22,416)	—	(22,416)
Sales and marketing expenses	(46,303)	—	(46,303)
General and administrative expenses	(32,310)	—	(32,310)
Net other operating income	3,771	—	3,771
Operating profit	**5,164**	**(410)**	**4,754**
Financial expenses	(4,864)	—	(4,864)
Financial income	3,627	—	3,627
Share in loss of joint venture	(475)	—	(475)
Profit before taxes	**3,452**	**(410)**	**3,042**
Income taxes	(425)	—	(425)
Net profit for the year	**3,027**	**(410)**	**2,617**
Net profit attributable to:			—
The owners of the parent	3,027	(410)	2,617
Basic earnings per share	0.06		0.05
Diluted earnings per share	0.06		0.05

Restatements in the reporting year 2017

The Group has restated the reporting year 2017 for the following impacts:

- Our audited financial statements for the year ended December 31, 2017 appearing in our Annual Report on Form 20-F, as filed with the U.S. Securities and Exchange Commission on April 30, 2018 (the "FY 2017 Form 20-F"), included a provisional accounting for the ACTech business combination. The fair value analysis with respect to the assets and liabilities acquired was not yet finalized as of the reporting date.

  As of October 4, 2018, we completed the fair value analysis of the ACTech business combination, with corresponding adjustments to intangible assets, goodwill, property, plant and equipment, inventories and contracts in progress, other current assets, investment grants and tax payables as if the accounting for the business combination had been completed at acquisition date. The impact has been accounted for as retrospective adjustments to our consolidated statement of financial position as of December 31, 2017 and our consolidated income statement for the year ended December 31, 2017. Furthermore it includes an adjustment to the inventory valuation at ACTech as at December 31, 2017, with a total impact on the consolidated reserves for the year amounted to K€(461).

  We refer to Note 4 for a detailed discussion of the ACTech business combination.

- The Group has voluntarily changed the presentation of the amortization expense related to the intangible assets acquired from a business combination, except for the backlog, in the consolidated income statement. The related amortization expense is in 2018 presented in the line net other operating income in the consolidated income statement while previously this expense was included in the lines cost of sales, sales and marketing expenses and general and administrative expenses. The intangible assets relate to acquired technology and acquired customer relationships. Management has changed the presentation in order to better reflect the performance of the Group.

The impact of the restatements on the consolidated statement of financial position as of December 31, 2017 and the consolidated income statement for the year ended December 31, 2017 is as follows:

Restatement impact on statement of financial position in 000€	As of December 31, 2017		
	As previously reported	**IFRS 3 ACTECH**	**As restated**
Assets			
Non-current assets			
Goodwill	18,447	(895)	17,552
Intangible assets	28,646	(46)	28,600
Property, plant & equipment	86,881	184	87,065
Investments in joint ventures	31	—	31
Deferred tax assets	304	—	304
Other non-current assets	3,667	—	3,667
Total non-current assets	**137,976**	**(757)**	**137,219**
Current assets			
Inventories and contracts in progress	11,594	(567)	11,027
Trade receivables	35,582	—	35,582
Other current assets	9,212	(1,537)	7,675
Cash and cash equivalents	43,175	—	43,175
Total current assets	**99,563**	**(2,104)**	**97,459**
Total assets	**237,539**	**(2,861)**	**234,678**
Equity and liabilities			
Equity			
Share capital	2,729	—	2,729
Share premium	79,839	—	79,839
Consolidated reserves	(3,250)	(461)	(3,711)
Other comprehensive loss	(1,803)	—	(1,803)
Equity attributable to the owners of the parent	**77,515**	**(461)**	**77,054**
Total equity	**77,515**	**(461)**	**77,054**
Non-current liabilities			
Loans & borrowings	81,788	—	81,788
Deferred tax liabilities	7,006	409	7,415
Deferred income	5,040	(1,272)	3,768
Other non-current liabilities	1,904	—	1,904
Total non-current liabilities	**95,738**	**(863)**	**94,875**
Current liabilities			
Loans & borrowings	12,769	—	12,769
Trade payables	15,670	—	15,670
Tax payables	3,560	(1,537)	2,023
Deferred income	18,791	—	18,791
Other current liabilities	13,496	—	13,496
Total current liabilities	**64,286**	**(1,537)**	**62,749**
Total equity and liabilities	**237,539**	**(2,861)**	**234,678**

Restatement impact on income statement in 000€	For the year ended December 31, 2017			
	As previously reported	IFRS 3 ACTECH	Reclassification	As restated
Revenue	142,573	—	—	142,573
Cost of sales	(62,787)	(447)	282	(62,952)
Gross profit	**79,786**	**(447)**	**282**	**79,621**
Research and development expenses	(19,959)	—	—	(19,959)
Sales and marketing expenses	(39,109)	—	174	(38,935)
General and administrative expenses	(25,484)	—	608	(24,876)
Net other operating income / (expenses)	5,631	(26)	(1,064)	4,541
Operating profit (loss)	**865**	**(473)**	**—**	**392**
Financial expenses	(4,728)	—	—	(4,728)
Financial income	3,210	—	—	3,210
Share in loss of joint venture	(469)	—	—	(469)
Loss before taxes	**(1,122)**	**(473)**	**—**	**(1,595)**
Income taxes	(534)	12	—	(522)
Net loss for the year	**(1,656)**	**(461)**	**—**	**(2,117)**
Net loss attributable to:				
The owners of the parent	(1,656)	(461)	—	(2,117)
Non-controlling interest	—	—	—	—

The consolidated income statement of the year ended December 31, 2016 has not been restated. The total impact on the net other operating income/(expenses) was immaterial for the year 2016 and therefore such amount has not been reclassified.

A * mark has been added next to the year 2017 in tables in the notes when the year has been impacted by the restatement.

3 Summary of significant accounting policies

Basis for consolidation

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries.

Entities are fully consolidated from the date of acquisition, which is the date when the Group obtains control, and continue to be consolidated until the date when such control ceases. The financial statements of the entities are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-Group balances, transactions, unrealized gains and losses resulting from intra-Group transactions and dividends are fully eliminated.

The Group attributes profit or loss and each component of other comprehensive income to the owners of the parent company and to the non-controlling interest based on present ownership interests, even if the results in the non-controlling interest have a negative balance.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over the subsidiary, it will derecognize the assets (including goodwill) and liabilities of the subsidiary, any non-controlling interest and the other components of equity related to the subsidiary. Any surplus or deficit arising from the loss of control is recognized in profit or loss. If the Group retains an interest in the previous subsidiary, then such interest is measured at fair value at the date the control is lost.

The proportion allocated to the parent and non-controlling interests in preparing the consolidated financial statements is determined based solely on present ownership interests.

There are no significant changes to the consolidated scope occurred in 2018.

Non-controlling interests

The Group has the choice, on a transaction by transaction basis, to initially recognize any non-controlling interest in the acquiree which is a present ownership interest and entitles its holders to a proportionate share of the entity's net assets in the event of liquidation at either acquisition date fair value or, at the present ownership instruments' proportionate share in the recognized amounts of the acquiree's identifiable net assets. Other components of non-controlling interest such as outstanding share options are generally measured at fair value. The Group has not elected to take the option to use fair value in acquisitions completed to date and currently does not have non-controlling interest resulting from business combinations.

Foreign currency translation

The Group's consolidated financial statements are presented in euros, which is also the parent company's functional currency. For each entity, the Group determines the functional currency, and items included in the financial statements of each entity are measured using the functional currency.

Financial statements of foreign subsidiaries

Foreign subsidiaries use the local currencies of the country where they operate. The statement of financial position is translated into euro at the closing rate on the reporting date and their income statement is translated at the average exchange rate at each month-end. Differences resulting from the translation of the financial statements of said subsidiaries are recognized in other comprehensive income as "exchange differences on translation of foreign operations".

Foreign currency transactions

Transactions denominated in foreign currencies are translated into euro at the exchange rate at the end of the previous month-end. Monetary items in the statement of financial position are translated at the closing rate at each reporting date and the relevant translation adjustments are recognized in financial or operating result depending on its nature.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method at the acquisition date, which is the date at which the Group obtains control over the entity. The cost of an acquisition is measured as the amount of the consideration transferred to the seller, measured at the acquisition date fair value, and the amount of any non-controlling interest in the acquiree.

The Group measures goodwill initially at cost at the acquisition date, being:

- the fair value of the consideration transferred to the seller, plus
- the amount of any non-controlling interest in the acquiree, plus
- if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree re-measured at the acquisition date, less
- the fair value of the net identifiable assets acquired and assumed liabilities

Goodwill is recognized as an intangible asset with any impairment in carrying value being charged to the consolidated income statement. Where the fair value of identifiable assets, liabilities and contingent liabilities exceed the fair value of consideration paid, the excess is credited in full to the consolidated income statement on acquisition date.

Acquisition costs incurred are expensed and included in general and administrative expenses.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration, which is deemed to be an asset or liability, will be recognized either as a profit or loss or as a change to other comprehensive income. If the contingent consideration is classified as equity, it should not be re-measured until it is finally settled within equity.

Acquisition of non-controlling interests are accounted for as an equity transaction.

Investments in joint ventures

The Group carries investment in a joint venture (RS Print NV). The Group's investments in its joint venture is accounted for using the equity method. Under the equity method, the investment in the joint venture was initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the joint venture since the acquisition date. Goodwill relating to the joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The income statement reflects the Group's share of the results of operations of the joint venture. Any change in other comprehensive income of the joint venture is presented as part of the Group's other comprehensive income. In addition, when there has been a change recognized directly in the equity of the joint venture, the Group recognizes its share of the change in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the joint venture are eliminated to the extent of the interest in the joint venture.

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in its joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the Group's interest in the joint venture (higher of value in use and fair value less costs to sell), and then recognizes the loss as 'Share of profit or loss of joint ventures' in the income statement.

Property, plant & equipment

Property, plant and equipment is stated at cost, net of accumulated depreciation and/or accumulated impairment losses, if any. Such cost includes borrowing costs directly attributable to construction projects if the asset necessarily takes a substantial period of time to get ready for its intended use, it is probable that they will result in future economic benefits to the group and the cost can be measured reliably. When significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognizes such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in the income statement as incurred.

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets as follows:

- Buildings: 20-30 years
- Furniture, Plant & Equipment: 5-30 years
- Property leased Assets: 15-30 years or lease term if shorter
- Leased machines: 5-10 years or lease term if shorter

Land is not depreciated.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset or the lease term.

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognized.

The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year-end and adjusted prospectively, if appropriate.

Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at the inception date, whether fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset, even if that right is not explicitly specified in an arrangement.

Finance leases which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are capitalized at the commencement of the lease at the fair value of the leased item or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability.

Finance charges are recognized as financial expenses in the consolidated income statement.

Where substantially all of the risks and rewards incidental to ownership are not transferred to the Group (an "operating lease"), the total rentals payable under the lease are charged to the consolidated income statement on a straight-line basis over the lease term. The aggregate benefit of lease incentives is recognized as a reduction of the rental expense over the lease term on a straight-line basis.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of a qualified asset that necessarily takes a substantial period of time to prepare for its intended use or sale are capitalized as part of the cost of the respective assets. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Research and development

Research and development includes the costs incurred by activities related to the development of software solutions (new products, updates and enhancements), guides and other products.

Development activities involve the application of research findings or other knowledge to a plan or a design of new or substantially improved (software) products before the start of the commercial use.

Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

- the technical feasibility of completing the intangible asset so that the asset will be available for use or sale;
- its intention to complete and its ability to use or sell the asset;
- how the asset will generate future economic benefits;
- the availability of resources to complete the asset; and
- the ability to measure reliably the expenditure during development.

The Group has determined that the conditions for recognizing internally generated intangible assets from proprietary software, guide and other product development activities are not met until shortly before the products are available for sale, unless either (i) the Group has strong evidence that the above criteria are met and a detailed business plan is available showing the asset will on a reasonable basis generate future economic benefits or (ii) the development is done based upon specific request of the customer, it is highly likely that the Group will be able to market the product also to other parties than the customer, the development is subject to an agreement and the substance of the agreement is that the customer reimburses the Group for a significant portion, but not all, of the development expenses incurred. As such, development expenditures not satisfying the above criteria and expenditures on the research phase of internal projects are recognized in the consolidated income statement as incurred. Internally generated intangible assets from proprietary software are amortized over their useful lives, starting from the moment they are ready for use/available for sale.

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortisation and accumulated impairment losses. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit, which is determined on a project-by-project basis. Amortisation is recorded in cost of sales. During the period of development, the asset is tested for impairment annually.

Intangible assets other than goodwill and capitalized development expenditures

Intangible assets comprise acquired technology and customer portfolio, patents and licenses, goodwill and technology and customers acquired in connection with business combinations. Those intangible assets are measured on initial recognition at cost, except for the acquired technology and customers arising from business combinations, which are measured initially at fair value. Following initial recognition, intangible assets other than goodwill are carried at cost less any accumulated amortization and accumulated impairment losses, if any.

The useful life of the intangible assets is as follows:

• Software:	3 years;
• Patents and licenses:	5 years;
• Acquired customers:	5-20 years;
• Technology:	6-10 years;
• Order Backlog:	Period over which orders will be completed.

The intangible assets with finite lives are amortized over their useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. The amortization expense on intangible assets with finite lives is recognized in the consolidated income statement in the line "net other operating income".

Impairment of goodwill and other non-financial assets (excluding inventories and deferred tax assets)

Impairment tests on goodwill and other intangible assets with indefinite useful economic lives or capitalized development expenses which are not amortized yet, are undertaken annually at the financial year end. Other non-financial assets and goodwill are subject to impairment tests whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Where the carrying value of an asset exceeds its recoverable amount (i.e. the higher of value in use and fair value less costs to sell), the asset is written down accordingly.

Where it is not possible to estimate the recoverable amount of an individual asset, the impairment test is carried out on the smallest Group of assets to which it belongs for which there are separately identifiable cash flows: its cash generating units (CGUs). Goodwill is allocated on initial recognition to each of the Group's CGUs that are expected to benefit from the synergies of the combination giving rise to the goodwill.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to future cash flows projected after the fifth year.

Impairment charges are included in profit or loss, except, where applicable, to the extent they reverse gains previously recognized in other comprehensive income. An impairment loss recognized for goodwill is not reversed.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

Inventories and Contracts in progress

Inventories are valued at the lower of cost and net realizable value. Costs incurred in bringing each product to its present location and condition are accounted for as follows:

- Raw materials: purchase cost on a first in, first out basis; and
- Finished goods and work in progress: cost of direct materials and labor and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs.

Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

A write-off of inventories is estimated based on an ageing or rotation analysis.

Work in progress relates to production of inventory for which a customer has not yet been secured, while contracts in progress are contract assets that relate to production for specific customers in performance of a signed contract. We refer also to the accounting policy on revenue recognition.

Financial assets

Financial assets are classified at initial recognition, and subsequently measured as at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price.

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortised cost;
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments);
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments); and
- Financial assets at fair value through profit or loss.

Financial assets measured at amortized cost

This category is the most relevant to the Group. The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and

- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets, trade and other receivables, cash and cash equivalents at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)

The Group currently does not have financial assets at fair value through OCI with recycling of cumulative gains and losses.

Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)

The Group has irrevocably elected at initial recognition to classify the minority interest in the non-listed equity investment Essentium Inc, as disclosed in Note 10 and Note 20, as a financial asset designated at fair value through OCI as this measurement is most representative of the business model for this asset. Gain and losses on these financial assets are never recycled to profit and loss. Dividends are recognised as other operational income in the consolidated income statement when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets measured at fair value through profit or loss

The Group does not currently have financial assets classified as financial assets at fair value through profit or loss except for a call option on non-controlling interests in RapidFit+ as disclosed in Note 13 and the derivatives, which are carried in the statement of financial position at fair value with changes recognized in the income statement in the lines financial income/expense.

Derecognition

A financial asset is derecognized when:

- The rights to receive cash flows from the asset have expired, or
- The Group has transferred its rights to receive cash flows from the assets.

Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in Note 3 Significant accounting judgments, estimates and assumptions.

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss.

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. A loss allowance is recognized at each reporting date based on lifetime ECLs. The Group established a provision matrix that is based on its historical loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For all other receivables, ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms. ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

Financial liabilities

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts and derivative financial instruments including written put options over non-controlling interests.

Financial liabilities at amortized cost

The trade and other payables, and loans and borrowings are classified as financial liabilities at amortized cost.

Those financial liabilities are measured at amortized cost using the effective interest rate method. Gains and losses are recognized in the income statement when the liabilities are derecognized as well as through the effective interest rate method amortization process.

Financial liabilities at fair value through profit and loss

The derivative financial instruments are classified as financial liabilities at fair value through profit and loss except for the written put options on non-controlling interests which is disclosed below.

Written put options on non-controlling interest

The Group recognizes a financial liability for the written put options on non-controlling interest. The written put options have a variable redemption price based on a formula as specified in the contract (see Note 13).

- The financial liability is initially recognized at fair value and the fair value is reclassified from non-controlling interest and, for any amount higher than the non-controlling interest, from consolidated reserves.

- The fair value is determined as the present value of the redemption amount.
- Any change in the fair value as a result of a change in the estimated redemption price is recognized directly in consolidated reserves. Any unwinding effect of the present value of the redemption price is recognized directly in profit and loss (financial cost).
- No share of profit is allocated to the non-controlling interest.
- Upon exercise of the written put option, the carrying value will be offset with the cash payment received. When the written put option is not exercised, the carrying value of the financial liability is derecognized against non-controlling interest with the difference going to consolidated reserves.

Compound financial instruments

The Group has issued convertible debt which is accounted for as a compound financial instrument. For those instruments, the Group determines the carrying amount of the liability component by measuring the fair value of a similar liability (including any embedded non-equity derivative features) that does not have an associated equity component. The carrying amount of the equity instrument is then determined by deducting the fair value of the financial liability from the fair value of the compound financial instrument as a whole.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

Offsetting

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

Share capital

Financial instruments issued by the Group are classified as equity only to the extent that they do not meet the definition of a financial liability or financial asset. The Group's ordinary shares are classified as equity instruments.

Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Pensions benefits

The Group has a defined contribution obligation where the Group pays contributions based on salaries to an insurance company, in accordance with the laws and agreements in each country.

The Belgian defined contribution pension plans are by law with variable minimum returns based on the Belgian government bonds, with a minimum of 1.75% and a maximum of 3.75%, effective for contributions paid as from 2016. For contribution paid until 2015, the minimum guaranteed return is 3.25% on employer contributions and 3.75% on employee contributions.

These plans qualify as defined benefit plans. Contributions are recognized as expenses for the period in which employees perform the corresponding services. Outstanding payments at the end of the period are shown as other current liabilities.

Those plans are accounted for as a defined benefit plan however are considered not material.

Share based payments

Directors and employees (including senior executives) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments (equity-settled transactions). The Group currently has only warrants and share-appreciation rights as share-based payments.

Equity-settled transactions

Equity-settled share-based payments to employees and others providing similar services are measured, indirectly, at the fair value of the equity instruments granted. The cost of equity-settled transactions is recognized, together with a corresponding increase in other capital reserves in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The income statement expense or credit for a period represents the movement in cumulative expense recognized at the beginning and end of that period and is recognized as employee benefits expense.

The Group does currently only have equity-settled share-based payments that have service-based vesting conditions and no instruments with market vesting conditions.

No expense is recognized for awards that do not ultimately vest.

When the terms of an equity-settled award are modified, the minimum expense recognized is the expense as if the terms had not been modified, if the original terms of the award are met. An additional expense is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee as measured at the date of modification.

When an equity-settled award is cancelled, it is treated as if it vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. This includes any award where non-vesting conditions within the control of either the entity or the employee are not met. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

Cash-settled transactions

The Group has cash-settled share-based payment transaction for certain employees in certain countries due to legal requirements (in the form of share-appreciation rights). The cost of cash-settled transactions is measured initially at fair value at the grant date. This fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The liability is remeasured to fair value at each reporting date up to, and including the settlement date, with changes in fair value recognized in employee benefits expense.

Revenue from contracts with customers

The Group's revenue, which is presented net of sales taxes, is primarily generated by the sale of our software and 3D printed products and services. Software revenue is comprised of perpetual and periodic licenses, maintenance revenue and software development service fees. Perpetual license holders may opt to take an annual maintenance contract, which leads to annual fees. Periodic licenses entitle the customer to maintenance, support and product updates without additional charge. Revenue from prototypes and end products involving 3D printing technology is derived from our network of production centers and may include support and services such as pre-production collaboration prior to the actual production.

The Group sells its products and software through its direct sales force and through authorized distributors.

Software license revenue, maintenance and/or software development service fees may be bundled in one arrangement, or may be sold separately.

The Group recognizes revenue for goods including software based on the five-step model as a result of the application of IFRS 15 since January 1, 2018.

1. Identify the contract(s) with a customer;
2. Identify the performance obligations in the contract;
3. Determine the transaction price;
4. Allocate the transaction price to the performance obligations in the contract; and
5. Recognize revenue when (or as) the entity satisfies a performance obligation.

The impact of the application of IFRS 15 is discussed in Note 2. Basis of preparation.

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group is expected to be entitled in exchange from those goods and services.

If the consideration in a contract includes a variable amount, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved. Variable consideration is mainly related to quantities sold, volume (step-based) rebates and development time spend.

Prototypes and end products involving 3D printing technology

The Group recognizes revenue on the sale of goods to the customer or distributor at a point in time when control of the asset is transferred, generally upon shipment or delivery taking into account the shipment terms (usually Ex-works or FOB Time of Shipment Incoterms (International Commercial Terms)).

Perpetual licensed software

The sale and/or license of software products is deemed to have occurred at a point in time, i.e. when a customer either has taken possession of or has the ability to take immediate possession of the software and the software key.

Perpetual software licenses can include one year maintenance and support services as a separate performance obligation. The Company sells these maintenance services also on a stand-alone basis and is therefore capable of determining their stand-alone selling price. On this basis, the amount of the embedded maintenance is separated from the fee for the perpetual license and is recognized ratably over the period to which they relate.

Time-based licensed software

The time-based license agreements include the use of a software license for a fixed term and maintenance and support services during the same period. The Company does not sell time-based licenses without maintenance and support services and therefore revenues is satisfied over time for the entire arrangements and is recognized ratably over the term.

Maintenance and support services

Maintenance and support services are satisfied over time and as such, the Group recognizes this revenue ratably on a straight-line basis over the term that the maintenance service is provided. In general, maintenance services are not automatically renewed.

A maintenance and support contract may include a reinstatement for previous years when the customer did not have a maintenance and support contract previously. Revenue from reinstatements are recognized immediately when the maintenance and support services commence.

Software development services (SDS)

SDS include customized development of software components for customers. Revenue from SDS agreements when distinct from other performance obligations is satisfied over time. Revenue is then recognized either on time and material basis or on the stage of completion of each service contract and when the stage of completion can be measured reliably.

The Company determines the percentage-of-completion by comparing labor hours incurred to-date to the estimated total labor hours required to complete the project. The Company considers labor hours to be the most reliable available measure of progress on these projects. Adjustments to the Company's estimates of the time to completion are made when facts resulting in a change become known. When the estimate indicates that a loss will be incurred, such loss is recognized immediately.

Contracts with multiple performance obligations

The Group has entered into a number contracts with multiple performance obligations, such as when selling perpetual licenses that may include maintenance and support (included in price of perpetual licenses) and time-based licenses (that include embedded maintenance and support, both of which may be sold with software development services, training, and other product sales). In some cases, the Group delivers software development services bundled with the sale of the software.

The Group evaluates whether each performance obligation is distinct from each other, i.e. the customer can benefit from the good or service on its own, or with readily available resources. Certain development services significantly modify and/or enhance the software license and as such are not considered distinct and combined with the software license.

In those contracts, whether sold to end-customers or to collaboration partners, the Group uses either price list, historical pricing information or management's best estimate of selling prices (e.g. also using a cost-plus method) to determine the stand-alone selling price for each distinct performance obligation, including software and software-related services such as maintenance and support. In general, elements in such arrangements are also sold on a stand-alone basis and stand-alone selling prices are readily available.

Revenue is allocated to each distinct performance obligation ("PO") based on the relative percentage of the stand-alone selling price for each PO compared to the total of stand-alone selling prices for all PO over the total transaction price and is recognized when the revenue recognition criteria described above are met.

Contracts with collaboration partners in the medical segment also include multiple elements such as software, maintenance and support services, training, software development services, 3D printed products and royalties. Revenue from those contracts is determined and recognized consistent with other multiple element arrangements.

For certain contracts with collaboration partners, the Company also receives up-front fees, paid by customers for certain exclusivity rights granted only on previously acquired perpetual software licenses, which may be bundled with transfer of title, rights and ownership of certain software products and maintenance and support services. In case the up-front fees do not relate to already delivered good or services, the Group include the up-front fees in the total transaction price which is then allocated to all the distinct performance obligations. Other contracts with collaboration partners include prepaid fees to purchase a maximum number of "Plan Only" cases during a 12-month period. In this case, the prepaid fees are recognized over the period of 12 months based on the expected number of "Plan Only" cases that will be purchased.

Contract assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional. Contract assets are only contracts in progress that are disclosed with the line inventory and contracts in progress in the statement of financial position. We refer to our accounting policies regarding Inventories and Contracts in Progress

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract. Contract liabilities are presented as deferred income in the statement of financial position.

Contract costs

The Group does not have significant costs to obtain contracts and those costs are expensed as incurred.

The Group may have costs incurred in fulfilling contracts that are accounted for as intangible assets. When those costs are not in scope of another standards, these costs are accounted for under contracts in progress (see contract assets). For certain contracts, the Group may have significant software development expenses that are not considered a "distinct performance obligation" which are accounted for as an intangible assets. The Group evaluates whether those costs meet the recognition criteria for an intangible assets and when criteria are not met, expenses those costs as incurred.

Government grants

Government grants are recognized when there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to development costs or another expense, it is recognized as income over the grant period necessary to match the income on a systematic basis to the costs that it is intended to compensate. When the grant relates to the construction of buildings, it is recognized as income over the depreciation period of the related building.

Such grants have been received from the federal and regional governments and from the European Union in the forms of grants linked to certain of its research and development programs, reduced payroll taxes and the financing of the construction of an office building in Leuven (Belgium) and in Freiberg (Germany).

Where retention of a government grant related to assets or to income, is dependent on the Company satisfying certain criteria, it is initially recognized as deferred income. When the criteria for retention have been satisfied, the deferred income balance is released to other operating income in the consolidated income statement on a systematic basis over the periods in which the entity recognizes as expenses the related costs for which the grants are intended to compensate.

Any government grants recognized as income do not have any unfulfilled conditions or other contingencies attached to them, as otherwise we would not be recognizing income for such.

Other financial income and expenses

Other financial income and expenses include mainly foreign currency gains or losses on financial transactions and bank related expenses.

Taxes

Current income tax

Income tax assets and liabilities for the current period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date.

Current income tax relating to items that are recognized directly in equity is recognized in equity and not in the income statement. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is calculated using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences. Deferred tax assets are recognized for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Sales tax

Revenue, expenses and assets are recognized net of the amount of VAT, except:

- Where the sales tax incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case the sales tax is recognized as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- Receivables and payables that are stated with the amount of sales tax included.

The net amount of sales tax recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position.

New and revised standards not yet adopted

The standards and interpretations that are issued, but not yet effective, up to the closing date of the Group's financial statements are disclosed below.

Of those standards that are not yet effective, *IFRS 16 Leases* is expected to have a material impact on the Group's financial statements in the period of initial application.

IFRS 16, Leases

The Group is required to adopt IFRS 16 *Leases* from January 1, 2019. The Group has assessed the estimated impact that initial application of IFRS 16 will have on its consolidated financial statements, as described below. The actual impacts of adopting the standard on January 1, 2019 may change because:

- The Group has not finalised the testing and assessment of controls over its new IT systems; and
- The new accounting policies are subject to change until the Group presents its first financial statements that include the date of initial application.

IFRS 16 introduces a single, on-balance sheet lease accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low-value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases.

IFRS 16 replaces existing leases guidance, including IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement contains a Lease*, SIC-15 *Operating Leases – Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease.*

The Group will, where it acts as a lessee, recognise new assets and liabilities for its operating leases of buildings, vehicles and machinery & equipment. The nature of expenses related to those leases will now change because the Group will recognise a depreciation charge for right-of-use assets and interest expense on lease liabilities.

Previously, the Group recognised operating lease expense on a straight-line basis over the term of the lease, and recognised assets and liabilities only to the extent that there was a timing difference between actual lease payments and the expense recognised.

No significant impact on income statement is expected for the Group's finance leases.

Based on the information currently available, the Group estimates that it will recognise additional lease liabilities of K€4,998 as at January 1, 2019 and estimated annual depreciation expense of K€2,483.

The Group plans to apply IFRS 16 initially on January 1, 2019, using the modified retrospective approach with the Right-of-Use asset equal to the lease liability. Therefore, there will be no restatement of comparative information.

The Group plans to apply the practical expedient to grandfather the definition of a lease on transition. This means that it will apply IFRS 16 to all contracts entered into before January 1, 2019 and identified as leases in accordance with IAS 17 and IFRIC 4.

The other standards, interpretations and amendments issued by the IASB and relevant for the Group, but not yet effective are not expected to have a material impact on the Group's future consolidated financial statements:

- IFRIC 23 Uncertainty over Tax Treatments;
- IFRS 17 Insurance Contracts;
- Amendments to IFRS 9: Prepayment Features with Negative Compensation;
- Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture;
- Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures;
- Amendments to IAS 19: Plan Amendment, Curtailment or Settlement;
- Annual Improvements to IFRS Standards 2015–2017 Cycle – various standards (IFRS 3 Business Combinations; IFRS 11 Joint Arrangements; IAS 12 Income Taxes; IAS 23 Borrowing Costs); and
- Amendments to References to Conceptual Framework in IFRS Standards;

Significant accounting judgments, estimates and assumptions

The preparation of the Group's consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities, and the accompanying disclosures. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities for future periods.

On an ongoing basis, the Group evaluates its estimates, assumptions and judgments, including those related to revenue recognition, development expenses, share-based payment transactions, income taxes, impairment of goodwill, intangible assets and property, plant & equipment and business combinations.

The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

Revenue recognition

Our revenue recognition policies require management to make significant estimates. Management analyzes various factors, including a review of specific transactions, historical experience, creditworthiness of customers and current market and economic conditions. Changes in judgments based upon these factors could impact the timing and amount of revenue and cost recognized and thus affects our results of operations and financial condition. The significant estimates and judgments relate to:

- The assessment whether a performance obligation is distinct in a bundled sales transactions;
- Estimates of the variable considerations and the assessment of the revenue constraint limitation;
- Estimates of the stand-alone selling prices for each distinct performance obligation; and
- The stage of completion of our customized development of software components for customers when revenue is satisfied over time.

The Group is making significant judgments when performing the assessment of whether a performance obligation is distinct from the other performance obligations in a contract, i.e. whether the good or service has a benefit for the customer in its own or together with readily available resource and/or whether the good or service is highly interrelated or a significant input with another good or service delivered, or whether it significantly modifies or customizes another good or service. The relevant judgments include the following:

- Whether the software license is distinct from the 3D printed guides – in most cases with contracts with collabroration partners in the Materialise Medical segment, the software licenses is combined with the manufacturing of the 3D printed guides as the software license has no benefit for the customer without the manufacturing services. Note that the Group is implementing a new feature "Plan Only" which where the collaboration partners could benefit from the software license in its own.

- Whether the development services are distinct from other performance obligations – in most cases, those performance obligations are distinct however for one contract with a collaboration partner in the Materialise Medical segment, the software license is combined with the license and the 3D printed guides as one "distinct" performance obligation

For the stand-alone selling prices, the Group is using prices from price list or historical prices for similar transactions. However, in certain cases, such information is not immediately available and in such cases, the Group estimates the stand-alone selling price by using a cost-plus or another estimate. In addition, for certain performance obligations such as development services, stand-alone selling prices also require an estimate of the time to complete the development.

Certain contracts include estimates of variable considerations within the transaction price and assessing the revenue constraint, such as:

- Quantities/volume sold for fixed prices in relation to, but not limited to, manufacturing of 3D printed products, software licenses sold, maintenance renewals;
- Contractual prices may be different based on volume purchased during a certain period;
- FTE spend for development or other services billed on a time and material basis; and
- Volume rebates.

The method applied to estimate the variable consideration is dependent on the number of possible scenarios and the probability of each scenario. In case there are many possible scenarios with a wide range of probabilities (each less than 50%), the Group will use the expected value method while the most likely method is used when there is a scenario with a higher probability (more than 50%).

Variable consideration is not constrained when based on historical experience and/or high reliable business forecast and/or the timeframe of the estimates, the Group determines that there is a high probability that this will not result in a future revenue reversal.

We determine the stage of completion for development contracts satisfied over time by comparing labor hours incurred to-date to the estimated total labor hours required to complete the project. We consider labor hours to be the most reliable, available measure of progress on these projects. Adjustments to estimates to complete are made in the periods in which facts resulting in a change become known. When the estimate indicates that a loss will be incurred, such loss is recorded in the period identified. Significant judgments and estimates are involved in determining the percent complete of each contract. Different assumptions could yield materially different results.

Development expenses

Under IAS 38, internally generated intangible assets from the development phase are recognized if certain conditions are met. These conditions include the technical feasibility, intention to complete, the ability to use or sell the asset under development, and the demonstration of how the asset will generate probable future economic benefits. The cost of a recognized internally generated intangible asset comprises all directly attributable cost necessary to make the asset capable of being used as intended by management. In contrast, all expenditures arising from the research phase are expensed as incurred.

Determining whether internally generated intangible assets from development are to be recognized as intangible assets requires significant judgment, particularly in determining whether the activities are considered research activities or development activities, whether the product enhancement is substantial, whether the completion of the asset is technical feasible considering a company-specific approach, the probability of future economic benefits from the sale or use including an assessment whether FDA approval will be obtained.

The Group has determined that the conditions for recognizing internally generated intangible assets from proprietary software, guide and other product development activities are not met until shortly before the products are available for sale, unless either (i) the Group has strong evidence that the above criteria are met and a detailed business plan is available showing the asset will on a reasonable basis generate future economic benefits or (ii) the development is done based upon specific request of the customer, the Group has the intention to market the product also to other parties than the customer, the development is subject to an agreement and the substance of the agreement is that the customer reimburses the Group for a significant portion of the development expenses incurred. As such, development expenditures not satisfying the above criteria and expenditures on the research phase of internal projects are recognized in the consolidated income statement as incurred. This assessment is monitored by the Group on a regular basis.

We have determined that the criteria for internally generated intangible assets were met for two projects in 2018: (1) the software development of a new planner for hospitals within a certain medical field and (2) the process to obtain FDA and E.U. approval for a 3D printed product within the Materialise Medical segment. For the latter, we determined that there is a low risk that FDA approval will not be obtained although clinical trials have to be started and commercialization is not expected before 2022. This assessment was made by management based on several factors including the developed product itself, the exclusive patent rights obtained on the developed product, the successful application of the product on a number of patients as part of the emergency exception use obtained from the FDA and the continued discussions to speed up the trial duration and commercialization. The product is also expected to receive E.U. approval for commercialization by the end of 2020. The total amount capitalized is K€158 and K€524 as per December 31, 2018.

Share-based payment transactions

The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted and measured the cost of cash-settled transactions by reference to the fair value of the equity instrument at the date of reporting. The Group has applied the Black-Scholes valuation model to estimate fair value. Using this model requires management to make assumptions with regards to volatility and expected life of the equity instruments. The assumptions used for estimating fair value for share-based payment transactions are disclosed in Note 14 and are estimated as follows:

- Volatility is estimated based on the average annualized volatility of the Group;

- Estimated life of the warrant is estimated to be until the first exercise period which is typically the month after their vesting;
- Fair value of the shares is determined based on the share price of the Group on Nasdaq at the date of issuance. For the grants prior to the initial public offering, the fair value of the shares was estimated based on a discounted cash flow model with 3-year cash flow projections and a multiple of EBITDA determined based on a number quoted peers in the 3D printing industry; and
- The dividend return is estimated by reference to the historical dividend payment of the Group. Currently, this is estimated to be zero as no dividends have been paid since inception.

Income taxes

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

As at December 31, 2018, the Group had K€25,285 (2017: K€11,948; 2016: K€9,451) of tax losses carry forward and other tax credits such as investment tax credits and notional interest deduction, of which K€15,592 related to Materialise NV (2017: K€4,581; 2016: K€1,570). These losses relate to the parent and subsidiaries that have a history of losses, in countries where these losses do not expire, except for the notional interest deduction of K€0 in 2018 (2017: K€315; 2016: K€315) and may not be used to offset taxable income elsewhere in the Group.

With respect to the unused tax losses of Materialise NV, no deferred tax assets have been recognized in 2018, 2017 and 2016, given that in view of the Belgian Patent Income Deduction and Innovation Income Deduction there is an uncertainty to which extent these tax losses will be used in future years. As from July 1, 2016, the new Innovation Income Deduction replaces the former Patent Income Deduction. Under the grandfathering rule the Patent Income Deduction system can still be applied until June 30, 2021. The Belgian Patent Income Deduction allows companies to deduct 80% of the qualifying gross patent income from the taxable basis. Under the Innovation Income Deduction system, companies can deduct up to 85% of their net innovation income from the taxable basis. Based on its analysis in 2018 the Company has assessed that no deferred tax asset should be accounted for with respect to its unused tax losses in Belgium.

With respect to the unused tax losses of the other entities, no deferred tax assets have been recognized in 2018 (2017: K€0; 2016: K€109). The Group has not recognized deferred tax assets on unused tax losses totalling K€11,906 in 2018 (2017: K€7,904; 2016: K€8,877) given that it is not probable that sufficient positive taxable base will be available in the foreseeable future against which these tax losses can be utilized.

If the Group was able to recognize all unrecognized deferred tax assets, net profit would have increased by K€3,531 in 2018 during which K€11,906 of tax losses were utilized. Further details on taxes are disclosed in Note 22.10.

Impairment of goodwill, intangible assets and property, plant & equipment

The Group has goodwill for a total amount of K€17,491 as at December 31, 2018 (2017: K€17,552; 2016: K€8,860) which has been subject to an impairment test. The goodwill is tested for impairment based on a discounted cash flow model with cash flows for the next five years derived from the budget and a residual value considering a perpetual growth rate. The value in use is sensitive to the discount rate used for the DCF model as well as the expected future cash-inflows and the growth rate used for extrapolation purposes. The key assumptions used to determine the value in use for the different CGUs are disclosed and further explained in Note 5.

The Group capitalized development expenses for a total amount of K€682 as at December 31, 2018 which are not in the condition as intended by management and as such not amortized. Those development expenses have been subject to an impairment test based on a discounted cash flow model with cash flows derived from the latest business plan. The value in use is sensitive to the discount rate used for the DCF model as well as the expected commercialization date for the products and the expected future cash inflows after commercialization. We refer to the section on development expenses above for further explanations.

When events or changes in circumstances indicate that the carrying amount of the intangible assets and property, plant and equipment may not be recoverable, we estimate the value in use for the individual assets, or when not possible, at the level of CGUs to which the individual assets belong. No impairment charges have been recorded during 2018 (2017: K€0; 2016: K€0).

Business combinations

We determine and allocate the purchase price of an acquired business to the assets acquired and liabilities assumed as of the business combination date. Business combinations are discussed further in Note 4. The purchase price allocation process requires us to use significant estimates and assumptions, including

- estimated fair value of the acquired intangible assets;
- estimated fair value of property, plant and equipment; and
- estimated fair value of the contingent consideration.

The contingent consideration as included in the financial statements is recorded at fair value at the date of acquisition and is reviewed on a regular basis. The fair value of the contingent consideration is based on risk-adjusted future cash flows of different scenarios discounted using appropriate interest rates. The structure of the possible scenarios and the probability assigned to each one of them is reassessed by management at every reporting period and requires judgement from management about the outcome and probability of the different scenarios as well as the evolution of the variables.

While we are using our best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the date of acquisition, our estimates and assumptions are inherently uncertain and subject to refinement. Examples of critical estimates in valuing certain of the intangible assets we have acquired or may acquire in the future include but are not limited to:

- future expected cash flows from customer contracts and relationships, software license sales and maintenance agreements;
- the fair value of the plant and equipment
- the fair value of the deferred revenue; and
- discount rates.

Provision for expected credit losses of trade receivables and contract assets

The Group uses a provision matrix to calculate ECLs for trade receivables and contract assets. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by legal entity).

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic product) are expected to deteriorate over the next year which can lead to an increased number of defaults, the historical default rates are adjusted. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future. The information about the ECLs on the Group's trade receivables and contract assets is disclosed in Note 25.

4 Business Combinations

Acquisitions in 2018

The Group has not completed any Business Combinations during the year 2018.

Acquisitions in 2017

ACTech

The Group has signed a share and purchase agreement on October 4, 2017 to acquire all of the shares and voting interest of ACTech Holding Gmbh, an entity incorporated in Germany, and its subsidiaries ACTech Gmbh and ACTech North America Inc. (together referred to as "ACTech Group") for a total purchase consideration in cash of K€28,907 (net of indemnification asset).

The German-based ACTech Group is specialist in producing limited runs of highly complex cast metal parts in a short timeframe. ACTech Group will be part of the Manufacturing segment.

The fair value of the identifiable assets and liabilities at the date of acquisition were:

in 000€	Carrying value at acquisition date	Fair value adjustments	Fair value at acquisition date
Assets			
Technology	—	515	515
Customer relations	—	17,092	17,092
Other intangible assets	6,330	(5,345)	985
Property, plant & equipment	19,986	243	20,229
Deferred tax assets	503	(415)	88
Other non-current financial assets	56	—	56
Inventory	2,356	433	2,789
Trade receivables	5,176	—	5,176
Cash & cash equivalents	2,244	—	2,244
Other assets	542	—	542
Total Assets	**37,193**	**12,523**	**49,716**
Liabilities			
Deferred tax liabilities	(47)	(5,977)	(6,024)
Deferred income	(1,298)	1,298	—
Loans & borrowings	(11,308)	—	(11,308)
Trade payables	(777)	—	(777)
Tax payables	(3,664)	1,214	(2,450)
Other liabilities	(9,062)	—	(9,062)
Total Liabilities	**(26,156)**	**(3,465)**	**(29,621)**
Total identified assets and liabilities	**11,037**	**9,058**	**20,095**
Goodwill			8,812
Acquisition price	—	—	**28,907**

The cash flow from the business combination is as follows:

Cash & cash equivalents acquired	(2,244)
Acquisition price in cash including escrow	29,418
Total cash flow	**27,174**

The fair value of the identifiable assets and liabilities as included in our consolidated financial statements per December 31, 2017 were provisional as the final valuation had not been completed by the date these consolidated financial statements were approved for issue by the board of directors. As of October 4, 2018, we have completed the fair value analysis of the ACTech business combination, which corresponding adjustments to the intangible assets, property, plant and equipment, inventories and contracts in progress, other current assets, investment grants and tax payables. The fair value of the identified assets and liabilities were K€2,432 higher than the provisional value at date of acquisition, with a corresponding reduction in goodwill. We refer to Note 2 for the detailed impact of the restatement resulting from the final accounting of the ACTech business combination.

The accounting for the business combination resulted in fair values at date of acquisition of K€17,092 for customer relationships, K€515 for patented technology, K€826 for order backlog, and K€511 for tax contingencies subject to an indemnification asset. The fair value of the receivables is K€5,176 which equals the gross contractual amounts receivable. Fair value analysis with respect to property, plant and equipment led to a fair value of K€20,229. A fair value adjustment was identified of K€433 for the inventory. The deferred tax liabilities comprise the tax effect of the fair value adjustments for the above described items.

The purchase price paid at the acquisition date amounted to K€29,418. The share and purchase agreement foresees that the Sellers will indemnify the Group for certain tax payables and contingencies that may occur in the period between 2018 and 2021. An amount of K€3,788 has been paid in an escrow account which can be applied against the indemnification asset. The Group has estimated that the fair value of the indemnification asset is K€511 which has been applied against the acquisition price. The indemnification asset will be paid out of the escrow account when the related tax payables and contingencies are paid.

There are no contingent considerations payable.

The goodwill recognized is primarily attributable to the trained and knowledgable workforce and to the expected synergies that will be realized at level of software platforms, manufacturing and existing customer base. The goodwill is not deductible for income tax purposes.

The total acquisition-related costs recognized as an expense in the general & administration costs are K€609.

The contribution of the acquired business to the revenue and net profit of the Group for the year ended December 31, 2017 were, respectively, K€9,965 and K€275. The pro forma revenue and the pro forma net profit of the acquired business would have been K€37,096 and K€2,060, respectively, if the business would have been acquired on January 1, 2017.

Acquisitions in 2016

The Group has not completed any Business Combinations during the year 2016.

Changes in the measurement of the contingent consideration for previous acquisitions

Cenat

The Group signed a sale and purchase agreement on March 10, 2015 to acquire all of the shares and voting interests of Cenat BVBA for a consideration in cash of K€1,547 and a contingent consideration related to certain targets set over the coming years between K€0 and K€2,250. The fair value of this contingent consideration was estimated at time of final accounting (December 31, 2015) at K€1,310.

Based on the historical results and the forecasted financial information for the period 2018 to 2019 the Group has re-estimated the fair value of the contingent consideration at December 31, 2016 to K€905, and maintained this estimate per December 31, 2017.

In the course of 2018 a payment of K€263 was made to the former shareholders. And on December 24, 2018 an agreement was signed determining that the only remaining and final consideration to be paid amounts to K€450, payable by the Group to the former shareholders in the course of early 2019. As at December 31, 2018 a payable of K€450 has been recorded under the other current liabilities (we refer to Note 19). The impact of the remeasurement has been recorded in the line "net other operating income" in the consolidated income statement. This final consideration was paid on January 21, 2019.

5 Goodwill

The goodwill has been allocated to the cash generating units ("CGU") as follows:

	As of December 31,		
in 000€	2018	2017*	2016
CGU: MAT NV SAM BE	3,241	3,241	3,241
CGU: e-Prototypy	794	818	775
CGU: ACTech	8,812	8,812	—
CGU: OrthoView	4,467	4,504	4,667
CGU: MAT NV Manufacturing (Metal)	177	177	177
Total	**17,491**	**17,552**	**8,860**

The changes in the carrying value of the goodwill can be presented as follows for the years 2018, 2017 and 2016:

in 000€	Gross	Impairment	Total
At January 1, 2016	**9,768**	**(104)**	**9,664**
Currency translation	(804)	—	(804)
At December 31, 2016	**8,964**	**(104)**	**8,860**
Additions	8,812	—	8,812
Currency translation	(120)	—	(120)
At December 31, 2017	**17,656**	**(104)**	**17,552**
Currency translation	(61)	—	(61)
At December 31, 2018	**17,595**	**(104)**	**17,491**

The goodwill of Orthoview (UK) and of e-Prototypy (PL) include respectively K€(37) and K€(24) impact of currency translation in 2018.

The Group has performed an impairment test based on a discounted cash flow model with cash flows for the next five years derived from the budget and a residual value considering a perpetual growth rate. The MAT NV SAM BE and Cenat are included in the reportable segment "Materialise Software". The CGU ACTech, e-Prototypy (PL) and MAT NV Manufacturing (Metal) are included in the reportable segment "Materialise Manufacturing". The CGU Orthoview (UK) is included in the reportable segment "Materialise Medical".

CGU: MAT NV SAM (BE)

The goodwill allocated to the CGU MAT NV SAM (BE) relates to the goodwill from the acquisition of CENAT in 2015 and the goodwill related to the acquisition of Marcam in 2011 (DE-3D Printing Software).

The impairment test is based on the projected discounted cash flows resulting from the CGU MAT NV SAM BE, considering a period of five years. The main assumptions for goodwill impairment testing include a pre-tax discount rate (based on WACC) of 12.82% and a perpetual growth rate of 1.71%. Other assumptions include the year-on-year growth rate of the revenue, gross margin and the operating costs which has been determined by management based on past experience. It was concluded that the value in use is higher than the carrying value of the cash generating unit of K€36,700. There are no reasonable changes in assumptions that would reduce the value in use below its carrying value of the cash generating unit.

CGU e-Prototypy

The goodwill relates to the acquisition of the Polish entity e-Prototypy. The impairment test on the CGU e-Prototypy is based on the projected discounted cash flows considering a period of five years. The main assumptions include a pre-tax discount rate (based on WACC) of 12.47% and a perpetual growth rate of 5.00%. Other assumptions include the year-on-year growth rate of the revenue, gross margin and the operating costs which has been determined by management based on past experience and continued investments in capex in new 3D printing equipment. It was concluded that the value in use is significantly higher than the carrying value of the cash generating unit of K€3,870. Based on the sensitivity analysis where discount rate would increase with 1%, the value in use would still be significantly higher than the carrying value of the cash generating units. Based on the sensitivity analysis that the five-year projections would be 10% lower or a perpetual growth rate which is 2% lower, the value in use would still be significantly higher than the carrying value of the cash generating units.

CGU Orthoview

The goodwill relates to the acquisition of Orthoview. The impairment test on the CGU Orthoview is based on the projected discounted cash flows considering a period of 5 years .The main assumptions include a pre-tax discount rate (based on WACC) of 13.27% and a perpetual growth rate of 2.00%. Other assumptions include the year-on-year growth rate of the revenue, gross margin and the operating costs which have been determined by management based on past experience. It was concluded that the value in use is higher than the carrying value of the cash generating unit of €9.70 million. Based on the sensitivity analysis where discount rate would increase with 1%, the value in use would still be higher than the carrying value of the cash generating unit. A reasonable change in the perpetual growth by 2% or overall 10% lower five-year projections still result in a value in use that is higher than the carrying value of the cash generating unit.

The Orthoview business is being integrated further in the existing software business within our Materialise Medical segment. Synergies that are expected from joined product lines are not taken into account in the current impairment review as management believes that Orthoview can still be considered a separate cash generating unit in 2018.

CGU ACTECH

The impairment test on the CGU ACTech is based on the projected discounted cash flows, considering a period of 5 years. The main assumptions include a pre-tax discount rate (based on WACC) of 13.95% and a perpetual growth rate of 1.57%. Other assumptions include the year-on-year growth rate of the revenue, gross margin and the operating costs which have been determined by management based on past experience. It was concluded that the value in use is higher than the carrying value of the cash generating unit of €26.7 million. Based on the sensitivity analysis where discount rate would increase with 1% or other reasonable changes in the 5-year projected cash flows (such as lower EBITDA) and perpetual growth rate, the value in use would be higher than the carrying value of the cash generating unit.

6 Intangible assets

The changes in the carrying value of the intangible assets can be presented as follows for the years 2018, 2017 and 2016:

in 000€	Patents and licenses	Software	Acquired customers, technology and backlogs	Developed technology and software under construction	Total
Acquisition value					
At January 1, 2016	**3,202**	**1,779**	**8,525**	—	**13,506**
Additions	606	1,736	—	—	2,342
Acquisition of a subsidiary	—	—	—	—	—
Disposals	(18)	(212)	—	—	(230)
Transfer between accounts	—	490	—	—	490
Currency translation	(2)	(26)	(923)	—	(951)
Other	—	2	(6)	—	(4)
At December 31, 2016	**3,788**	**3,769**	**7,596**	—	**15,153**
Additions	749	3,718	—	—	4,467
Acquisition of a subsidiary*	115	242	18,433	—	18,790
Disposals	(159)	(143)	—	—	(302)
Transfer between accounts	—	(98)	—	—	(98)
Currency translation	—	(5)	(183)	—	(188)
Other	4	155	(251)	—	(92)
At December 31, 2017*	**4,497**	**7,638**	**25,595**	—	**37,730**
Additions	554	807	32	951	2,344
Acquisition of a subsidiary	—	—	—	—	—
Disposals	(759)	(221)	—	—	(980)
Transfer between accounts	2	—	—	364	366
Currency translation	—	—	(48)	—	(48)
Other	—	17	—	—	17
At December 31, 2018	**4,294**	**8,241**	**25,579**	**1,315**	**39,429**

in 000€	Patents and licenses	Software	Acquired customers, technology and backlogs	Developed technology and software under construction	Total
Amortization					
At January 1, 2016	**(1,471)**	**(958)**	**(1,420)**	**—**	**(3,849)**
Depreciation charge for the year	(576)	(559)	(819)	—	(1,954)
Disposals	3	239	—	—	242
Transfer between accounts	—	—	—	—	—
Currency translation	2	26	144	—	172
Other	—	1	—	—	1
At December 31, 2016	**(2,042)**	**(1,251)**	**(2,095)**	**—**	**(5,388)**
Depreciation charge for the year*	(609)	(1,634)	(1,579)	—	(3,822)
Disposals	2	77	—	—	79
Transfer between accounts	—	98	—	—	98
Currency translation	—	4	45	—	49
Other	(117)	(279)	250	—	(146)
At December 31, 2017*	**(2,766)**	**(2,985)**	**(3,379)**	**—**	**(9,130)**
Depreciation charge for the year	(749)	(2,310)	(2,005)	—	(5,064)
Disposals	854	206	—	—	1,060
Transfer between accounts	—	—	—	—	—
Currency translation	—	1	22	—	23
Other	—	8	—	—	8
At December 31, 2018	**(2,661)**	**(5,080)**	**(5,362)**	**—**	**(13,103)**
Net carrying value					
At December, 31 2018	1,633	3,161	20,217	1,315	26,326
At December, 31 2017*	1,731	4,653	22,216	—	28,600
At December 31, 2016	1,746	2,518	5,501	—	9,765
At January, 1 2016	1,731	821	7,105	—	9,657

Patent and licenses include only the direct attributable external costs incurred in registering the patent and obtaining the license. Software relates to purchased software for internal use only except for software development on certain application interfaces that were almost fully funded by a third party. Apart from the developed technology and software under construction that was capitalized per end of 2018 for the amount of K€1,315, no other software development was capitalized in 2018 (2017: K€86, 2016: K€39). The remaining amortization period is 1.5 years for the main software purchases and 8.1 years for the main patents and licenses.

The 'Acquired customers and technology' have been recognized as part of the acquisition of ACTech, E-Prototypy, OrthoView, and Cenat (see Note 4). At December 31, 2018, the remaining amortization period for the acquired customers is 18.75 years for ACTech, 5.75 years for OrthoView, fully amortized for E-Prototypy and 6.25 years for Cenat (2017: 6.75 years for OrthoView, 1.00 years for E-Prototypy and 7.25 years for Cenat). At December 31, 2018, the remaining amortization period for the acquired technology of ACTech, Orthoview and Cenat are 5.75 years, 1.75 years and 6.25 years, respectively.

The developed technology and software relate to two projects that meet the criteria for recognition as internally developed intangible asset (see also Note 2: significant accounting judgments, estimates and assumptions). Those assets are still being constructed and consequently are not amortized. The Group has performed an impairment analysis on those assets which resulted in no impairment. The key assumptions used are:

- Discount rate of 10%;
- Periods of cash flows: 6
- No perpetuity

The total amortization charge for 2018 is K€5,064 (2017*: K€3,822; 2016: K€1,954). As from 2017 the amortization of intangible assets from business combinations is mainly included in the line net operating income of the consolidated income statement. We refer to Note 2 for additional information.

7 Property, plant & equipment

The changes in the carrying value of the property, plant & equipment can be presented as follows for the year 2018 and 2017:

in 000€	Land and buildings	Plant and equipment	Leased assets	Construction in progress	Total
Acquisition value					
At January 1, 2017	**19,797**	**40,199**	**11,241**	**4,652**	**75,889**
Additions	377	10,560	2,246	17,334	30,517
Acquired from business combinations*	9,362	10,318	136	414	20,230
Disposals	(31)	(1,046)	(39)	218	(898)
Transfers	11,527	7,439	(425)	(18,914)	(373)
Currency Translation	(185)	(118)	5	88	(210)
Other	(663)	(235)	1,139	(38)	203
At December 31, 2017*	**40,184**	**67,117**	**14,303**	**3,754**	**125,358**
Additions	3,079	9,476	792	5,210	18,557
Acquired from business combinations	—	—	—	—	—
Disposals	(99)	(1,882)	(17)	(387)	(2,385)
Transfers	2,728	2,953	(732)	(5,547)	(598)
Currency Translation	(119)	(25)	(19)	(26)	(189)
Other	4	(82)	—	(2)	(80)
At December 31, 2018	**45,777**	**77,557**	**14,327**	**3,002**	**140,663**
Depreciation					
At January 1, 2017	**(5,093)**	**(22,263)**	**(3,470)**	**—**	**(30,826)**
Depreciation charge for the year*	(831)	(5,531)	(2,327)	—	(8,689)
Disposals	15	842	18	—	875
Transfers	521	(444)	296	—	373
Currency Translation	31	166	(1)	—	196
Other	853	64	(1,139)	—	(222)
At December 31, 2017*	**(4,504)**	**(27,166)**	**(6,623)**	**—**	**(38,293)**
Depreciation charge for the year	(1,560)	(8,010)	(2,346)	(307)	(12,223)
Disposals	26	2,102	6	—	2,134
Transfers	(18)	(253)	514	—	243
Currency Translation	(15)	(53)	8	—	(60)
Other	—	73	—	—	73
At December 31, 2018	**(6,071)**	**(33,307)**	**(8,441)**	**(307)**	**(48,126)**
Net book value					
At December 31, 2018	39,706	44,250	5,886	2,695	92,537
At December 31, 2017*	35,680	39,951	7,680	3,754	87,065
At January 1, 2017	14,704	17,936	7,771	4,652	45,063

The changes in the carrying value of the property, plant and equipment can be presented as follows for the year 2016:

in 000€	Land and buildings	Plant and equipment	Leased assets	Construction in progress	Total
Acquisition value					
At January 1, 2016	**19,719**	**33,408**	**8,933**	**2,114**	**64,174**
Additions	8	4,916	2,483	7,899	15,306
Acquired from business combinations	—	—	—	—	—
Disposals	(2)	(2,266)	(699)	(6)	(2,973)
Transfers	3	4,180	540	(5,330)	(607)
Currency Translation	69	—	(20)	(25)	24
Other	—	(39)	4	—	(35)
At December 31, 2016	**19,797**	**40,199**	**11,241**	**4,652**	**75,889**
Depreciation					
At January 1, 2016	**(4,369)**	**(18,927)**	**(2,478)**	**—**	**(25,774)**
Depreciation charge for the year	(709)	(4,048)	(1,663)	—	(6,420)
Disposals	2	541	669	—	1,212
Transfers	—	117	—	—	117
Currency Translation	(17)	6	2	—	(9)
Other	—	48	—	—	48
At December 31, 2016	**(5,093)**	**(22,263)**	**(3,470)**	**—**	**(30,826)**
Net book value					
At December 31, 2016	14,704	17,936	7,771	4,652	45,063
At January 1, 2016	15,350	14,481	6,455	2,114	38,400

The investments in property, plant & equipment in 2018 amounted to K€18,557 (2017: K€30,517;2016: K€15,306) and mainly related to new machines and installations in Belgium and Germany (K€10,747), land and buildings in Germany (K€2,491), IT equipment (K€1,781) and leased vehicles (K€792). The investments in 2017 related to the building constructions in Leuven and Poland (K€12,762), the investment into new machines and installations (acquired and leased – K€11,947) and the investment in motor vehicles (K€1,444). The investments in 2016 related to the acquisition of land in Leuven and Poland (K€6,098) and the investment into new machines and installations (acquired and leased – K€8,254) and the investment in computer equipment (K€890).

The Group realized a net loss on disposal of property, plant and equipment of K€83 in 2018 (2017: a net loss of K€25; 2016: a net gain of K€(149)).

No impairment of property, plant and equipment was recorded.

Finance leases

The carrying value of finance leases at December 31, 2018 was K€5,886 (2017: K€7,680; 2016: K€7,771). Finance leases are included in the column leased assets and mainly relate to 3D printing machines with a carrying value of K€4,608 at December 31, 2018 (2017: K€6,613; 2016: K€7,771) and for which depreciation of K€1,745 was recorded in 2018 (2017: K€1,864; 2016: K€1,663). New finance leases in 2018 amount to K€792 of which K€792 relate to leased motor vehicles (2017:K€1,596; 2016:K€2,757).

Assets under construction

Both in 2018 and 2017, the assets under construction mainly relate to machinery and installations in Belgium, Poland and Germany. Per end of 2018 the main asset under construction related to installations for our medical segment for an amount of K€937, located in Belgium. In 2016 the assets under construction mainly included the building of the new production and office facility in Belgium and Poland (K€6,098) as well as the construction and upgrade of 3D printing machines, transferred to land & buildings and plant & equipment, respectively, in 2017.

Borrowing costs

In 2018, no borrowing costs have been capitalized (2017: K€87; 2016: K€0).

Pledges

Land and buildings (including buildings under construction) with a carrying amount of K€27,319 (2017: K€28,526; 2016: K€12,594) are subject to pledges to secure several of the Group's bank loans. In addition, pledges have been given on current and other fixed assets with a total carrying amount of K€3,533 (2017: K€13,340; 2016: K€0) (Note 24).

8 Investments in joint ventures

The Group has one investment in the joint venture RSPrint NV (Belgium).

The summarized financial information of RSPrint NV can be presented as follows:

in 000€	2018	2017**	2016
(Share in the) joint venture's statement of financial position			
Current assets	850	1,256	1,643
Non-current assets	114	212	186
Goodwill	—	—	—
Current liabilities	(756)	(692)	(1,118)
Non-current liabilities	(1,096)	(788)	—
Shareholders' deficit (surplus)	888	12	(711)
(Share in the) joint venture income and expenses (loss)			
Revenue	1,186	817	684
Profit (loss)[2]	(876)	(723)	(1,208)

[2] there are no discontinued operations
** restated based on 20F amendment filing June 2018

Total current assets include cash and cash equivalents for a total amount of K€175 per December 31, 2018 (2017: K€128; 2016: K€86). Profit (loss) include total deprecations and amortization for a total amount of K€30 in 2018 (2017: K€50; 2016: K€34).

The movement of the carrying value of the joint venture is as follows:

	in 000€
Carrying value as of January 1, 2016	**1,018**
Share in loss	(1,018)
Carrying value as of December 31, 2016	**—**
Additional investment	500
Share in loss	(469)
Carrying value as of December 31, 2017	**31**
Additional investment	—
Transfer from receivables	444
Share in loss	(475)
Carrying value as of December 31, 2018	**—**

9 Inventories and contracts in progress

Inventories and contracts in progress include the following:

	As of December 31,		
in 000€	2018	2017*	2016
Raw materials	5,616	4,970	4,297
Work in progress	2,151	3,377	1,538
Finished goods	1,390	1,414	880
Contracts in progress	829	1,266	1,155
Total inventories and contracts in progress	**9,986**	**11,027**	**7,870**

The amount of the inventory written-off as an expense is K€229 (2017: K€48; 2016: K€98).

The group has contracts in progress and advances from customers. The total costs incurred is K€547 and the profit recognized is K€282 as per December 31, 2018. Advances were received for the amount of K€370 with respect to contracts in progress per end of 2018 (2017: K€0; 2016: K€0). There are no retentions outstanding.

10 Other assets

Other non-current assets

Other non-current assets include the following:

	As of December 31,		
in 000€	2018	2017	2016
Tax credits	3,006	2,446	1,766
Guarantees and deposits	405	362	342
Non-current receivable on joint venture	1,096	804	—
Non-listed equity investments	2,701	—	—
Other	29	55	46
Total non-current assets	**7,237**	**3,667**	**2,154**

The non-current tax credits relate to tax credits that will be realized over more than one year.

The non-listed equity investments mainly consist of the investment in equity shares of the non-listed company Essentium Inc. The Group holds a non-controlling interest of 5% in this company. This investment was irrevocably designated at fair value through OCI as the Group considers these investments to be strategic in nature. We refer to Note 3 and Note 20.

Other current assets

Other current assets include the following:

	As of December 31,		
in 000€	2018	2017*	2016
Deferred charges	2,046	2,021	1,483
Tax credits	185	219	176
Accrued income	958	524	666
Other tax receivables	2,286	2,910	604
Other non-trade receivables	1,461	2,001	1,552
Total current assets	**6,936**	**7,675**	**4,481**

The other tax receivables include Value Added Tax (VAT) receivables. The non-trade receivables for the year ending December 31, 2018 include the indemnification asset for the amount of K€222 as referred to in Note 4. Business Combinations related to ACTech. Also please note that a receivable related to factoring was accounted for under the non-trade receivables in the year ending December 31, 2016 (K€541). In the year ending December 31, 2018 this receivable related to factoring has been recorded under the trade receivables for the amount of K€445 (2017: K€646).

11 Trade receivables

The trade receivables include the following:

in 000€	As of December 31, 2018	2017	2016
Trade receivables	38,764	36,572	27,990
Amortization receivables	(1,873)	(990)	(511)
Total	**36,891**	**35,582**	**27,479**

Trade receivables are non-interest bearing and are generally on payment terms of 30 to 90 days.

As at December 31, 2018, trade receivables of an initial value of K€1,873 (2017: K€990; 2016: K€511) were impaired. Impairment is accounted for under the other operating expenses. See below for changes in the impairment of receivables.

in 000€	
At January 1, 2016	**(505)**
Addition	(266)
Usage	190
Reversal	70
At December 31, 2016	**(511)**
At January 1, 2017	**(511)**
Addition	(620)
Usage	12
Reversal	129
At December 31, 2017	**(990)**
At January 1, 2018	**(990)**
Addition	(1,284)
Usage	182
Reversal	219
At December 31, 2018	**(1,873)**

12 Cash and cash equivalents

Cash and cash equivalents include the following:

in 000€	As of December 31, 2018	2017	2016
Cash at bank	105,846	33,611	45,645
Cash equivalents	9,660	9,564	10,267
Total	**115,506**	**43,175**	**55,912**

Cash at banks earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

In connection with the exercise of warrants payments have been received in 2017 from employees for a total amount of K€209, not converted into shares before year-end. In line with regulations the amount of K€209 was posted on a restricted bank account per December 31, 2017. There were no restrictions on cash at December 31, 2018 or 2016.

13 Equity

Share capital

The share capital of the parent company Materialise NV consists of 52,890,761 ordinary nominative shares at December 31, 2018 (2017: 47,325,438; 2016: 47,325,438) with no nominal but par value of €0.058 in 2018 (2017: €0.058; 2016: €0.058) for a total amount of K€3,050 at December 31, 2018 (2017: K€2,729; 2016: K€2,729).

in 000€, except share data	Total number of founder shares	Total number of ordinary shares	Total share-holders' capital	Total share-premium
Outstanding at January 1, 2016	**—**	**47,325,438**	**2,729**	**78,098**
Transfer share capital to share premium	—	—	—	—
Capital increase in cash - public offering	—	—	—	—
Expenses directly attributable to public offering	—	—	—	—
Capital increase via exercise of warrants	—	—	—	—
Equity settled share-based payments expense	—	—	—	921
Outstanding on December 31, 2016	**—**	**47,325,438**	**2,729**	**79,019**
Outstanding at January 1, 2017	**—**	**47,325,438**	**2,729**	**79,019**
Transfer share capital to share premium	—	—	—	—
Capital increase in cash - public offering	—	—	—	—
Expenses directly attributable to public offering	—	—	—	—
Capital increase via exercise of warrants	—	—	—	—
Equity settled share-based payments expense	—	—	—	820
Outstanding on December 1, 2017	**—**	**47,325,438**	**2,729**	**79,839**
Outstanding at January 1, 2018	**—**	**47,325,438**	**2,729**	**79,839**
Transfer share capital to share premium	—	—	—	—
Capital increase in cash - public offering and private placement	—	5,403,125	312	59,575
Expenses directly attributable to public offering	—	—	—	(4,003)
Capital increase via exercise of warrants	—	162,198	9	593
Equity settled share-based payments expense	—	—	—	633
Outstanding on December 31, 2018	**—**	**52,890,761**	**3,050**	**136,637**

The shareholders' capital increased by K€9 in 2018 as a result of the exercise of warrants outstanding and fully vested. The number of new shares issued was 162,198 at an average price of €3.72 per share, including share premium. The shareholders' capital further increased in 2018 by K€312 due to a capital increase in cash. The number of new shares issued was 5,403,125 at an average price of €11.08 per share, including share premium.

Share premium

In Belgium, the portion of the capital increase in excess of par value is typically allocated to share premium.

The carrying value of the share premium is K€136,637 at December 31, 2018 (2017: K€79,839; 2016: K€79,019). The change in 2018 is the result of:

- The capital increase in cash-public offering and private placement of K€59,575, compensated by the expenses directly attributable to the public offering of K€(4,003);
- The capital increase via exercise of warrants of K€593; and
- the share-based payment expense of K€633.

The change in 2017 and 2016 is the result of the share-based payment expense of K€820 and K€921, respectively.

Reserves

The nature and purpose of the reserves is as follows:

in 000€	As of December 31, 2018	2017*	2016
Legal reserve	279	279	279
(Accumulated deficit)	(2,127)	(3,990)	(1,882)
Reserves	**(1,848)**	**(3,711)**	**(1,603)**

Based on the statutory result and after final result allocation approved by the annual shareholders meeting the legal reserve is increased by reserving 5% of the yearly statutory profit until the legal reserve reaches at least 10% of the shareholders' capital. The legal reserve cannot be distributed to the shareholders.

The Group did not pay any dividend during 2018, 2017 and 2016.

Non-controlling interest

The non-controlling interest is zero per end of 2018, 2017 and 2016. No non-controlling interest is recognized for the 17% held by a third party in RapidFit+ as the amount was reclassified to a financial liability.

RapidFit+

The Group has purchased a call option and written a put-option on the non-controlling interest in Rapidfit+. The call option is accounted for in accordance with IFRS 9 and has an exercise price which is calculated according to a specified contractual formula based on the following parameters: invested capital, multiple of EBITDA minus net financial debt. Based on our analysis the call option remains out of the money and as such the fair value is estimated at zero at December 31, 2018. The call option is exercisable between 2015 and 2019.

The written put option has been recognized as a financial liability and measured at the fair value of the redemption amount and amounts to K€845 at December 31, 2018 (2017: K€788; 2016 K€735). The undiscounted estimated redemption amount totals K€875 at December 31, 2018 (2017: K€875; 2016: K€875). The redemption price has an exercise price according to a specified contractual formula based on the following parameters: invested capital, multiple of EBITDA minus net financial debt. The initial recognition resulted in a reclassification of K€264 from non-controlling interest and K€64 from consolidated reserves. The parameter "invested capital" of the contractual formula has been adjusted in December 2014 to reflect the impact of the capital increase and the exercise period has been extended with one year. As a result, the estimated redemption amount of the written put option has increased by K€273 which has been recorded in diminution of the consolidated reserves. The written put option is exercisable between 2017 and 2021 and it is management's estimate that the put option will be exercised within 12 months. As such, the written put option is presented as an other current liability.

In addition, RapidFit+ has issued 0 dilution warrants to the non-controlling interest which are exercisable upon occurrence of certain specified events. The fair value of the dilution warrants is zero per end of 2018 (2017: zero; 2016: zero).

14 Share-based payment plans

Share-based payment plans of the parent

The changes of the year for the warrant plans are as follows:

	2018	2017	2016
Outstanding at January 1*	**1,458,360**	**1,681,000**	**1,401,852**
Granted	2,000	—	350,000
Forfeited / Cancelled	(69,104)	(119,784)	(70,852)
Exercised	(73,207)	(102,856)	—
Outstanding at December 31*	**1,318,049**	**1,458,360**	**1,681,000**
Exercisable at December 31	**252,793**	—	—

* The Group's share-based payment plans are all equity-settled except for the IPO warrants that have been granted to certain employees in certain countries due to legal requirements which are cash-settled. The outstanding amount includes number of stock appreciation rights ("SARs") issued under cash-settled share-based payment plans.

The number of outstanding warrants has been adjusted to reflect the 1-to-4 stock split decided in June 2014. The 2013 warrant plan gives a right to four shares for each warrant, whereas under all other warrant plans one warrant gives a right to one share. For presentation purposes the tables reflect the number of shares the warrants give right to across all plans.

In the course of October and November 2017 payments were done by employees in connection with the exercise of 25,714 warrants, representing 102,856 shares (2013 warrant plan), for which the notary deed was only passed after year-end 2017. Therefore, the payments had been kept on a restricted bank account of the Company as at December 31, 2017. The notary deed required for the capital increase in connection with this exercise was passed before the notary in the course of March 2018. In addition, capital increases were passed before the notary in the course of December 2018 in connection with the exercises of warrants related to the 2013 warrant plan (second phase; 4,775 warrants representing 19,100 shares) and the IPO warrant plan (40,242 warrants representing 40,242 shares).

Equity-settled share-based payment plans

The Group has several plans in place (2013 warrant plan, IPO warrant plan and 2015 warrant plan) which have similar terms except for the exercise price, except for the 2015 warrant plan.

2013 warrant plan

Each warrant gives the right to the holder to four ordinary shares of the parent Company. The warrants have a contractual term of ten years and vest for 25% in the fourth year; 25% in the fifth year; 25% in the sixth year; and 25% in the seventh year. Warrants are exercisable as from the month after they have vested and in the subsequent exercise periods. There are no cash settlement alternatives and the Group does not have a practice of cash settlement for these warrants. The warrants have a contractual term of ten years.

Under the 2013 warrant plan 301,096 warrants were effectively granted in October 2013 and 166,800 warrants were granted to certain employees and to certain members of our board of directors and senior management on November 28, 2013 with an exercise price ranging from €7.86 to €8.54.

The status of the 2013 warrant plan at December 31 is as follows:

	2018	2017	2016
Outstanding at January 1	**320,640**	**435,096**	**439,896**
Granted	—	—	—
Forfeited / Cancelled	(1,500)	(11,600)	(4,800)
Exercised	(19,100)	(102,856)	—
Outstanding at December 31	**300,040**	**320,640**	**435,096**
Exercisable at December 31	**89,892**	—	—

With respect to the warrants exercised, we refer to our comments above. Since the 2013 warrant plan prescribes that each warrant gives right to four shares and our table above presents the impact on the number of shares, the actual remaining number of warrants as per December 31, 2018 equals 75,010.

IPO warrant plan

Each warrant gives the right to the holder to one ordinary share of the parent Company. The warrants have a contractual term of 10 years and vest for 25% in the fourth year; 25% in the fifth year; 25% in the sixth year and 25% in the seventh year. Warrants are exercisable as from the month after they have vested and in the subsequent exercise periods. There are no cash settlement alternatives and the Group does not have a practice of cash settlement for these warrants. The warrants have a contractual term of 10 years.

The Group granted 979,898 warrants in July 2014 and 36,151 warrants in November 2014 in the context of the initial public offering to the employees of the Group with an exercise price of €8.81 ("IPO warrant plan"). The Group granted an additional 18,180 warrants to employees in July 2015 under the IPO warrant plan.

The status of the IPO warrant plan at December 31 is as follows:

	2018	2017	2016
Outstanding at January 1	**671,503**	**727,599**	**772,859**
Granted	—	—	—
Forfeited / Cancelled	(42,209)	(56,096)	(45,260)
Exercised	(40,242)	—	—
Outstanding at December 31	**589,052**	**671,503**	**727,599**
Exercisable at December 31	**114,012**	—	—

Warrant plan 2015

The board of directors decided on December 18, 2015 on a new plan ("2015 warrant plan") by which it can grant up to 1,400,000 warrants to employees. Each warrant gives the right to the holder to one ordinary share of the parent Company. The warrants vest for 10% on the second anniversary of the granting; 20% on the third anniversary of the granting; 30% on the fourth anniversary of the granting; and 40% on the fifth anniversary of the granting, unless otherwise decided by the board of directors or one or more of its representatives granted powers thereto. Warrants are exercisable only after they have vested and only during a period of (i) four weeks following the publication of the results of the parent Company of the second and fourth quarter, or (ii) if no quarterly results are published, during the month March and the month September of every year. There are no cash settlement alternatives and the Group does not have a practice of cash settlement for these warrants. The warrants have a term of ten years.

The Group granted 350,000 warrants in July 2016 to the employees of the Group with an exercise price of €6.45. The Group granted 2,000 warrants to an employee in May 2018 with an exercise price of €10.08

The status of the 2015 warrant plan at December 31 is as follows:

	2018	2017	2016
Outstanding at January 1	**329,000**	**350,000**	—
Granted	2,000	—	350,000
Forfeited / Cancelled	(5,800)	(21,000)	—
Exercised	—	—	—
Outstanding at December 31	**325,200**	**329,000**	**350,000**
Exercisable at December 31	**32,700**	—	—

Fair value

The fair value of the warrants is estimated at the grant date using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the warrants were granted.

The following table provides the input to the Black-Scholes model for the 2013 warrant plan, IPO warrant plan and 2015 warrant plan:

	2015 (Sept 16)	2015 (Nov)	IPO 2014 (Nov)	IPO 2014 (June)	2013 (Dec) *	2013 (Oct) *
Return dividend	0%	0%	0%	0%	0%	0%
Expected volatility	47%	47%	50%	46%	50%	53%
Risk-free interest rate	0.24%	1.17%	1.12%	1.70%	2.56%	2.43%
Expected life	4.30	5.50	5.50	5.50	5.50	5.50
Exercise price (in €)	6.45	8.81	8.81	8.81	8.54	7.86
Stock price (in €)	6.42	8.08	8.67	8.81	18.09	18.09
Fair value SAR (in €)	2.41	3.30	3.94	3.83	12.23	12.77

(*) Exercise price, stock price and fair value are not adjusted for the 1 to 4 stock-split completed in June 2014.

The above input for the Black-Scholes model have been determined based on the following:

- The dividend return is estimated by reference to the historical dividend payment of the Group. Currently, this is estimated to be zero as no dividend have been paid since inception;
- Expected volatility is estimated based on the average annualized volatility of the volatility of the Group's stock (until September 2016: of a number of quoted peers in the 3D printing industry and the volatility of the Group's stock);
- Risk-free interest rate is based on the interest rate applicable for the 10Y Belgian government bond at the grant date;
- Estimated life of the warrant is determined to be until the first exercise period which is typically the month after vesting; and
- Fair value of the shares is determined based on the share price of the Group on Nasdaq at the date of valuation. For the grants prior to the initial public offering, the fair value of the shares was estimated based on a discounted cash flow model with 3-year cash flow projections and a multiple of EBITDA determined based on a number of quoted peers in the 3D printing industry.

The expense arising from share-based payment transactions for the warrants plans mentioned above was K€640 in 2018 (2017: K€819; 2016: K€921).

The weighted average remaining estimated life of the warrants outstanding as of December 31, 2018 is 5.95 years (2017: 6.92 years; 2016: 4.38 years). The weighted average fair value for the warrants outstanding at the end of 2018 was €5.62 (2017: €5.60; 2016: €6.01). The weighted average exercise price for the warrants outstanding at the end of 2018 was €7.99 (2017: €8.05; 2016: €8.06).

Cash-settled share-based payment plans

The Group has issued 215,688 SARs in July 2014 towards certain employees in certain countries due to legal requirements with similar terms and conditions as the IPO warrant plan except that the SAR will be settled in cash. The exercise price of the SAR is €8.81.

The status of this plan is as follows:

	2018	2017	2016
Outstanding at January 1	**137,217**	**168,305**	**189,097**
Granted	—	—	—
Forfeited / Cancelled	(19,595)	(31,088)	(20,792)
Exercised	(13,865)	—	—
Outstanding at December 31	**103,757**	**137,217**	**168,305**
Exercisable at December 31	**16,189**	—	—

The SAR plan grants the bearer the right to a cash payment equal to the difference between the exercise price and the stock price at the exercise date. This plan is considered a cash settled shared based payment and is as such recorded as liability (see Note 16).

The SAR's have a contractual term of ten years and vest for 25% in the fourth year; 25% in the fifth year; 25% in the sixth year and 25% in the seventh year. SAR's are exercisable as from the month after they have vested and in the subsequent exercise periods.

The fair value of the SAR is estimated at each reporting date using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the warrants were granted.

The following table lists the input used for the Black-Scholes model:

	2018	2017	2016
Return dividend	0%	0%	0%
Expected volatility	49%	49%	50%
Risk-free interest rate	0.77%	0.73%	0.55%
Expected life	1.25	2.25	3.25
Exercise price (in €)	8.81	8.81	8.81
Stock price (in €)	17.49	10.61	7.30
Fair value SAR (in €)	9.09	3.85	2.17

The expense arising from share-based payment transactions for the SAR's plan was K€435 in 2018 (2017: K€204; 2016: K€46). The carrying value of the liability at December 31, 2018 amounts to K€786 (2017: K€351; 2016: K€147). The total intrinsic value of the liability for warrants currently exercisable was K€0 at December 31, 2018, 2017 and 2016.

Share-based payment plans of RapidFit+

The subsidiary RapidFit+ has issued a warrant plan on August 23, 2013 where a maximum of 300 warrants can be offered to management with an exercise price of €553.92. In January 2014, a total of 199 warrants were granted and accepted.

The changes for the year for the RapidFit+ warrant plan are as follows:

	2018	2017	2016
Outstanding at January 1	199	199	199
Granted	—	—	—
Forfeited / Cancelled	—	—	—
Exercised	—	—	—
Outstanding at December 31	**199**	**199**	**199**
Exercisable at December 31	—	—	—

The following table lists the input to the Black-Scholes model for the RapidFit+ warrant plan:

	2014
Return dividend	0%
Expected volatility	50%
Risk-free interest rate	2.29%
Expected life	5.5
Exercise price	553.9
Fair value option	262.7

The expense arising from share-based payment transactions for RapidFit+ warrant plan was K€7 in 2018 (2017: K€10; 2016: K€10).

15 Loans and borrowings

The loans and borrowings include the following:

in 000€	As of December 31		
	2018	2017	2016
K€28,000 acquisition bank loan	24,576	27,513	—
K€18,000 secured bank loans	17,739	17,575	6,404
K€10,000 EIB bank loan	10,000	—	—
K€12,300 bank loans ACTech	12,300	9,247	—
K€8,750 other facility loans	4,299	4,982	5,411
Bank investment loans—top 20 outstanding	23,801	21,441	9,467
Bank investment loans—other	3,808	2,289	2,927
Financial lease agreements	6,809	9,164	7,395
Institutional loan	1,492	1,105	936
Convertible bonds	1,000	1,000	1,000
Related party loan	214	241	266
Total loans and borrowings	**106,038**	**94,557**	**33,806**
Current	13,598	12,769	5,539
Non-Current	92,440	81,788	28,267

K€28,000 Acquisition loan (balance K€24,576 per December 31, 2018)

This bank loan has been concluded in October 2017 to finance the acquisition of ACTech. The loan includes a portion of K€18,000 reimbursable monthly during seven years, and a bullet portion of K€10,000, reimbursable at once in October 2024. The interest rate is fixed for the duration of the loan, and amounts to 1.1% on average for both portions. The bank loans are secured with a business pledge mandate, a share pledge on Materialise Germany GMBH, and debt covenants.

K€18,000 secured bank loans

The K€18,000 loan has been concluded in 2016 in two agreements to finance the construction of new facilities in Leuven (Belgium) and in Poland, both maturing in 2032. The agreement for the Belgian facility financing amounts to K€12,000 (drawn per end 2018: K€11,739; per end 2017: K€11,575), and with reimbursements only starting in December 2022. The agreement for the Polish facility financing amounts to K€6,000 (fully drawn per end of 2017), and with reimbursements only starting in June 2019. The average interest rate of both agreements amounts to 1.2%. The bank loan is secured with a mortgage mandate on the Belgian facility buildings.

K€10,000 EIB bank loan

On December 20, 2017 the Group entered into a finance contract with the European Investment Bank, or EIB, to finance future research and development programs. As part of a first tranche, an amount of K€10,000 was drawn over the course of 2018. The agreement foresees a two-year loan reimbursement period. Loans under the contract are made at a fixed rate, based on the Euribor rate at the time of the borrowing, plus a variable margin. The margin is initially equal to 1.86% and varies in function of certain EBITDA levels and debt ratios. The contract contains customary security, covenants and undertakings.

K€12,300 bank loans

In March 2018, three bank loans originating from the acquired ACTech Group were refinanced entirely for the amount of K€9,300, with adjusted maturity to May 2025 and first reimbursements in August 2020. The interest rate has been fixed at approximately 1.6%, and pledges including a K€4,650 mortgage on ACTech's facilities and a guarantee of Materialise NV. In addition, a new investment credit of K€3,000 was obtained in June 2018, repayable as from January 2019 and with a fixed interest rate of 1.5%.

K€8,750 - Other facility loans

Three facility loans were contracted in 2005, 2006 and 2012 for the construction of Leuven office and production facilities (K€2,000, K€300 and K€5,000, respectively) and another loan for the Czech Republic offices in 2008 (K€ 1,750). The balance of the four loans amounts to K€4,299 per December 31, 2018. All loans have a repayment schedule of 15 years and interest rates are fixed between 4.3% and 5.4% for the four loans.

Miscellaneous investment loans

The 20 largest of these loans outstanding per December 31, 2018 amount to a balance of K€23,801. They have been agreed in 2017, 2016 and in the years before to finance various investments in machinery, printers, equipment, and software tools. The vast majority of the loans have a reimbursement period over seven years, and are at fixed interest rates with weighted average below 1%.

Finance lease obligations with third parties

The Group has several finance lease obligations mainly with financial institutions and related to the financing of buildings and various other items of plant and equipment such as 3D printers. Per December 31, 2018 the balance of these financial lease agreements amounts to K€6,809, and are mostly at fixed interest rates with weighted average below 2%.

K€2,000 institutional loan

This loan was contracted with a governmental institution in Germany to finance the production operations of Materialise Germany for a maximum amount of K€2,000. The loan is repayable over a four year period, starting as of September 2017 with a fixed interest rate of 0.25% payable per quarter. Per December 31, 2018 K€1,942 has been drawn with an outstanding balance of K€1,492.

K€1,000 convertible bond with related party

We issued, on October 28, 2013, 1,000 convertible bonds with a related party for a total amount of K€1,000. The bonds have been fully subscribed by a member of our senior management.

The conditions of the convertible bond can be summarized as follows:

- Number of convertible bonds: 1,000
- Nominal value per bond: €1,000
- Contractual life: 7 years
- Interest: 3.7% per year
- Conversion period: from January 1, 2017 until maturity
- Convertion price: €1.97 per share

The maximum number of ordinary shares that can be issued upon conversion is 508,904.

The Group has estimated the fair value of a similar liability however without any conversion option by reference to a number of quoted peers in Belgium. The fair value was estimated at K€907. Upon initial recognition, an amount of K€93 was recognized in consolidated reserves reflecting the fair value of the conversion option.

Finance lease obligations with related parties

In October 2001, we entered into a finance lease agreement with Ailanthus NV to lease land and a portion of a new production building. The lease had a term of 15 years and included a purchase option for the land and the building. We determined that this lease was a finance lease because (i) the purchase option is assumed to be significantly lower than the fair value of the land and building and (ii) it was very likely at inception of the lease that we would exercise our purchase option. The amounts outstanding as of December 31, 2018 is K€0 (2017: K€0; 2016: K€74). The interest expense for the year 2018 is K€0 (2017: K€0; 2016: K€4). The term of the lease expired on September 20, 2016 and we exercised a purchase option in respect of the land and building. The notary deed transferring the land and building was completed in the course of 2017.

Related party loan

Ailanthus NV has granted us one other loan at fixed interest rate of 4.23% that matures in 2025. The purpose of the loan is to finance the purchase of a building in France. The amounts outstanding as of December 31, 2018 is K€214 (2017: K€241; 2016: K€266). The interest expense for the year ended December 31, 2018 is K€10 (2017: K€11; 2016: K€12).

Changes of liabilities for financing activities:

The following table presents the changes of the liabilities for financing activities:

in 000€	For the year ended December 31		
	2018	**2017**	**2016**
At January 1,	**94,557**	**33,806**	**21,089**
Proceeds from loans & borrowings	32,554	54,319	14,669
Repayment of loans & borrowings	(18,820)	(11,904)	(2,796)
New finance leases	792	2,906	2,483
Repayment of finance leases	(3,102)	(2,947)	(1,898)
Loans acquired from business combination	—	18,205	—
Net foreign exchange movements	57	172	259
At December 31,	**106,038**	**94,557**	**33,806**

16 Other non-current liabilities

The other non-current liabilities consist of the following:

in 000€	As of December 31, 2018	2017	2016
Written-put option RapidFit+	—	788	735
Contingent consideration	—	648	909
Provisions	82	109	69
Other	786	359	160
Total	**868**	**1,904**	**1,873**

We refer to Note 13 for a description of the written-put options RapidFit+.

With respect to the contingent consideration, related to the CENAT acquisition, we refer to Note 4 on business combinations. At December 31, 2018 only a consideration of K€450 remains, recorded under the other current liabilities (see Note 19). Per end of 2017 and 2016 the non-current part of the CENAT contingent consideration amounted to K€648 and K€909, respectively.

The other items in the above table include a liability of K€786 per December 31, 2018 related to the cash settled shared based payment plan as referred to in Note 14 (2017: K€351; 2016: K€147).

The impact of the accounting treatment of the Belgian contribution plans with a minimal guarantee is not material as only a limited number of people can benefit. No provisions have been recognized as of December 31, 2018, 2017 and 2016. As such, no further disclosures have been provided.

17 Tax payables

The tax payables amount to K€2,313 as per December 31, 2018 (2017*: K€2,023; 2016: K€926) and is mainly related to the tax payables of the entities located in Germany.

18 Deferred income

Deferred income consists of the following:

	As of December 31		
in 000€	2018	2017*	2016
Deferred maintenance & license	22,606	18,723	16,799
Deferred (project) fees	4,838	3,765	4,134
Deferred government grants	338	71	419
Other	—	—	58
Total	**27,782**	**22,559**	**21,410**
current	23,195	18,791	17,822
non-current	4,587	3,768	3,588

The deferred maintenance and license consist of maintenance fees paid up-front which are deferred and amortized over the maintenance period. The deferred (project) fees consist of one-time and advance payments received which are deferred in accordance with the revenue accounting policies. The deferred government grants are recognized as income under "other operating income".

We refer to Note 22.1.2 for more detail on the contract liabilities.

19 Other current liabilities

Other current liabilities include the following:

in 000€	As of December 31		
	2018	2017	2016
Payroll-related liabilities	10,111	9,274	7,873
Non-income tax payables	2,175	2,063	694
Accrued charges	789	769	946
Advances received	713	870	581
Other current liabilities	1,554	520	53
Total	**15,342**	**13,496**	**10,147**

The other current liabilities as per December 31, 2018 include an amount of K€450 (2017: K€257; 2016: K€0) payable in connection with the CENAT business combination (see also Note 4 and Note 16), and a payable for the amount of K€845 (2017: K€0; 2016: K€0) in connection with the written-put options RapidFit+ (see also Note 13 and Note 16).

The non-income tax payables mainly relate to VAT payables and payroll taxes.

20 Fair value

Financial assets

The carrying value and fair value of the financial assets as of December 31, 2018, 2017 and 2016 can be presented as of:

in 000€	Carrying value 2018	Carrying value 2017*	Carrying value 2016	Fair value 2018	Fair value 2017*	Fair value 2016
Financial assets						
Debt instruments measured at amortized cost						
Trade receivables (current)	36,891	35,582	27,479	36,891	35,582	27,479
Other financial assets (non-current)	1,530	1,221	388	1,530	1,221	388
Other current non-trade receivables	1,461	2,001	1,552	1,461	2,001	1,552
Cash & cash equivalents	115,506	43,175	55,912	115,506	43,175	55,912
Total debt instruments	**155,388**	**81,979**	**85,331**	**155,388**	**81,979**	**85,331**
Financial assets at fair value through profit or loss						
Derivatives	117	218	—	117	218	—
Total financial assets measured at fair value	**117**	**218**	**—**	**117**	**218**	**—**
Equity instruments designated at fair value through OCI						
Non-listed equity investments	2,701	—	—	2,701	—	—
Total Equity instruments designated at fair value through OCI	**2,701**	**—**	**—**	**2,701**	**—**	**—**

The fair value of the financial assets has been determined on the basis of the following methods and assumptions:

- The carrying value of the cash and cash equivalents and the current receivables approximate their fair value due to their short term character;
- The fair value of the derivatives has been determined based on a mark-to-market analysis prepared by the bank based on observable market inputs (level 2 inputs);
- Other current non-trade receivables are being evaluated on the basis of their credit risk and interest rate. Their fair value is not different from their carrying value on December 31, 2018, 2017 and 2016
- The non-listed equity investments, mainly representing the investment in Essentium Inc, are measured at fair value. As of December 31, 2018, management considers that currently the cost is an appropriate estimate of fair value (level 2 input) as long as there is no significant capital increase that would give a reliable indication of the fair value of the investment. This was because of the followings reasons:
  - Essentium Inc is a non-listed entity;
  - The Group only has an insignificant interest in Essentium Inc (5% of the shares);
  - The Group has no representatives in the Board of Directors of Essentium Inc;
  - Insufficient more recent information is available to measure fair value; and
  - The investment was completed close to year-end.

Financial liabilities:

The carrying value and fair value of the financial liabilities as of December 31, 2018, 2017 and 2016 can be presented as of:

in 000€	Carrying value 2018	Carrying value 2017*	Carrying value 2016	Fair value 2018	Fair value 2017*	Fair value 2016
Financial liabilities measured at amortized cost						
Loans & Borrowings	106,038	94,557	33,806	105,027	95,351	34,619
Trade payables	18,667	15,670	13,400	18,667	15,670	13,400
Other liabilities	778	1,133	647	778	1,133	647
Total financial liabilities measured at amortized cost	**125,483**	**111,360**	**47,853**	**124,472**	**112,154**	**48,666**
Financial liabilities measured at fair value						
Contingent consideration	450	905	909	450	905	909
Cash settled share based payments	786	351	147	786	351	147
Written put option on NCI	845	788	735	845	788	735
Derivatives	194	8	—	194	8	—

Total financial liability measured at fair value	**2,275**	**2,052**	**1,791**	**2,275**	**2,052**	**1,791**
Total non-current	94,521	85,276	31,715	93,289	85,890	32,358
Total current	33,237	28,136	17,929	33,458	28,316	18,099

The fair value of the financial liabilities has been determined on the basis of the following methods and assumptions:

- The carrying value of current liabilities approximates their fair value due to the short term character of these instruments;
- Loans and borrowings are evaluated based on their interest rates and maturity date. Most interest bearing debts have fixed interest rates and their fair value is subject to changes in interest rates and individual creditworthiness. The interest-free loans have already been recognized initially at fair value based on a present value technique (level 2 inputs) and are subsequently measured at amortized cost. Their carrying value approximates their fair value;
- The fair value of the derivatives has been determined based on a markt-to-market analysis prepared by the bank based on observatable marketinputs (level 2 inputs);
- The fair value of the written put option on non-controlling interest has been determined based on the present value of the redemption amount (level 3 inputs); and
- The fair value of the (contingent) consideration has been determined based on the latest long-term business plans of the Cenat business (level 3 inputs). Note that the consideration is no longer contingent as per end 2018.

Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets and liabilities;
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly; and
- Level 3: techniques which use inputs that have a significant effect on the recorded fair value that are not based on observable market data.

The Group has the following financial instruments carried at fair value in the statement of financial position on December 31, 2018, 2017 and 2016: the derivatives related to interest rate and foreign currency swaps as included in the above tables, a call option and written put option on non-controlling interest, the (contingent) consideration for the acquisition of Cenat and the non-listed equity investments.

- The fair value of the written put option is determined based on the present value of the redemption amount and is considered level 3. The redemption amount is a formula (see Note 13) and is estimated on historical financial figures. The impact on the income statement is K€57 during 2018 (2017: K€53; 2016: K€50).
- The fair value of the call option is estimated at zero as the call option is out of the money based on our analysis (see Note 13).
- The fair value of the (contingent) consideration is based on the agreement that was signed with the former shareholders on December 24, 2018 determining that the only remaining and final consideration to be paid amounts to K€450. The final consideration was paid on January 21, 2019. A fair value adjustment was recognized in 2018 for the amount of K€192, recorded under the other operating income (we also refer to Note 4).
- The fair value of the non-listed equity investments is currently estimated as its cost because of the reasons explained above.

21 Segment information

For management purposes, the Group is organized into segments based on their products, services and industry and has the following three reportable segments:

- The Materialise Medical segment, which develops and delivers medical software solutions, medical devices and other related products and services;
- The Materialise Manufacturing segment, which delivers 3D printed products and related services; and
- The Materialise Software segment, which develops and delivers additive manufacturing software solutions and related services.

The measurement principles used by the Group in preparing this segment reporting are also the basis for segment performance assessment and are in conformity with IFRS. The Chief Executive Officer of the Group acts as the chief operating decision maker. As a performance indicator, the chief operating decision maker controls the performance by the Group's revenue and EBITDA. EBITDA is defined by the Group as net profit plus finance expenses, less financial income plus income taxes, plus depreciation, amortization and impairment.

The following table summarizes the segment reporting for each of the reportable periods ending December 31. Corporate research and development, headquarters' function, financing and income taxes are managed on a Group basis and are not allocated to operating segments. As management's controlling instrument is mainly revenue-based, the reporting information does not include assets and liabilities by segment and is as such not available per segment.

in 000€	Materialise Software	Materialise Medical	Materialise Manufacturing	Total segments	Unallocated	Consolidated
For the year ended December 31, 2018						
Revenues	37,374	52,252	94,956	184,582	139	184,721
Segment EBITDA	11,536	10,252	10,785	32,573	(10,122)	22,451
Segment EBITDA %	30.9%	19.6%	11.4%	17.6%	—	12.2%
For the year ended December 31, 2017						
Revenues	35,770	42,841	63,712	142,323	250	142,573
Segment EBITDA*	13,926	4,400	4,439	22,765	(9,797)	12,968
Segment EBITDA %	38.9%	10.3%	7.0%	16.0%	—	9.1%
For the year ended December 31, 2016						
Revenues	30,122	37,910	46,406	114,438	39	114,477
Segment EBITDA	10,130	894	3,848	14,872	(6,391)	8,481
Segment EBITDA %	33.6%	2.4%	8.3%	13.0%	—	7.4%

The segment EBITDA is reconciled with the consolidated net profit (loss) for the year as follows:

	For the year ended December 31,		
in 000€	2018	2017*	2016
Segment EBITDA	**32,573**	**22,765**	**14,872**
Depreciation, amortization and impairment	(17,287)	(12,576)	(8,374)
Corporate research and development	(1,913)	(2,017)	(1,673)
Corporate headquarter costs	(10,358)	(9,690)	(8,646)
Other operating income (expense)	2,149	1,910	3,928
Operating (loss) profit	**5,164**	**392**	**107**
Financial expenses	(4,864)	(4,728)	(2,437)
Financial income	3,627	3,210	2,039
Income taxes	(425)	(522)	(1,710)
Share in loss of joint venture	(475)	(469)	(1,018)
Net (loss) profit	**3,027**	**(2,117)**	**(3,019)**

The Group has no customers with individual sales larger than 10% of the total revenue in 2018 (2017: none; 2016: none).

Entity-wide disclosures

We refer to the Note 22.1 for the revenue by geographical area, based on location of the customer. The total revenue realized in the country of domicile (Belgium) in 2018 amounts to K€9,350 (2017: K€8,145; 2016: K€7,534).

The total non-current assets, other than financial instruments, deferred tax assets, by geographical area is as follows:

in 000€	As of December 31, 2018	2017*	2016
United States of America (USA)	3,953	3,880	4,697
Americas other than USA	62	29	35
Europe (without Belgium)	82,427	81,988	23,984
Belgium	48,873	46,576	34,074
Asia-Pacific	1,039	744	898
Total	**136,354**	**133,217**	**63,688**

The totals of the above table includes goodwill, intangible assets and property, plant & equipment as disclosed in the consolidated statements of financial position.

22 Income and expenses

22.1 Revenue

The effect of initially applying IFRS 15 on the Group's revenue from contracts with customers is described in Note 2. Due to the transition method chosen in applying IFRS 15, comparative information has not been restated to reflect the new requirements.

22.1.1 Disaggregated revenue information

in 000€	Materialise Software	Materialise Medical	Materialise Manufacturing	Total segments	Unallocated	Consolidated
Geographical markets						
United States of America (USA)	8,804	23,940	9,439	42,183	34	42,217
Americas other than USA	193	1,404	101	1,698	2	1,700
Europe (without Belgium) & Africa	17,026	19,073	74,852	110,951	77	111,028
Belgium	155	1,824	7,364	9,343	7	9,350
Asia Pacific	11,196	6,011	3,200	20,407	19	20,426
Total revenue from contracts with customers	**37,374**	**52,252**	**94,956**	**184,582**	**139**	**184,721**
Type of goods or service						
Software revenue (non-medical)	37,374	—	—	37,374	—	37,374
Software revenue (medical)	—	17,045	—	17,045	—	17,045
Medical devices and services	—	35,207	—	35,207	—	35,207
Prototyping	—	—	27,599	27,599	—	27,599
End parts production	—	—	23,919	23,919	—	23,919
Complex metal parts production (ACTech)	—	—	43,438	43,438	—	43,438
Other	—	—	—	—	139	139
Total revenue from contracts with customers	**37,374**	**52,252**	**94,956**	**184,582**	**139**	**184,721**
Timing of revenue recognition						
Goods/Services transferred at a point in time	20,326	39,682	90,614	150,622	139	150,761
Goods/Services transferred over time	17,048	12,570	4,342	33,960	—	33,960
Total revenue from contracts with customers	**37,374**	**52,252**	**94,956**	**184,582**	**139**	**184,721**

The revenue per type of good or service including the previous years is as follows:

	For the year ended December 31		
in 000€	2018	2017	2016
Software revenue (non-medical)	37,374	35,770	30,122
Software revenue (medical)	17,045	15,619	13,404
Medical devices and services	35,207	27,222	24,506
Prototyping	27,599	28,423	27,568
End parts production	23,919	25,324	18,838
Complex metal parts production (ACTech)	43,438	9,965	—
Other	139	250	39
Total	**184,721**	**142,573**	**114,477**

22.1.2 Contract balances

The following table provides information about receivables, contracts in progress (contract assets) and deferred income (contract liabilities) from contracts with customers.

in 000€	As of December 31, 2018	2017
Trade receivables, included in 'trade and other receivables'	38,764	36,572
Contract assets / contracts in progress	829	1,266
Contract liabilities / deferred income	27,444	23,661
Total	**67,037**	**61,499**

We refer to note 18 for a detail of the deferred income and Note 2 for a detail on the cumulative catch-up adjustment on initial application of IFRS 15.

The Group has recognized K€19,201 revenue in 2018 for contract liabilities recognized at January 1, 2018 and reduced revenue for K€96 related to performance obligations that were (partially) satisfied in prior years. Note 18 include split of the deferred income in current and non-current. Non-current deferred income, representing mainly maintenance contracts with terms more than one year and certain contracts with up-front fees which are allocated to performance obligations that will be satisfied over more than one year, may be recognized as revenue between one to three years.

The relation between the timing of satisfaction of the performance obligations and the timing of billing resulting in contract assets and liabilities is as follows:

- Maintenance services: maintenance services are typically billed at the beginning of the maintenance period resulting in deferred income that is recognized on a straightline basis over the maintenance period.
- Software licenses: certain software licenses may have been billed prior to the delivery of the software key resulting in a deferred income balance.
- Certain agreements in the medical segment include up-front fees such as step-in fees or milestone payments which are billed at inception of the contract but which are allocated to performance obligations which are satisfied at a later time in the contract term or which have not been recognized considering the revenue contraint (i.e. may have to be credited when customer achieves certain volume targets). In addition, certain contracts include prepaid fees for volume "Plan Only" purchases for which the purchased services are only delivered during a one year period. Those fees result in deferred income which are recognized as revenue when services/products are delivered and revenue is not constrainted.
- Certain development services are satisfied while the services can only billed at certain pre-defined points in time or when the services are fully satisfied resulting in contracts in progress / contract assets.

22.2 Cost of sales

Cost of sales include the following selected information:

in 000€	For the year ended December 31 2018	2017*	2016
Purchase of goods and services	(39,114)	(34,480)	(25,374)
Amortization and depreciation	(9,910)	(7,560)	(5,007)
Payroll expenses	(33,036)	(20,806)	(16,161)
Other expenses	(239)	(106)	(164)
Total	**(82,299)**	**(62,952)**	**(46,706)**

22.3 Research and development expenses

Research and development expenses include the following selected information:

in 000€	For the year ended December 31 2018	2017	2016
Purchase of goods and services	(3,590)	(3,140)	(3,177)
Amortization and depreciation	(830)	(686)	(478)
Payroll expenses	(17,935)	(16,054)	(13,985)
Other	(61)	(79)	(42)
Total	**(22,416)**	**(19,959)**	**(17,682)**

22.4 Sales and marketing expenses

Sales and marketing expenses include the following selected information:

in 000€	For the year ended December 31		
	2018	2017*	2016
Purchase of goods and services	(9,775)	(8,035)	(7,450)
Amortization and depreciation	(725)	(505)	(563)
Payroll expenses	(35,585)	(30,175)	(27,828)
Other	(218)	(220)	(312)
Total	**(46,303)**	**(38,935)**	**(36,153)**

22.5 General and administrative expenses

General and administrative expenses include the following selected information:

in 000€	For the year ended December 31		
	2018	2017*	2016
Purchase of goods and services	(9,892)	(7,053)	(5,488)
Amortization and depreciation	(3,828)	(2,761)	(2,326)
Payroll expenses	(18,442)	(14,858)	(11,895)
Other	(148)	(204)	(332)
Total	**(32,310)**	**(24,876)**	**(20,041)**

22.6 Net other operating income

The net other operating income can be detailed as follows:

in 000€	For the year ended December 31		
	2018	2017*	2016
Government grants	4,658	4,342	4,181
Amortization intangibles purchase price allocation	(1,994)	(1,064)	—
Allowance for doubtful debtors	(1,065)	(454)	(77)
Capitalized expenses (asset construction)	16	123	12
Net foreign currency exchange gains / (losses)	246	(235)	452
Tax Credits	706	899	741
Fair value adjustment Cenat liability	192	—	—
Personnel related income	168	—	—
Other	844	930	903
Total	**3,771**	**4,541**	**6,212**

The Company has received government grants from the Belgian federal and regional governments and from the European Community in the forms of grants linked to certain of its research and development programs and reduced payroll taxes.

Any government grants recognized as income do not have any unfulfilled conditions or other contingencies attached to them.

The Group has changed its accounting policy with respect to the amortization expense related to the fair value adjustments of the intangible assets acquired from a business combination. These expenses, except for expenses related to the backlog, are now presented under the net other operating result. We refer to Note 2 for more information.

22.7 Payroll expenses

The following table shows the breakdown of payroll expenses for 2018, 2017 and 2016:

in 000€	For the year ended December 31		
	2018	2017	2016
Short-term employee benefits	(76,023)	(60,195)	(50,714)
Social security expenses	(14,139)	(11,200)	(10,136)
Expenses defined contribution plans	(936)	(926)	(388)
Other employee expenses	(13,900)	(9,572)	(8,631)
Total	**(104,998)**	**(81,893)**	**(69,869)**
Total registered employees at the end of the period	2,009	1,862	1,432

22.8 Financial expenses

Financial expenses includes the following selected information:

in 000€	For the year ended December 31		
	2018	2017	2016
Interest expense	(1,747)	(1,026)	(665)
Foreign currency losses	(2,748)	(3,131)	(1,453)
Other financial expenses	(369)	(571)	(319)
Total	**(4,864)**	**(4,728)**	**(2,437)**

22.9 Financial income

Financial income includes the following selected information:

in 000€	For the year ended December 31		
	2018	2017	2016
Foreign currency exchange gains	3,047	2,830	1,853
Amortization discount interest free loans	—	6	14
Other finance income	580	374	172
Total	**3,627**	**3,210**	**2,039**

22.10 Income taxes and deferred taxes

Current income tax

The following table shows the breakdown of the tax expense for 2018, 2017 and 2016:

	As of December 31,		
in 000€	2018	2017*	2016
Estimated tax liability for the year	(1,216)	(1,530)	(1,698)
Tax adjustments to the previous year	—	412	—
Deferred income taxes	791	596	(12)
Total income taxes for the period	**(425)**	**(522)**	**(1,710)**

The current tax expense is equal to the amount of income tax owed to the tax authorities for the year, under the applicable tax laws and rates in effect in the various countries.

Deferred tax

Deferred tax is presented in the statement of financial position under non-current assets and non-current liabilities, as applicable. The following table shows the breakdown of the deferred tax assets, deferred tax liability and the deferred tax expense for 2018, 2017 and 2016:

	Asset/(liability)			Income/(expense)		
in 000€	2018	2017*	2016	2018	2017*	2016
Tax losses, notional interest deduction and other tax benefits	26	—	109	—	—	—
Amortization development assets and other intangible assets	224	304	227	—	—	—
Depreciation property, plant & equipment	30	—	—	—	—	—
Other items	35	—	—	—	—	—
Total deferred tax assets	**315**	**304**	**336**	**11**	**(32)**	**(756)**
Property, plant & equipment	(694)	(698)	(452)	—	—	—
Intangible assets	(5,370)	(6,656)	(873)	—	—	—
Investment grants	(312)	—	—	—	—	—
Inventory valuation	141	—	—	—	—	—
Other items	9	(61)	—	—	—	—
Total deferred tax liabilities	**(6,226)**	**(7,415)**	**(1,325)**	**780**	**628**	**744**
Total deferred tax income (loss)	**—**	**—**	**—**	**791**	**596**	**(12)**

The Group has unused tax losses, tax credits and notional interest deduction available in an amount of K€25,285 for 2018 (2017: K€11,948; 2016: K€9,451) of which K€15,592 for 2018 (2017: K€4,581; 2016: K€1,570) relating to Materialise NV. As at December 31, 2018 no unused notional interest deduction remains (2017: K€315; 2016: K€315), the amount remaing from previous periods has expired.

With respect to the net operating losses of Materialise NV, no deferred tax assets have been recognized given that in view of the Belgian Patent Income Deduction and Innovation Income Deduction there is an uncertainty to which extent these tax losses will be used in future years. As from July 1, 2016, the new Innovation Income Deduction replaces the former Patent Income Deduction. Under the grandfathering rule the Patent Income Deduction system can still be applied until June 30, 2021. The Belgian Patent Income Deduction allows companies to deduct 80% of the qualifying gross patent income from the taxable basis. Under the Innovation Income Deduction system, companies can deduct up to 85% of their net innovation income from the taxable basis. Based on its analysis, in 2018 the Company has assessed that no deferred tax asset should be accounted for with respect to its unused tax losses in Belgium.

With respect to the net tax losses of the other entities in the Group, deferred taxes have been recognized in 2018 for the amount of K€26 (2017: K€0; 2016: K€109). The deferred tax liability of K€6,226 in the year ending December 31, 2018 mainly relates to the intangibles that have been recognized as part of the purchase price allocation (ACTech).

Relationship between Tax Expense and Accounting Profit

	For the year ended December 31		
in 000€	2018	2017*	2016
Profit (loss) before taxes	3,452	(1,595)	(1,309)
Income tax at statutory rate of 29.58% (2017, 2016: 33,99%)	(1,021)	542	445
Effect of different local tax rate	166	433	663
Tax adjustments to the previous period	80	412	—
Non-deductible expenses	(1,141)	(818)	(453)
Capitalized initial public offering transaction costs	—	—	—
Research and development tax credits & patent income deduction	337	44	3,664
Notional interest deduction Belgium	—	—	351
Non recognition of deferred tax asset	(546)	(1,505)	(6,767)
Recognition of deferred tax assets on previous years tax losses	653	—	—
Non-taxable income	606	556	729
Use of previous years tax losses and tax credits for which no deferred tax assets was recognized	—	12	50
Taxes on other basis	280	(117)	(342)
Other	161	(81)	(50)
Income tax expense as reported in the consolidated income statement	**(425)**	**(522)**	**(1,710)**

23 Earnings per share

Basic earnings per share amounts are calculated by dividing the net profit (loss) for the year attributable to ordinary equity holders of the parent company by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net profit (loss) attributable to ordinary equity holder of the parent company by the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on conversion of all warrants.

The net profit (loss) for the year used for the basic and diluted earnings per share are reconciled as follows:

	For the year ended December 31		
in 000€	2018	2017*	2016
Net profit attributable to ordinary equity holders of the parent for basic earnings	3,027	(2,117)	(3,019)
Interest on convertible bonds	50	—	—
Net profit attributable to ordinary equity holders of the parent adjusted for the effect of dilution	3,077	(2,117)	(3,019)

The convertible bond and the warrants are dilutive as per December 31, 2018 but are anti-dilutive as per December 31, 2017 and 2016. We refer to Notes 14 and 15 for information on the number of instruments that could potentially be dilutive but which were not considered in the calculation above.

The following reflects the share data used in the basic and diluted earnings per share computations:

	For the year ended December 31		
in 000	2018	2017	2016
Weighted average number of ordinary shares for basic earnings per share	49,806	47,325	47,325
Effect of dilution:			
Share options	382	—	—
Convertible loan	421	—	—
Weighted average number of ordinary shares adjusted for effect of dilution	50,609	47,325	47,325

The earnings per share are as follows:

	For the year ended December 31		
	2018	2017*	2016
Earnings per share attributable to the owners of the parent			
Basic	0.06	(0.04)	(0.06)
Diluted	0.06	(0.04)	(0.06)

24 Commitments and contingent liabilities

Operating lease commitments

The Group has operating lease commitments mainly related to buildings and cars as follows:

in 000€	As of December 31, 2018	2017	2016
Within one year	2,053	1,721	2,012
Between one and three years	2,302	1,504	1,964
Between four and five years	785	406	561
More than five years	302	77	84
Total	**5,442**	**3,708**	**4,621**

The total lease payments recognized in the consolidated income statement are K€2,956 in 2018 (2017: K€2,909; 2016: K€2,451).

Apart from one operating lease commitment for a 3D printer located in Germany for an amount of K€554, including the purchase option, and a total rent commitment for our office in Malaysia for an amount of K€1,236, including the renewal option, the Group has no individually significant lease commitments per end of 2018.

Finance lease commitments

The Group has finance leases for the building and various other items of plant and equipment. Future minimum lease payments under finance lease with the present value of the net minimum lease payments are as follows:

	December 31, 2018		December 31, 2017		December 31, 2016	
in 000€	Minimum lease payments	Present value of payments	Minimum lease payments	Present value of payments	Minimum lease payments	Present value of payments
Within one year	2,876	2,829	3,179	3,034	2,400	2,287
Between two and three years	3,398	3,236	5,017	4,643	3,640	3,503
Between four and five years	655	604	1,361	1,269	1,206	1,057
More than five years	149	140	285	218	587	548
Total	**7,078**	**6,809**	**9,842**	**9,164**	**7,833**	**7,395**
Less finance charges	(269)	—	(678)	—	(438)	—
Present value of minimum lease payments	6,809	6,809	9,164	9,164	7,395	7,395

Mortgages and pledges

The Group has several loans secured by a mortgage on the building. The carrying value of related property, plant & equipment (including buildings under construction) is K€30,853 (2017: K€28,526; 2016: K€12,594). The total outstanding mortgages and pledges are K€124,428 in 2018 (2017: K€85,186; 2016: K€32,362).

Included in the above, the Group also has pledges on the business goodwill ("fonds de commerce") of the Company for a total amount of K€70,300 in 2018 (2017: K€29,000; 2016: K€4,491) and pledges on current and other fixed assets for a total amount of K€21,142 (2017: K€9,131; 2016: zero).

Other commitments

The Group has outstanding non-cancellable contracts with a future commitment of K€6,383 at December 31, 2018 (2017: K€7,638; 2016: K€1,290), mainly related to purchase commitment for raw materials. For property, plant & equipment, we have no committed expenditures as per December 31, 2018 (2017: K€672; 2016: K€10,204).

Contingent liabilities

The Group is currently involved in a legal proceeding with Dentsply Implants NV regarding the alleged wrongful termination of a supply agreement between the Company and Dentsply Implants NV entered into in 2010. The court of first instance ruled in favor of Dentsply Implants NV, that we have wrongfully terminated the relationship. We have appealed this decision before the court has pronounced itself on the monetary damages. The amount of damages which Dentsply Implants NV is claiming is K€2,700. While we are confident that the first instance decision will be overruled, we believe that, in the event that the first instance decision would be confirmed, the amount of monetary damages that we would be exposed to will not have a material impact on our business, financial conditions or result of operations. We are currently not a party to, and we are not aware of any threat of, any other legal proceedings, which, in the opinion of our management, is likely to have or could reasonably possibly have a material adverse effect on our business, financial condition or results of operations. As a result management concluded that no provision is required.

25 Risks

The Group is mainly exposed to liquidity risk, interest rate risk and credit risk.

Foreign exchange risk

The Group has primarily exposure to the USD, GBP and JPY as foreign currency.

During 2018 the impact of changes in foreign currency rates on the cash and term accounts held in USD funded through the initial public offering proceeds was positive for an amount of K€752.

If the USD (rate for 1 EUR) would have appreciated by 10%, the net result would have been K€1,561 higher, excluding the effect of the cash and term accounts held in USD. If the USD (rate for 1 EUR) would have depreciated by 10%, the net result would have been K€1,278 lower, excluding the effect of the cash and term accounts held in USD.

To limit the exposure to foreign currency rate fluctuations on GBP and JPY, the Group has entered into currency rate swaps as of 2017. We refer to note 20.

Liquidity risk

The liquidity risk is that the Group may not have sufficient cash to meet its payment obligations. This risk is countered by day-by-day liquidity management at the corporate level. The Group has historically entered into financing and lease agreements with financial institutions to finance significant projects and certain working capital requirements. At December 31, 2018 the Group still has undrawn lines of credit totaling K€26,040, including K€25,000 from the European Investment Bank (EIB) as mentioned in the below paragraph (2017: K€4,473; 2016: K€4,355).

On September 29, 2017 KBC Bank and Materialise agreed on a credit facility, mainly related to the financing of the ACTech acquisition, in which debt covenants were determined based on the ratio of the Group's total net financial debt over EBITDA.

On December 20, 2017, the European Investment Bank (EIB) and Materialise entered into a finance contract to support Materialise's ongoing research and development programs for growth from 2017 to 2020. The contract provides a credit of up to €35.0 million drawable in two tranches. The first tranche could not exceed €25.0 million and could be drawn during the first year of the contract. The Group actually has drawn €10.0 million of this first tranche in the course of 2018. The second tranche can be drawn during the second year of the contract, subject to a specified debt ratio being met. The duration of the loan will be between six to eight years starting from the disbursement of the respective tranches, and includes a two-year loan reimbursement grace period. Loans under the contract will be made at a fixed rate, based on the Euribor rate at the time of the borrowing, plus a variable margin. The margin is initially equal to 1.86% and varies in function of certain EBITDA levels and debt ratios. The contract contains customary security, covenants and undertakings.

The range of contracted obligations are as follows:

in 000€	Less than 1 year	2 to 3 years	4-5 years	More than 5 years	Total
At December 31, 2018					
Loan & borrowings	14,491	42,100	33,636	23,870	114,097
Trade payables	18,667	—	—	—	18,667
Other current liabilities	2,267	—	—	—	2,267
Total	**35,425**	**42,100**	**33,636**	**23,870**	**135,031**

	Less than 1 year	2 to 3 years	4-5 years	More than 5 years	Total
At December 31, 2017*					
Loan & borrowings	14,331	37,933	22,286	32,699	107,249
Trade payables	15,670	—	—	—	15,670
Other current liabilities	1,390	—	—	—	1,390
Total	**31,391**	**37,933**	**22,286**	**32,699**	**124,309**

	Less than 1 year	2 to 3 years	4-5 years	More than 5 years	Total
At December 31, 2016					
Loan & borrowings	6,050	10,787	7,471	12,620	36,928
Trade payables	13,400	—	—	—	13,400
Other current liabilities	634	—	—	—	634
Total	**20,084**	**10,787**	**7,471**	**12,620**	**50,962**

Interest rate risk

Although the Group mainly has loans outstanding with a fixed interest rate, some of the loans have been contracted with variable interest rates. The most significant loans with variable interest rates have been secured by means of a variable to fixed interest rate swap. We therefore believe that the Group is not subject to immediate changes in interest rates. With respect to the interest rate swaps, we refer to note 20.

Credit risk

Credit risk is the risk that third parties may not meet their contractual obligations resulting in a loss for the Group. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, which are mainly deposits with financial institutions. The Group limits this exposure by contracting with credit-worthy business partners or with financial institutions which meet high credit rating requirements. In addition, the portfolio of receivables is monitored on a continuous basis.

Trade receivables and contracts in progress

Customer credit risk is managed by each business unit subject to the Group's established policy, procedures and controls relating to customer credit risk management.

An impairment analysis is performed at each reporting date per company and using a provision matrix per company to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns (i.e., by legal entity).

The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, trade receivables are written-off if past due for more than one year and are not subject to enforcement activity. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note 11. The Group does not hold collateral as security.

The Group evaluates the concentration of risk with respect to trade receivables as low, as its customers are located in several jurisdictions and industries and operate in largely independent markets.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

in 000€	Total	Non-due	Less than 30 days	31-60 days	61-90 days	91-180 days	More than 181 days
December 31, 2018	36,891	26,208	5,395	1,479	931	1,512	1,366
December 31, 2017	35,582	21,630	6,920	1,765	1,526	1,614	2,127
December 31, 2016	27,479	15,590	6,434	1,885	490	2,008	1,072

Capital management

The primary objective of the Group's shareholders' capital management strategy is to ensure it maintains healthy capital ratios to support its business and maximize shareholder value. Capital is defined as the Group shareholder's equity.

The Group consistently reviews its capital structure and makes adjustments in light of changing economic conditions. The Group made no changes to its capital management objectives, policies or processes during the years ended December 31, 2018, 2017 and 2016.

26 Related party transactions

The compensation of key management personnel of the Group is as follows:

	For the year ended December 31		
in 000€	2018	2017	2016
Short-term employee benefits	2,334	2,190	2,693
Post-employment benefits	80	80	116
Termination benefits	—	—	—
Total	**2,414**	**2,270**	**2,809**
Warrants granted	—	—	199,500
Warrants outstanding	557,935	573,980	790,752

The amounts disclosed in the table are the amounts recognized as an expense during the reporting period related to key management personnel (senior management and executive committee members). In the year ending December 31, 2018 the compensation to key management by means of share based payments amounts to K€312.

The following table provides the total amount of transactions that have been entered into with related parties for the relevant financial year:

in 000€	Sale of goods to	Purchases from	Interest expense	Receivables	Liabilities
Non-executive directors of the group					
2018	—	123	51	—	1,038
2017	—	96	50	—	965
2016	—	72	50	—	972
Shareholders of the group					
2018	—	123	10	—	261
2017	—	172	11	—	371
2016	—	117	16	—	378
Joint ventures					
2018	1,156	241	—	1,281	22
2017	714	23	—	804	28
2016	527	—	—	601	—

Related party – Ailanthus NV

Ailanthus NV, shareholder and director of the Group, has provided several loans and financial leases to the Group for the purchase of machinery and a portion of the office and production buildings. We refer to Note 15 for details.

The Group rent apartments on a regular basis from Ailanthus NV in order to host our employees from foreign subsidiaries who are visiting our headquarters in Leuven. The total amount paid to Ailanthus NV for rent in 2018 was K€123 (2017: K€172; 2016: K€141).

Related party – Convertible debt

The Group has issued on October 28, 2013 1,000 convertible bonds for a total amount of K€1,000. The bonds have been fully subscribed by a member of our senior management. We refer to Note 15 for more details.

Founder shares

At the inception of the Company, the other shareholders granted a total of 300,000 founder shares ("oprichtersaandelen") to the founder and CEO of the Group, Mr. Wilfried Vancraen, in his capacity as shareholder. In accordance with Belgian Company Law, these founder shares do not represent shareholders' capital but grant the holder voting and dividend rights. No other terms and conditions were attached to these founder shares and no dividends has been paid by the Group to the shareholders since inception.

At the General Meeting of Shareholders held on November 28, 2013, 300,000 founder shares were converted to ordinary A shares. Converting the founder shares into ordinary A shares did not confer any substantial advantage to their holder but resulted in a dilution for the existing shareholders by 0% .These ordinary A shares benefited from all rights attached to the ordinary shares.

Joint ventures

The receivable for the amount of K€1,281 is accounted for under the other non-current assets and trade receivables and relates to the services and goods delivered to the joint venture RSPRINT. In the course of 2018 the Group also purchased a 3D printer from RSPRINT for the amount of K€200.

27 Events subsequent to the statement of financial position date

On January 10, 2019, Materialise NV granted a K€2,500 convertible loan to Fluidda NV ("Fluidda"). This investment is part of a general collaboration, bringing the possibilities of 3D printing to the pulmonology market, combining Fluidda's Functional Respiratory Imaging methods with Materialise's expertise in medical engineering. Part of the funds will be used to expand the development of Functional Respiratory Imaging methods driven 3D printed devices for personalized monitoring of airflow distribution in lung patients, using advanced machine learning and artificial intelligence.

There are no other significant events subsequent to the statement of financial position date that would require adjustments or disclosures to the financial statements.

28 Overview of consolidated entities

Name	Country of incorporation	% equity interest 2018	2017	2016
Materialise NV	Belgium	100%	100%	100%
Materialise France SAS	France	100%	100%	100%
Materialise GmbH	Germany	100%	100%	100%
Materialise Japan K.K.	Japan	100%	100%	100%
Materialise Czech Republic SRO	Czech Republic	100%	100%	100%
Materialise USA, LLC	United States	99%	99%	99%
Materialise UK Limited	United Kingdom	100%	100%	100%
OBL SAS	France	100%	100%	100%
Materialise Austria GmbH	Austria	100%	100%	100%
Materialise Malaysia SDN. Bhd.	Malaysia	100%	100%	100%
Materialise Ukraine LLC	Ukraine	100%	100%	100%
RapidFit NV	Belgium	83%	83%	83%
RapidFit, LLC (liquidated)	United States	—	—	83%
Meridian Technique Limited	United Kingdom	100%	100%	100%
OrthoView, LLC (liquidated)	United States	—	—	100%
OrthoView Holdings Limited	United Kingdom	100%	100%	100%
Meridian (Corporate Trustee) Limited (liquidated)	United Kingdom	—	100%	100%
OrthoView Limited (liquidated)	United Kingdom	—	100%	100%
Materialise SA	Poland	100%	100%	100%
Materialise Colombia SAS	Colombia	100%	100%	100%
RSPRINT powered by Materialise NV (joint venture)	Belgium	50%	50%	50%
Materialise Shanghai Co. Ltd	China	100%	100%	100%
Materialise Australia PTY Ltd	Australia	100%	100%	100%
Materialise S.R.L.	Italy	100%	100%	100%
ACTech GmbH	Germany	100%	100%	—
ACTech Holding GmbH	Germany	100%	100%	—
ACTech, Inc	United States	100%	100%	—

The entities Materialise GmbH, Gilching, Germany, ACTech Holding GmbH, Freiberg / Saxony, Germany and ACTech GmbH, Freiberg / Saxony, Germany, have taken advantage of the exemption regulations of § 264 (3) HGB (German Commercial Code) for the financial year ending December 31, 2018.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

BDO Bedrijfsrevisoren CVBA was engaged as our independent registered public accounting firm in 2018 and 2017 in connection with our SEC reporting obligations, as well as our statutory auditor for Belgian company and tax law purposes. The following table sets forth by category of service the total fees for services provided by BDO Bedrijfsrevisoren CVBA and BDO member firms to us during 2018 and 2017.

	For the year ended December 31	
in 000€	2018	2017
Audit Fees	1,121	543
Audit-Related Fees	17	61
Tax Fees	2	5
All Other Fees	—	—
Total	**1,140**	**609**

Audit Fees

Audit fees consist of the aggregate fees billed in connection with the audit of our annual consolidated and statutory financial statements and internal controls, the issuance of comfort letters and interim reviews of our quarterly financial information.

Audit-Related Fees

Audit-related fees are fees for services that are traditionally performed by the independent accountants, including consultations concerning financial accounting and reporting, and employee benefit plan audits, and due diligence on mergers or acquisitions. The fees also include the attestation of our cash position and certain financial ratios to the EIB.

Tax Fees

Tax fees were paid to BDO Bedrijfsrevisoren CVBA or to BDO member firms. For the fiscal year ended December 31, 2018 these fees related to the Materialise entity in Malaysia, and for the fiscal year ended December 31, 2017 these fees related to the Materialise entities in the United Kingdom and Malaysia

All Other Fees

No other fees were paid to BDO Bedrijfsrevisoren CVBA or to BDO member firms for the fiscal years ended December 31, 2018 and December 31, 2017.

Audit Committee Pre-Approval Policies and Procedures

The pre-approval of the Audit Committee or member thereof, to whom pre-approval authority has been delegated, is required for the engagement of our independent auditors to render audit or non-audit services. Audit Committee pre-approval of audit and non-audit services will not be required if the engagement for the services is entered into pursuant to pre-approval policies and procedures established by our audit committee regarding our engagement of the independent auditors, provided the policies and procedures are detailed as to the particular service, our audit committee is informed of each service provided and such policies and procedures do not include delegation of the Audit Committee's responsibilities under the Exchange Act to our management. Audit Committee pre-approval of non-audit services (other than review and attest services) also will not be required if such services fall within available exceptions established by the SEC.

All audit fees, audit related fees and tax fees for the fiscal years ended December 31, 2018 and 2017 were pre-approved under the pre-approval policies of the Audit Committee.

MATERIALISE NV
Company having made a public appeal to savings

Technologielaan 15
B-3001 Leuven
enterprise number 0441.131.254
RPR/RPM Leuven

(the "**Company**")

MANAGEMENT REPORT
TO THE ANNUAL GENERAL MEETING
TO BE HELD ON 4 JUNE 2019

Ladies and Gentlemen,

In accordance with the requirements laid down by law and the statutes of the Company, we are pleased to report to you about the activities of the Company and its subsidiaries (the "**Group**") for the financial year starting on January 1, 2018 and ending on December 31, 2018, and to present to you both the statutory annual accounts as well as the consolidated annual accounts as at December 31, 2018. This report has been prepared in accordance with articles 95 and 119 of the Belgian Companies Code. For additional information, we also refer to our annual report on Form 20-F which has been filed with the SEC and is available on our website.

1. ANALYSIS OF THE OPERATING RESULTS ON A CONSOLIDATED BASIS

On a consolidated basis, the results of our operations, as derived from our consolidated annual accounts prepared in accordance with IFRS as issued by IASB and adopted by the European Union, can be summarised as follows:

Comparison of the Years Ended December 31, 2018 and 2017

	Year Ended December 31,		
	2018	**2017***	**% Change**
	(in thousands of €)		*(%)*
Revenue	184,721	142,573	29.56%
Cost of sales	(82,299)	(62,952)	30.73%
Gross profit	**102,422**	**79,621**	**28.64%**
Research and development expenses	(22,416)	(19,959)	12.31%
Sales and marketing expenses	(46,303)	(38,935)	18.92%
General and administrative expenses	(32,310)	(24,876)	29.88%
Net other operating income (expenses)	3,771	4,541	-16.96%
Operating (loss) profit	**5,164**	**392**	**1217.35%**
Financial expenses	(4,864)	(4,728)	2.88%
Financial income	3,627	3,210	12.99%
Share in loss of joint venture	(475)	(469)	1.28%
(Loss) profit before taxes	**3,452**	**(1,595)**	
Income taxes	(425)	(522)	-18.58%
Net (loss) profit for the year	**3,027**	**(2,117)**	

* The year 2017 has been restated to reflect certain reclassification adjustments and the final accounting of the business combination with ACTech Holding GmbH, ACTech GmbH and ACTech North America Inc., referred to collectively as ACTech. See Note 2 to our audited consolidated financial statements in Form 20-F for more information.

Comparison for the Years Ended December 31, 2018 and 2017 by Segment

	Materialise Software	Materialise Medical	Materialise Manufacturing	Total Segments	Unallocated(1)	Consolidated
			(in thousands of €, except percentages)			
For the year ended December 31, 2018						
Revenues	37,374	52,252	94,956	184,582	139	184,721
Segment EBITDA	11,536	10,252	10,785	32,573	(10,122)	22,451
Segment EBITDA %	30.9%	19.6%	11.4%	17.6%		12.2%
For the year ended December 31, 2017						
Revenues	35,770	42,841	63,712	142,323	250	142,573
Segment EBITDA*	13,926	4,400	4,439	22,765	(9,797)	12,968
Segment EBITDA %	38.9%	10.3%	7.0%	16.0%		9.1%

(1) Unallocated related Revenues consist of occasional one-off sales by our core competencies not allocated to any of our segments. Unallocated related Segment EBITDA consist of corporate research and development, corporate headquarter costs and other operating income (expense).

* The year 2017 has been restated to reflect certain reclassification adjustments and the final accounting of the business combination with ACTech Holding GmbH, ACTech GmbH and ACTech North America Inc., referred to collectively as ACTech. See Note 2 to our audited consolidated financial statements in Form 20-F for more information.

Analysis

Revenue. Revenue was €184.7 million in the year ended December 31, 2018 compared to €142.6 million in the year ended December 31, 2017, an increase of €42.1 million, or 29.6 %.

Revenue from our Materialise Software segment increased from €35.8 million in the year ended December 31, 2017 to €37.4 million in the year ended December 31, 2018, which represented an increase of €1.6 million, or 4.5%. Recurrent revenue, consisting of limited license fees and maintenance fees, grew 18.0%. Non-recurrent revenue, mainly consisting of perpetual fees, decreased 4.6%. Deferred revenue from license and maintenance fees increased to €2.8 million, compared to €1.3 million in the year ended December 31, 2017.

Revenue from our Materialise Medical segment increased from €42.8 million in the year ended December 31, 2017 to €52.3 million in the year ended December 31, 2018, representing an increase of €9.4 million, or 22.0%. Within our medical software department recurrent revenue from annual and renewed licenses and maintenance fees increased by 17.1%, reflecting the implementation of our strategy focused on products with defined contractual periods. Our revenue from perpetual licenses and services decreased by 8.4%. These recurrent revenues represented 73.7% of all medical software revenues in the year ended December 31, 2018, compared to 68.7% in the year ended December 31, 2017. Revenues from medical devices and services grew 29.3% in the year ended December 31, 2018, due to the revenue increase from partner sales, especially in our CMF, shoulder and knee devices business lines.

Revenue from our Materialise Manufacturing segment increased from €63.7 million in the year ended December 31, 2017 to €95.0 million in the year ended December 31, 2018, representing an increase of €31.2 million, or 49.1%. Revenue from the ACTech business contributed €43.4 million in 2018. As of December 31, 2018, Materialise

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Manufacturing operated 149 3D printers, six vacuum casting machines and 19 CNC machines, as compared to 155, six and 16 as of December 31, 2017, respectively. The decrease in 3D printers was mainly due to five powder binding machines no longer being used for consumer printing commercial purposes. Four metal 3D printers were added, while five older plastic 3D printers were put out of operation during the year ended December 31, 2018.

As a result of the ACTech acquisition, our revenue was distributed differently in 2018 than in 2017. During the year ended December 31, 2018, and across our various segments, 29.5% of our revenue was derived from Materialise Software and Materialise Medical software licenses and related services, as compared to 36.1% in the year ended December 31, 2017. Furthermore, 51.4% of our revenues was derived from the sale of printed industrial and consumer products (including €43.4 million from ACTech's business), compared to 44.7% in the year ended December 31, 2017 and 19.1% of our revenues was derived from the sale of medical devices (guides as well as implants).). These medical devices were brought to the market together with complex software planning solutions, had corresponding royalties and other fees, and contributed to the total revenue at the same level as compared to the year ended December 31, 2017.

Cost of sales. Cost of sales was €82.3 million in the year ended December 31, 2018 compared to €63.0 million in the year ended December 31, 2017, an increase of €19.3 million, or 30.6%. This increase in cost of sales was primarily attributable to increased purchases of goods and services and payroll expenses and a full year of depreciation expenses from the acquired ACTech business. Cost of sales of the ACTech business contributed €28.7 million in 2018.

Gross profit. The overall gross profit margin (our gross profit divided by our revenue) decreased to 55.4% in the year ended December 31, 2018 from 55.8% in the year ended December 31, 2017.

Research and development, or R&D, sales and marketing, or S&M, and general and administrative, or G&A, expenses. R&D, S&M and G&A expenses increased, in the aggregate, to €101.0 million for the year ended December 31, 2018 from €83.8 million in the year ended December 31, 2017. R&D expenses (excluding ACTech business) increased from €20.0 million to €22.4 million, S&M expenses increased from €38.9 million to €46.3 million (including €3.2 million from ACTech), and G&A expenses increased from €24.9 million to €32.3 million (including €6.0 million from ACTech).

Net other operating income. Net other operating income decreased from €4.5 million in the year ended December 31, 2017 to €3.8 million in the year ended December 31, 2018. This decrease in other operating income was primarily increase of the provision for doubtful receivables, including the impact of the new IFRS 9 accounting standard.

Financial result (financial expenses and financial income). The net financial result increased from €(1.5) million in the year ended December 31, 2017 to €(1.2) million in the year ended December 31, 2018. This variance was due to an increase of net interest expense, offset by positive variances related to foreign currency results and net other financial income.

Income taxes. Income taxes in the year ended December 31, 2018 resulted in an expense of €0.4 million, which was a combination of deferred tax bookings, and income taxes due over the result for the period.

Net profit. As a result of the factors described above, the net profit was €3.0 million in the year ended December 31, 2018 compared to a net loss of €2.1 million in the year ended December 31, 2017, or an increase of €5.1 million.

EBITDA. As a result of the factors described above, our consolidated EBITDA increased from €13.0 million in the year ended December 31, 2017 to €22.5 million in the year ended December 31, 2018, an increase of €7.5 million, or 73.1 %, and our total segment EBITDA increased from €22.8 million in the year ended December 31, 2017 to €32.6 million in the year ended December 31, 2018, an increase of €9.8 million, or 43.1%. The 2018 EBITDA includes the ACTech business's contribution of €9.4 million.

Our Materialise Software segment's EBITDA decreased from €13.9 million in the year ended December 31, 2017 to €11.5 million in the year ended December 31, 2018, a decrease of €2.4 million, or 17.3%. This segment's EBITDA margin (the segment's EBITDA divided by the segment's revenue) decreased from 38.9% for the year ended December 31, 2017 to 30.9% in the year ended December 31, 2018. The decrease in the EBITDA margin was due to a moderate revenue growth of 4.5% (which was affected negatively from a sales mix with a higher portion of recurrent sales and deferred revenue), offset by an increase in operating expenses by 18.3%, reflecting continued investments in R&D and S&M, and increased G&A expenses.

Our Materialise Medical segment's EBITDA increased from €4.4 million in the year ended December 31, 2017 to €10.3 million in the year ended December 31, 2018. The segment's EBITDA margin increased from 10.3% in the year ended December 31, 2017 to 19.6% in the year ended December 31, 2018, which was mainly the result of an increase of the segment's gross margin by 28.6% partially offset by an increase of 6.1% across the segment's operational expenses.

Our Materialise Manufacturing segment's EBITDA increased from €4.4 million in the year ended December 31, 2017 to €10.8 million in the year ended December 31, 2018. Excluding ACTech's contribution of €9.4 million, the EBITDA margin of this segment decreased from 5.4% in the year ended December 31, 2017 to 2.7% in the year ended December 31, 2018.

2. ANALYSIS OF THE OPERATING RESULTS AT THE LEVEL OF THE COMPANY

At the level of the Company, the results of our operations, as derived from our statutory annual accounts prepared in accordance with Belgian GAAP, can be summarized as follows:

Comparison of the Years Ended December 31, 2018 and 2017

	Year Ended December 31,		
	2018	2017	% Change
	(in thousands of €)		*(%)*
Operating income	**130,212**	**128,561**	**1.28**
Operating charges	137,862	137,727	0.10
Operating profit (loss)	**-7,650**	**-9,166**	
Financial income	5,587	2,758	102.57
Financial charges	12,812	5,769	122.08
Gain (loss) on ordinary activities before taxes	**-14,875**	**-12,179**	
Transfer from deferred taxes	2	2	
Taxes on result	-232	126	
Net profit	**-14,641**	**-12,302**	**19.01**

Analysis

The operations of the Company are in line with the operations of the Group. Reference is made to Section 1 in this respect.

The operating loss in 2018 amounted to €7.6 million as compared to €9.2 million in 2017. The depreciation of activated development expenses increased with €1.5 million to €17.4 million from €16.0 million. The operating result in 2018 also includes consulting cost of €1.1 million related to capital increases of July 2018. These elements were fully offset by an improvement of our operations.

Financial charges for 2018 include an impairment of €7.0 million on our investment in Rapidfit NV and €2.5 million bank cost related to capital increases of July 2018.

Although we have losses for the third consecutive year, we see no reason to change our valuation rules in the company that have been based upon going concern. Such presumption is justified on the basis of the Company's equity position that increased to €128.6 million end 2018 from €82.7 million end 2017, and cash and cash equivalents that increased €65.0 million to €95.3 million at end 2018 from €30.3 million.

APPROPRIATION OF PROFITS

The period which has expired concluded with a net loss of €14,641,548.

Together with the carried forward profit of the previous financial year (€3,184,372), the total amount to be appropriated amounts to €17,825,920 which we recommend to carry forward in its entirety.

3. STRUCTURE AND DEVELOPMENT OF THE GROUP

On December 31, 2018, we had 22 (direct and indirect) subsidiaries (in Belgium (2), France (2), England (3), Germany (3), Czech Republic, Austria, Poland, the United States (2), Columbia, Japan, Malaysia, China, Italy, Australia and Ukraine).

We owned 100% of the shares of Mobelife NV. On December 5, 2016, after a transfer of all assets of Mobelife NV to the Company, Mobelife NV was dissolved and ceased to exist. The business of Mobelife NV has been fully integrated in and is continued by our Materialise Medical segment.

On December 31, 2016, we decided to transfer all the assets and activities of RapidFit, LLC, a subsidiary of RapidFit NV.

With regard to the 50/50 joint-venture company RS Print NV, Materialise NV has a participation of €2.0 million fully paid up as per end 2018. This participation is fully impaired.

On June 29, 2016 and November 7, 2016 respectively, CENAT BVBA and Elbimmo NV were merged into the Company as well as Materialise Metal BVBA was liquidated on 5 December 2016.

On October 4, 2017, we acquired ACTech, a full- service manufacturer of complex metal parts based in Germany, based on a total enterprise value of €43.7 million for a total cash payment of €29.4 million.

On November 6, 2017, we dissolved RapidFit LLC and on November 13, 2017, we dissolved Orthoview LLC, a subsidiary of OrthoView Holdings Limited.

In December 2018, we filed for dissolution of Meridian Corporate Trustees Limited and Orthoview Limited, subsidiaries of Orthoview Holdings Limited.

On July 18, 2018, we and BASF New Business GmbH, or BASF New Business, a subsidiary of BASF SE, the German chemical conglomerate (FWB: BAS), entered into a Strategic Alliance Partnership Agreement. The Strategic Alliance Partnership Agreement establishes a framework for collaboration to leverage the parties' existing strengths and expertise to develop new materials for the 3D printing industry.

In connection with the entry into the Strategic Alliance Partnership Agreement, we and BASF Antwerpen NV, or BASF Antwerpen, a subsidiary of BASF SE, entered into a Subscription Agreement pursuant to which BASF Antwerpen subscribed for 1,953,125 of our newly issued ordinary shares in a private placement, for an aggregate subscription price of approximately $25 million. The ordinary shares subscribed for were delivered to BASF Antwerpen on July 19, 2018.

On July 27, 2018, we sold 3,450,000 ADSs in a follow-on public offering at a public offering price of $13.00 per ADS, and received net proceeds of approximately $40.2 million.

4. MATERIAL EVENTS SINCE THE END OF THE FINANCIAL YEAR

Apart from what is mentioned below, there are no material events since the end of the financial year.

On January 10, 2019, Materialise NV granted a €2.5 million convertible loan to Fluidda NV ("Fluidda"). This investment is part of a general collaboration, bringing the possibilities of 3D printing to the pulmonology market, combining Fluidda's Functional Respiratory Imaging methods with Materialise's expertise in medical engineering. Part of the funds will be used to expand the development of Functional Respiratory Imaging methods driven 3D printed devices for personalized monitoring of airflow distribution in lung patients, using advanced machine learning and artificial intelligence.

5. RISKS AND UNCERTAINTIES

The risks and uncertainties, with which both the Group and the Company are faced, can be summarized as follows. However, other than those risks and uncertainties, we are not aware of any circumstances that are likely to have a material influence on the development of the Company.

- We may not be able to maintain or increase the market share or reputation of our software and other products and services that they need to remain or become a market standard.

- We may not be successful in continuing to enhance and adapt our software, products and services in line with developments in market technologies and demands.

- The research and development programs that we are currently engaged in, or that we may establish in the future, may not be successful and our significant investments in these programs may be lost.

- Existing and increased competition may reduce our revenue and profits.

- We rely on collaborations with users of our additive manufacturing solutions to be present in certain large scale markets and, indirectly, to expand into potentially high-growth specialty markets. Our inability to continue to develop or maintain these relationships in the future could harm our ability to remain competitive in existing markets and expand into other markets.

- Our revenue and results of operations may fluctuate.

- Demand for additive manufacturing generally and our additive manufacturing software solutions, products and services in particular may not increase adequately.

- We are dependent upon sales to certain industries.

- If our relationships with suppliers, including with limited source suppliers of consumables, were to terminate or our manufacturing arrangements were to be disrupted, our business could be adversely affected.

- We depend on the knowledge and skills of our senior management and other key personnel, and if we are unable to retain and motivate them or recruit additional qualified personnel, our operations could suffer.

- We may need to raise additional capital from time to time in order to meet our growth strategy and may be unable to do so on attractive terms, or at all.

- Our international operations subject us to various risks, and our failure to manage these risks could adversely affect our results of operations.

- Our international operations pose currency risks, which may adversely affect our results of operations and net income.

- Changes in tax laws, treaties or regulations could adversely affect our financial results.

- We may engage in acquisitions or investments that could disrupt our business, cause dilution to our shareholders and harm our financial condition and results of operations.

- We may enter into collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships with third parties that may not result in the development of commercially viable products or the generation of significant future revenue.

- Failure to comply with the U.S. Foreign Corrupt Practices Act or other applicable anti-corruption legislation could result in fines, criminal penalties and an adverse effect on our business.

- Errors or defects in our software or other products could cause us to incur additional costs, lose revenue and business opportunities, damage our reputation and expose us to potential liability.

- We rely on our information technology systems to manage numerous aspects of our business and customer and supplier relationships, and a disruption of these systems could adversely affect our results of operations.

- A breach of security in our products or computer systems may compromise the integrity of our products, harm our reputation, create additional liability and adversely impact our financial results.

- We rely on third party technology, platform, carriers, server and hardware providers, and a failure of service by these providers could adversely affect our business and reputation.

- Workplace accidents or environmental damage could result in substantial remedial obligations and damage to our reputation.

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- Our operations are subject to environmental laws and other government regulations that could result in liabilities in the future.

- If our service center operations are disrupted, sales of our 3D printing services, including the medical devices that we print, may be affected, which could have an adverse effect on our results of operations.

- We could experience unforeseen difficulties in building and operating key portions of our 3D printing infrastructure.

- We may not have adequate insurance for potential liabilities, including liabilities arising from litigation.

- Current and future global economic uncertainties and political conditions may adversely affect our results of operations.

- We face potential liability related to the privacy and security of personal information we collect.

- Our medical business, financial condition, results of operations and cash flows could be significantly and negatively affected by substantial government regulations.

- Modifications to our medical products marketed in the United States may require new 510(k) clearances or premarket approvals, or may require us to cease marketing or recall the modified products until clearances are obtained.

- Healthcare policy changes, including legislation to reform the U.S. healthcare system and legislation to reform the EU medical Device legislation, could adversely affect us.

- Our financial performance may be adversely affected by medical device tax provisions in the health care reform laws.

- The use, including the misuse or off-label use, of our medical services and products may be deemed unauthorized use or improper promotion, which could harm our image in the marketplace or result in injuries that lead to product liability suits and could be costly to our business or result in regulatory sanctions.

- If our marketed medical devices are defective or otherwise pose safety risks, the relevant governmental authorities could require their recall, or we may initiate a recall of our products voluntarily.

- If our products cause or contribute to a death or a serious injury, or malfunction in certain ways, we will be subject to medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

- Our Materialise Medical segment's 3D printing operations are required to operate within a quality management system that is compliant with the regulations of various jurisdictions, including the requirements of ISO 13485, and the U.S. Quality System Regulation, which is costly and could subject us to enforcement action.

- We may be subject to or otherwise affected by U.S. federal and state, European or other healthcare laws, including fraud and abuse and health information privacy and security laws, and could face substantial penalties if we are unable to fully comply with such laws.

- If we are unable to obtain patent protection for our products or otherwise protect our intellectual property rights, our business could suffer.

- We may not be able to protect our trade secrets and intellectual property.

- We may incur substantial costs enforcing or acquiring intellectual property rights and defending against third-party claims as a result of litigation or other proceedings.

- Obtaining and maintaining our patent protection depends on compliance with various procedural, documentary, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

- We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

- If disputes arise, we could lose rights that are important to our business or be subject to restrictions on the conduct of our business.

- Certain technologies and patents have been developed with collaboration partners and we may face restrictions on this jointly developed intellectual property.

- Our use of open source software may expose us to additional risks and harm our intellectual property.

- The implementation of the recent reform of the Belgian Companies Code that will enter into force on May 01, 2019, may adversely affect the rights of our shareholders.

6. RESEARCH AND DEVELOPMENT

We have an ongoing research and development program to improve and expand the capabilities of our existing technology portfolio, which reflects our continued investments in a range of disciplines, including software development, industrial, mechanical and biomedical engineering, physics and chemistry.

We have a long history of research and development through collaborations, which augment our internal development efforts. Our earliest joint research projects date from the early 1990s with market leading collaboration partners such as Siemens AG, Zeneca and the University of Leuven (*Katholieke Universiteit Leuven*), or KU Leuven. Many

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of our innovations are based on industrial collaborations such as those with Phonak Staefa Switzerland and Zimmer Biomet.

As of December 2018, we were active in 33 government funded research projects. With our platform technologies and strong track record in successful commercialization of scientific innovations, we receive many requests for participation in new development projects. While we strongly protect our intellectual property in our core competencies, many of our products require collaborations in order to create healthy ecosystems for their successful implementation.

As of December 31, 2018, we had approximately 80 active research and development projects in various stages of completion and approximately 370 FTEs and fully dedicated consultants working on research and development in our facilities in Belgium, France, Germany, Poland, the United Kingdom, Ukraine, China and Malaysia.

For the year ended December 31, 2018, our research and development expenses were €22.4 million, or 12.1% of our revenue (15.9% excluding ACTech), as compared to €20.0 million, or 14.0% (15.1% excluding ACTech) of our revenue in 2017.

In addition, our strategic partnership with BASF New Business focuses on collaboration for research and development activities in multiple areas including: (i) materials supply and development, (ii) application development, (iii) research and development in new technology fields, (iv) interchange of expertise and know-how in additive manufacturing production in the fields of 3D printing processes, and (v) pursuit of new business development opportunities in the field of additive manufacturing in various industries.

We also regularly apply for research and development grants and subsidies under European, Belgian, British, French, German, Polish and Czech grant rules. The majority of these grants and subsidies are non-refundable. We have received grants and subsidies from different authorities, including the Flemish government (VLAIO, or Vlaams Agentschap Innoveren en Ondernemen, the former IWT) and the European Union (FP7 and H2020 framework programs).

We expect to continue to invest significantly in research and development in the future.

7. FINANCIAL INSTRUMENTS

The Company has used interest rate and foreign currency swaps as financial instruments in the course of the financial period.

8. MISCELLEANOUS

8.1 Exceptional tasks performed by the auditor

On top of the annual audit fees amounting to 347,287 EUR, we also paid €477,546 as fees to the statutory auditor for other control services, including issuance of comfort letter other services in relation to the public and private placement of 2018, as well as legal engagements and attestation reports in the year ended December, 31, 2018.

8.2 Conflicts of interest

Not applicable

8.3 Use of authorised capital

By resolution of the extraordinary shareholders' meeting of April 23, 2014, which entered into force on June 30, 2014, our shareholders authorized the board of directors, for a period of five years from August 18, 2014, to increase the Company's share capital, in one or more transactions, up to a maximum amount of €2,714,634.83 (the so-called authorised capital).

On July 18, 2018, the Board of Directors of the company decided to increase the company's registered capital within the framework of the authorized capital, which on July 26, 2018 was fixed at an amount for the capital increase of one hundred and seventy-three thousand and nine euros and nineteen cents (173,009.19 EUR), which resulted in a decrease in the available amount of the authorized capital to two million four hundred and fifty-six thousand two hundred and sixty-thirds euros and fourteen cents (2,456,261.14 EUR).

On July 19, 2018, the Board of Directors of the company decided to increase the company's registered capital within the framework of the authorized capital for an amount of one hundred and twelve thousand six hundred and thirty-six euros twenty cents (EUR 112,636.20), which resulted in a decrease in the available amount of the authorized capital to two million three hundred and forty-three thousand six hundred and twenty-four euros and ninety-four cents (2,343,624.94 EUR).

On July 18, 2018, the Board of Directors of the company decided to increase the company's registered capital within the framework of the authorized capital, which on July 27, 2018 was fixed at an amount for the capital increase of twenty-five thousand nine hundred and fifty-three euros and thirty-eight cents (25,951.38 EUR), which resulted in a decrease in the available amount of the authorized capital to two million three hundred and seventeen thousand six hundred and seventy-three euros and fifty-six cents (2,317,673.56 EUR).

8.4 Acquisition or disposal of own shares

Not applicable

9. DISCHARGE

We propose that the directors and auditors are formally discharged for the performance of their mandates during the financial period which has just expired.

Done in Leuven on April 29, 2019

Peter Leys

Chairman

Wilfried Vancraen

Director

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MATERIALISE NV

Statutory auditor's report to the general meeting on the consolidated financial statements for the year ended December 31, 2018

Free Translation

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Free translation

Statutory auditor's report to the general meeting of Materialise NV on the consolidated financial statements for the year ended December 31, 2018

In the context of the statutory audit of the consolidated financial statements of Materialise NV (the Company) and its subsidiaries (together referred to as 'the Group'), we hereby present our statutory auditor's report. It includes our report on the audit of the consolidated financial statements as well as our report on the other legal and regulatory requirements. These reports form part of an integrated whole and are indivisible.

We have been appointed as statutory auditor by the general meeting of June 7, 2016, following the proposal formulated by the board of directors per recommendation of the audit committee. Our statutory auditor's mandate expires on the date of the General Meeting deliberating on the consolidated financial statements closed on December 31, 2018. We have performed the statutory audit of the consolidated financial statements of Materialise NV for six consecutive years.

Report on the audit of the consolidated financial statements

Unqualified opinion

We have performed the statutory audit of the Group's consolidated financial statements, which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated income statement, the consolidated statement of comprehensive income , the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information, and which is characterized by a consolidated statement of financial position total of 313.225 kEUR and for which the consolidated income statement shows a profit for the year of 3.027 kEUR.

In our opinion, the consolidated financial statements give a true and fair view of the Group's net equity and financial position as at December 31, 2018, as well as of its consolidated financial performance and its consolidated cash flows for the year then ended, in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and with the legal and regulatory requirements applicable in Belgium.

Basis for unqualified opinion

We conducted our audit in accordance with International Standards on Auditing (ISA) as applicable in Belgium. Our responsibilities under those standards are further described in the 'Statutory auditor's responsibilities for the audit of the consolidated financial statements' section in this report. We have complied with all the ethical requirements that are relevant to the audit of consolidated financial statements in Belgium, including those concerning independence.

We have obtained from the board of directors and company officials the explanations and information necessary for performing our audit.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other statements

The consolidated financial statements, which are the basis of this audit report, are drawn up in English as the Dutch version is not yet available at the moment of this audit report. The Company will draw up a Dutch translation of the consolidated financial statements, to comply with the Belgian language legislation, and subsequently publish these with our Dutch audit report, which we issue today. We will verify at that moment whether the Dutch version of the consolidated financial statements corresponds with the English version, on which we issue our audit report today.

Responsibilities of the board of directors for the consolidated financial statements

The board of directors is responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union and with the legal and regulatory provisions applicable in Belgium, and for such internal control as the board of directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the consolidated financial statements, the board of directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the board of directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Statutory auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a statutory auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors;
- Conclude on the appropriateness of the board of directors's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our statutory auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our statutory auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- Evaluate the overall presentation, structure and content of the consolidated financial statements and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the management, the supervision and the performance of the Group audit. We assume full responsibility for the auditor's opinion.

We communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control identified during the audit.

Statutory auditor's report on other legal and regulatory requirements

Responsibilities of the board of directors

The board of directors is responsible for the preparation and the content of the management report on the consolidated financial statements.

Responsibilities of the statutory auditor

In the context of our mandate and in accordance with the Belgian standard (revised in 2018) that is supplementary to the International Standards on Auditing (ISA) as applicable in Belgium, it is our responsibility to verify, in all material aspects, the management report on the consolidated financial statements as well as to report on this element.

Aspects relating to the management report on the consolidated financial statements
In our opinion, after having performed specific procedures in relation to the management report, the management report is consistent with the consolidated financial statements for the same financial year, and it is prepared in accordance with article 119 of the Company Code.

In the context of our audit of the consolidated financial statements, we are also responsible for considering, in particular based on the knowledge we have obtained during the audit, whether the management report on the consolidated financial statements contains any material misstatements, i.e. any information which is inadequately disclosed or otherwise misleading. Based on the procedures we have performed, there are no material misstatements we have to report to you.

We do not express any form of assurance whatsoever on the management report on the consolidated financial statements.

Statement concerning independence
- Our audit firm and our network did not provide services which are incompatible with the statutory audit of the consolidated financial statements and our audit firm remained independent of the Group during the terms of our mandate.
- The fees related to additional services which are compatible with the statutory audit as referred to in article 134 of the Company Code were duly itemised and valued in the notes to the consolidated financial statements.

Zaventem, April 29, 2019

Veerle Catry (Signature)
Digitally signed by Veerle Catry (Signature)
DN: cn=Veerle Catry (Signature), c=BE
Date: 2019.04.29 17:41:36 +02'00'

BDO Réviseurs d'Entreprises SCRL
Statutory auditor
Represented by Veerle Catry