

VIA EDGAR AND BY FEDERAL EXPRESS

June 23, 2014

Pamela Long, Esq.
United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-0404

**Re: Materialise NV
Amendment No. 3 to Registration Statement on Form F-1
Filed June 12, 2014
File No. 333-194982**

Dear Ms. Long:

On behalf of our client, Materialise NV, a Belgian limited liability company (*naamloze vennootschap*) (the “**Company**”), set forth below are the responses of the Company to the issues raised by the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**SEC**”) in the Company’s telephone conversations with the Staff on June 19 and June 20, 2014 in connection with the Company’s above referenced Registration Statement on Form F-1, as amended (the “**Registration Statement**”).

Because of the commercially sensitive nature of certain information contained in this letter (the “**Letter**”), this submission is accompanied by a request for confidential treatment for selected portions of this Letter. For the Staff’s reference, we have separately furnished to the Staff by hand delivery on the date hereof (i) a separate copy of this Letter marked to show the full text of the portions of this Letter redacted from the version filed via EDGAR for which the Company is requesting confidential treatment and (ii) a transmittal letter to the Staff requesting confidential treatment with respect to those redacted portions of this Letter (the “**Request Letter**”), in each case pursuant to Rule 83 of the Rules on Information and Requests of the SEC, 17 C.F.R. § 200.83 (“**Rule 83**”). We have also furnished a copy of the Request Letter to the SEC’s Office of Freedom of Information and Privacy Act pursuant to Rule 83.

In accordance with Rule 83, the Company requests confidential treatment of (i) the portions of this letter marked as [***] (the “**Confidential Information**”) and (ii) the above-referenced Request Letter (collectively, the “**Confidential Material**”). Please promptly inform the undersigned of any request for disclosure of the Confidential Material made pursuant to the Freedom of Information and Privacy Act or otherwise so that the undersigned may substantiate the confidentiality of the omitted information in accordance with Rule 83.

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*** — Denotes information omitted and provided under separate cover to Staff pursuant to Rule 83

In accordance with Rule 83, this Letter has also been clearly marked with the legend “Confidential Treatment Requested by Materialise NV” and each page is marked with the identifying numbers and code “MAT-001” through “MAT-0007.”

Company Response:

Further to the Company’s telephone conversations with the Staff, the Company supplementally advises the Staff as follows.

Please note that, unless otherwise stated, the per share amounts set forth in this response reflect the impact of the stock split (the “**Stock Split**”) to be effected concurrently with the closing of the Company’s initial public offering, in which the Company will issue four new ordinary shares, no nominal value (“**Ordinary Shares**”), for every outstanding Ordinary Share (the “**Stock Split Ratio**”). The terms of all issued and outstanding warrants by the Company will also be adjusted to reflect the Stock Split Ratio.

Subsequent Events Following the September and November 2013 Valuations

Set forth below is a brief description of certain changes to the Company’s business that occurred subsequent to the valuations of the fair value of the Company’s shares that occurred on September 27, 2013 and November 26, 2013.

- Acquisition of Advanced Machining (September 30, 2013): This acquisition of an automotive machining company in Michigan relates to the RapidFit business within the Company’s Industrial Production segment and expanded the RapidFit business’s local manufacturing footprint in North America.¹
- Acquisition of e-prototypy (January 28, 2014): This acquisition of a 3D printing service center in Poland relates to the Company’s Industrial Production segment and resulted in the expansion of the Company’s 3D printers, casting machines and associated equipment.
- Joint venture with RS Scan International (April 10, 2014): This joint venture relates to a new business activity for the Company (producing customized footwear and footwear products using additive manufacturing).

¹ This acquisition occurred subsequent to the September 27, 2013 valuation date and prior to the November 26, 2013 valuation date.

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- Transition of medical software from perpetual to annual licenses (April 2014): In the Medical segment, in order to form the basis of stable annual revenue growth in the longer term, the Company has adopted a new model whereby, except for research and academic centers, the Company's medical software will only be offered through time based licenses.
- Growth of i.materialise and Rapid Fit businesses: Within the Industrial Production segment, the Company has two potential growth businesses, i.materialise and RapidFit, each of which is still in the pre-profitability investment phase. These businesses, particularly i.materialise, have experienced revenue growth during the recent financial periods (first quarter 2014 growth in revenue of 18.5%, and fiscal year growth in revenue of 18.0%).
- Significant increase in sales force: In an effort to increase its sales volume (specifically, in its Medical and Industrial Production segments), the Company significantly increased its sales force throughout fiscal 2013 and has continued such increases during the first quarter of 2014. Both of these segments have experienced growth in revenues during the recent financial periods (first quarter 2014 growth in Medical and Industrial Production revenue of 6.2% and 28.4%, and fiscal year growth in Medical and Industrial Production revenue of 11.6% and 20.4%).

Proposed Recalculation of the September and November 2013 Valuations

To address the concerns raised by the Staff related to the Company's September 27, 2013 and November 26, 2013 valuations, the Company would propose recalculating the valuations as follows.

As described in the Company's prior response letters, the Company previously calculated the estimated fair value per Ordinary Share by using a DCF Method and a Multiples Method to arrive at two separate estimated valuations for the Company, and determining the estimated fair value per Ordinary Share based on the mathematical average of such resulting valuations. The following table summarizes resulting estimated valuations under the Company's valuation methodologies as of the relevant valuation dates:

Date of Valuation	Valuation Methodology	Company Valuation (in thousands of euros)	Per share fair value (in euros)	Per share fair value (in U.S. dollars) ²
September 27, 2013	DCF Method	€ 76,514	€ 1.96	\$ 2.70
September 27, 2013	Multiples Method	€ 77,849	€ 2.00	\$ 2.75
September 27, 2013	Average Value	€ 77,181.5	€ 1.97	\$ 2.71
November 26, 2013	DCF Method	€ 76,514	€ 1.96	\$ 2.70
November 26, 2013	Multiples Method	€ 90,411	€ 2.32	\$ 3.20
November 26, 2013	Average Value	€ 83,462.3	€ 2.14	\$ 2.95

² Amounts in this column have been converted from euros to U.S. dollars solely for the convenience of the Staff at an exchange rate of \$1.3777 per euro, the exchange rate on March 31, 2014.

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The Company proposes to replace the Multiples Method valuation previously calculated by the Company with a new valuation based on the underwriters' 2015 estimated revenue multiples-based valuation methodology. As described in the Company's prior response letters, and as reflected in the Registration Statement, the underwriters have determined an estimated value of \$13.00 per Ordinary Share, based on the midpoint of the offering valuation range determined by the underwriters. The Company proposes to apply an illiquidity discount of 25%, which is the same illiquidity discount used by the Company in connection with its previous calculations of the Multiples Method, to arrive at a per share value of \$9.75 per Ordinary Share (the "**Revised Multiples Method**"). The Company then proposes to determine the estimated fair value per Ordinary Share based on the mathematical average of the Company's DCF Method valuation (\$2.70 per share, based on the March 31, 2014 euro to U.S. dollar exchange rate) and the Revised Multiples Method (\$9.75 per share), which results in an estimated fair value per Ordinary Share of \$6.23 per share.

As discussed with the Staff and as described in the Company's prior response letters, the Company was considering a number of alternatives at different stages during July through December of 2013 and in the first quarter of 2014, including undertaking a U.S. initial public offering and listing, undertaking a Belgian initial public offering and listing and remaining private and obtaining additional capital from private equity investors. The Company believes that the Company's DCF Method valuation corresponds to the discounted cash flow valuation that would have been used had the Company remained private, the Multiples Method corresponds to the historical EBITDA multiples-based valuation that would likely have been used had the Company gone public in Belgium and the Revised Multiples Method corresponds to the valuation method that is currently being used by the underwriters in connection with the Company's proposed offering. As discussed with the Staff and as described in the Company's prior response letters, all three options remained possibilities through December of 2013, as evidenced by the fact that the Company's board of directors did not make the determination to proceed with the U.S. initial public offering until December and the Company was also engaging in discussions with private equity investors through December. However, as a result of the Company ultimately determining to proceed with a U.S. initial public offering, the Company believes, based on its discussions with the Staff, that it is more appropriate to replace the Multiples Method component of the valuation with the Revised Multiples Method in order to include a component to the valuation that more closely corresponds to the valuation methodology that is now being used by the underwriters. The Company believes it is appropriate

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to apply an illiquidity discount in connection with the Revised Multiple Method to reflect the fact that, notwithstanding the possibility of the U.S. and Belgian offerings, the Company's shares ultimately were illiquid at the time of the valuations. Further, the Company believes it is appropriate to continue to include the DCF Method valuation as a component of the valuation and to give equal weighting to each of the DCF Method and the Revised Multiples Method on account of the uncertainty and equal viability of each of the three possible capital raising options that existed in September and November, as well as the possibility that the Company could have abandoned these options and chosen to remain private without pursuing any equity capital transaction.

Finally, the Company reconfirms to the Staff that the original September 27, 2013 valuation related to grants in October 2013 of 5,500 warrants to purchase 22,000 Ordinary Shares (the "**October Warrants**") and the original November 26, 2013 valuation related to grants in December 2013 of 5,500 warrants to purchase 22,000 Ordinary Shares (the "**December Warrants**") and grants in January 2014 of 36,200 warrants to purchase 144,800 Ordinary Shares (the "**January Warrants**"). Under Belgian law, warrants offered as equity compensation awards are required to be offered for a 60 day period and are deemed to be granted as of the date the award offers are accepted by the applicable recipients thereof. The December Warrants and the January Warrants were all offered simultaneously by the Company following the November 26, 2013 approval of the grants by the Company's board of directors. Certain of the proposed recipients accepted such warrants in December 2013 (these being the December Warrants) and the remaining recipients accepted the remaining warrants in January 2014 (these being the January Warrants). However, at the time the December Warrants and January Warrants were first offered in November (and at the time of the November per share fair value valuation related to such warrants), the Company was still considering all of the capital raising alternatives, as discussed above.

Materiality of Impact of Adjustment to Compensation Expense

Below is a quantitative analysis of the impact that an adjustment of the compensation expenses, resulting from an adjustment of the fair value per share of respectively \$6.23 at each of the grant dates in 2013 and 2014, would have on the Company's fiscal year 2013 and its first quarter 2014 results of operations, as well as on a forecasted income statement for the fiscal year 2014.

	Impact on consolidated income statement		
	Actual Year ended 12/31/2013	Actual 3 months ended 3/31/2014	Budget Year ended 12/31/2014
	<i>(in thousands of €, except per share amounts)</i>		
Net profit pre-adjustment	3,412.0	82.0	***
Impact of compensation expense adjustment	(21.0)	(50.0)	***
Net profit post-adjustment	3,391.0	32.0	***
Basic earnings per share post-adjustment (but prior to Stock Split)	0.37	0.01	***
Diluted earnings per share post-adjustment (but prior to Stock Split)	0.37	0.01	***

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At an adjusted fair value per share of \$6.23, the total cost of such equity-settled transactions will be approximately €1.5 million, as opposed to an original estimate of management of approximately €470,000, over the entire life of the equity-settled transactions. In relation to the amounts to be charged in each period, as identified above, such adjustment of €21,000 and €50,000, respectively, would be for an amount that would represent less than 0.001% of the Company's total revenues for the fiscal year 2013, 0.003% of the Company's total revenues for the first quarter 2014 and for the fiscal year 2014, such adjustment of €[***] would represent [***]% of the Company's total projected revenues.

Management has evaluated the propriety of the uncorrected misstatements based on a review of both the applicable authoritative literature and the underlying supporting evidence and has determined that the impact of such compensation adjustments is not material, either quantitatively or qualitatively, on its financial position, financial performance or cash flows, for the fiscal year ended December 31, 2013 or for the first quarter ended March 31, 2014, both individually and in the aggregate. Management will begin to recognize incremental non-cash charges in the form of share-based payment expenses related to these equity-settled transactions based on the adjusted fair value per share of \$6.23 beginning in the second quarter of 2014.

In addition, the Company's independent auditors have concluded that on both an individual and aggregate basis, taking into account additional understatements of the revenues for the first quarter March 31, 2014 of €39,000, which understatement would need to be offset against the adjustment of compensation expenses for the new fair value of the shares in such period, there is no material error to the Company's previously issued IFRS financial statements for either the fiscal year 2013 or for the quarter ended March 31, 2014, and that would have had a substantial likelihood of being viewed by a reasonable investor as having significantly altered the total mix of information made available, or any immaterial error made intentionally to achieve a particular presentation of the Company's financial position, financial performance or cash flows and therefore there is no requirement to withdraw and re-issue the Company's financial statements issued on February 18, 2014 and May 23, 2014, respectively, by the Board of Directors of the Company.

Should the Staff have additional questions or comments regarding any of the foregoing, please do not hesitate to contact the undersigned at (212) 878-3079 or Alejandro E. Camacho at (212) 878-8434.

Sincerely,

/s/ Per B. Chilstrom
Per B. Chilstrom

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Ms. Pamela Long
June 23, 2014
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