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VIA EDGAR AND BY FEDERAL EXPRESS

June 10, 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. 2 to Registration Statement on Form F-1 Filed May 23, 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 comments made by the staff (the "**Staff**") of the Securities and Exchange Commission (the "**SEC**") by letter dated June 9, 2014 (the "**Comment Letter**") in connection with the Company's above referenced Registration Statement on Form F-1, as amended (the "**Registration Statement**").

The Company's responses to the Staff's comments contained in the Comment Letter are set out in the order in which the comments were set out in the Comment Letter and are numbered accordingly.

Summary Financial and Operating Data, page 15

1. We note your response letter dated June 4, 2014. As previously requested in comment 1 in our letter dated May 1, 2014, please expand your disclosures to provide a narrative description of the pro forma effects of the warrants to be granted on the closing of your IPO offering in accordance with Articles 11-01(a)(8) and 11-02(b) of Regulation S-X in the Prospectus rather than on page 135 of the Description of Share Capital section of the F-1.

Company Response:

In response to the Staff's comment, the Company will revise the disclosure in the "Prospectus Summary – Summary Financial and Operating Data" and "Selected Financial and Operating Data" sections in the next pre-effective amendment to the Registration Statement to include pro forma numbers that give effect to the new warrant grants as requested.

2. We note in your response letter dated June 4, 2014, that you estimated the impact of the warrants to be issued on the closing of your IPO offering without taking into account the Stock Split of 4-to-1 and assuming the exercise price of the warrants is equal to the Midpoint Price. Since the Midpoint Price is a post-stock split number, it is unclear how your calculation of the warrants to net profit and basic and diluted earnings per share is on a consistent basis and an appropriate reflection of the impact of the grant. Please advise.

Company Response:

In response to the Staff's comment, the Company will revise the proforma numbers included in the "Prospectus Summary – Summary Financial and Operating Data" and "Selected Financial and Operating Data" sections in the next pre-effective amendment to the Registration Statement to give effect to both the new warrant grants and the Stock Split (as defined below).

Dilution, page 57

 Please provide us with a reconciliation between the \$22.2 million net tangible book value as of March 31, 2014, you disclose on page 57 and your total net equity of \$17.8 million disclosed in your interim balance sheet on page F-60.

Company Response:

In response to the Staff's comment, the Company advises the Staff that it will revise its presentation in the "Dilution" section in the next pre-effective amendment to the Registration Statement to calculate net tangible book value as total assets less goodwill, intangible assets and total liabilities.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 61

Additional Information Regarding Ordinary Share Value, page 82

4. We note that you granted warrants during October 2013 and December 2013 with exercise prices of €1.97 per share and €2.14 per share, respectively, after considering the Stock Split. We also note that you granted warrants during January 2014 with an exercise price of €2.14 per share after considering the Stock Split. Please confirm to us that you have not made subsequent warrant grants. Your disclosures also indicate that the per share exercise price is the estimated fair value of your ordinary shares. Please provide us with an analysis of any equity issuances since January 1, 2013 as well as any planned equity issuances. For each warrant grant, provide us with a detailed discussion of the significant factors considered, assumptions made and methodologies used in determining the fair value of the underlying ordinary

shares. In this regard, we note the information provided in your response letter dated June 4, 2014, is at a high level and does not provide us with any specifics about the factors considered and assumptions made. As part of your discussion you should include the significant factors contributing to the difference in the fair value determined between each grant issuance. This reconciliation should describe the significant intervening events within the company and changes in assumptions as well as weighting and selection of valuation methodologies employed that explain the changes in the fair value of underlying ordinary shares up to the filing of the registration statement. Please also tell us when you first initiated discussions with the underwriters regarding the IPO.

Company Response:

In response to the Staff's comment, the Company supplementally advises the Staff as follows.

Please note that 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 Warrant Grants

The Company confirms to the Staff that the Company has not made any warrant grants subsequent to the grant in January 2014 of 36,200 warrants to purchase 144,800 Ordinary Shares.

As the Company has indicated to the Staff in its previous response letters, and as discussed in the Registration Statement, the Company intends to issue 1,200,000 new warrants to purchase 1,200,000 Ordinary Shares concurrently with the closing of the Company's initial public offering. The new warrants will have an exercise price per warrant equal to the euro-equivalent of the American Depositary Shares ("ADSs") being offered in the proposed offering.

Equity Issuances Since January 1, 2013

Other than in connection with the issuance of shares pursuant to the exercise of outstanding warrants, the Company has not issued any shares since January 1, 2013. A discussion of these warrant related issuances of shares is included under Item 7. Recent Sales of Unregistered Securities in Part II of the Registration Statement.

The Company further advises the Staff that no further issuances of shares are contemplated other than in connection with the proposed initial public offering and to the extent any holders of outstanding warrants exercise such warrants.

Discussion of Changes in Value of Ordinary Shares

Prior Warrant Grants

The following summarizes the changes in fair value of the Ordinary Shares since January 1, 2013.

In July 2013, the Company began negotiating the employment terms under which the Company would hire its current Executive Chairman. The issuance of convertible bonds as well as warrants to purchase Ordinary Shares formed part of these discussions. During August 2013, the parties consistently referred to €1.96 as the fair value per Ordinary Share as part of their discussions regarding the issuance of the convertible bonds and warrants. This valuation was based on adjusting the last arms' length transaction involving shares of the Company (a sale of shares to a third party, at €1.28 per share, on November 21, 2012) for the average increase of the market capitalization of certain publicly-traded peer companies (an increase of 54% over such period).

In September 2013, Bart Luyten, a board member who has extensive experience in valuing private companies, was charged with further double checking and fine tuning the Company's proposed valuation of €1.96 per share. Based on his experience and calculations, Mr. Luyten decided to apply a more elaborate peer group comparison and to also apply a discounted cash flow valuation¹.

As described in the Company's prior response letter dated June 4, 2014, the peer group comparison valuation method estimated the value of the Company's business by comparing the Company to similar publicly-traded companies and evaluating their enterprise multiples (the ratio of Enterprise Value to EBITDA). The peer group used for this purpose was comprised of seven publicly-traded companies active in either the additive manufacturing, software or medical device industries. The EBITDA used to calculate the enterprise multiples was based on annualized results for the six months ended June 30, 2013. The discounted cash flow method estimated the value of the Company's business by discounting the estimated future cash flows available for distribution after funding internal needs to present value. The discounted cash flow method valuation was calculated based on the Company's then existing three year budget. These valuation methods also involved the application of a discount for the lack of marketability of the Ordinary Shares.

The application of these additional valuation methods resulted in a substantially similar per share value (€1.97 per share), based on the mathematical average of these two valuation methods. On October 15, 2013, the Company's board of directors formally approved the proposed valuation methodology (as developed by Mr. Luyten) and the

These valuations methods, respectively, are the Multiples Method and Discounted Cash Flow Method described in the proposed "Additional Information Regarding Ordinary Share Value" disclosure section that the Company previously submitted to the Staff in Appendix A to the Company's prior response letter dated June 4, 2014.

resulting valuation for the purpose of issuing the convertible bonds and warrants to the Company's Executive Chairman as well as to the Company's new Chief Financial Officer, who had also been identified at that time, based in part on a September 27, 2013 assessment from the Company's statutory auditor² regarding the Company's proposed per share valuation.

In November 2013, the Company's management recommended to the Company's board of directors that additional warrants be issued to a group of key executives. The exercise price for the new warrants was required to be determined in accordance with the procedures set forth under Belgian tax law and management concluded that a new valuation, using the same valuation methodologies that had been used in September 2013, reflecting recent changes in the trading prices of the peer group companies, would be appropriate under Belgian tax laws. The Company arrived at a €2.14 per share value by first updating the peer group valuation using the same methodology that had been used in September 2013 and by calculating the mathematical average of the discounted cash flow valuation (which remained unchanged) and the outcome of the updated peer group analysis. On November 26, 2013, the Company's board of directors approved the proposed grant of additional warrants to a group of key employees at an exercise price of €2.14 per share, based in part on a November 26, 2013 updated assessment from the Company's statutory auditor regarding the Company's proposed per share valuation.

The below table summarizes the recent warrant grants by the Company:

			Type of	Number of	Per share	Per share
		Number of	Securities	Securities	fair value	fair value
Date of Grant	Plan	Warrants	Upon Exercise	Upon Exercise	(euros)	(dollars)(2)
October 2013	2013 Warrant Plan	75,274	Ordinary Shares	301,096	€ 1.97	\$ 2.71
December 2013	2013 Warrant Plan	5,500	Ordinary Shares	22,000	€ 2.14	\$ 2.95
January 2014	2013 Warrant Plan	36,200	Ordinary Shares	144,800	€ 2.14	\$ 2.95

(1) 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.

The Company further notes to the Staff that, 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 5,500 warrants to purchase 22,000 Ordinary Shares and the 36,200 warrants to purchase 144,800 Ordinary Shares reflected in the table above 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 and the remaining recipients accepted the remaining warrants in January 2014.

The Company notes to the Staff that the Company's statutory auditor for Belgian company and tax law purposes is not the same accounting firm as the independent registered public accounting firm that is named as experts in the Registration Statement.

IPO Valuation

In the course of establishing the valuation range for the proposed initial public offering, the underwriters performed a number of valuation analyses including (i) evaluating the trading multiples (primarily Revenue and EBITDA multiples) of a group of publicly-traded peer companies in the additive manufacturing sector; (ii) evaluating recent initial public offerings in the sector with respect to the valuation multiples afforded these companies in their initial public offerings as well as the relative discount or premium these transaction multiples represented relative to the publicly-traded peer group; and (iii) to a lesser extent, discounted cash flow analysis.

Given the high growth experienced by additive manufacturing companies in recent years and the expected continued future growth in the sector, the underwriters believe that investors will be most focused on Enterprise Value/Revenues multiples and multiples of future revenues, specifically 2015 projected revenues, when deciding how to value the Company with respect to the contemplated initial public offering. Therefore, the underwriters used the ratio of Enterprise Value to 2015 Estimated Revenues as the primary metric to derive the offering valuation range for the Company, while also considering the other valuation analyses mentioned above. With respect to that Enterprise Value/2015 Estimated Revenues multiples analysis, the underwriters evaluated the relative trading multiples of seven publicly-traded peers in the additive manufacturing sector relative to each company's historical and projected growth rates and profitability as compared with the Company's historical and projected growth rates and profitability. In addition, the indicative valuation range for the offering will reflect the underwriters' view of a market discount applied to the Company's intrinsic valuation required by its new public security holders to reflect the illiquidity of the Company's shares and the risk inherent in investing in newly-public companies (the "IPO discount").

Prior Discussions with Underwriters

The Company first commenced preliminary discussions with investment banks regarding a proposed offering of its shares during July and August of 2013. At this time, it was yet to be determined whether the offering would be conducted as a public offering in the United States, listed on a U.S. national securities exchange, or as a public offering in Belgium, with a private international placement and listing of the shares on the Euronext. The Company subsequently engaged investment banks in October of 2013 and conducted testing the waters meetings with qualified institutional buyers in November of 2013. During this time, the Company still had not determined how the offering would be conducted. In December 2013, the board of directors of the Company determined to conduct the offering as U.S. public offering registered with the SEC and commenced preparing the initial draft of the Registration Statement with the underwriters.

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

cc: Securities and Exchange Commission

Tracey Smith Alfred Pavot Kamyar Daneshvar

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