

November 27, 2015

VIA EDGAR

Mr. Russell Mancuso, Branch Chief
Office of Electronics and Machinery
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: OSI Systems, Inc.
Form 10-K for Fiscal Year Ended June 30, 2015
Response Dated November 10, 2015
Form 10-Q for Fiscal Quarter Ended September 30, 2015
File No. 000-23125

Dear Mr. Mancuso:

This letter is submitted in response to the comments of the staff of the Division of Corporation Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) with respect to OSI Systems, Inc. (the “Company”) as set forth in your letter dated November 23, 2015.

For your convenience, each of the Staff’s comments is reproduced below in italics followed by the Company’s response. The headings and numbered paragraphs in this letter correspond to the headings and numbered paragraphs in the comment letter from the Staff.

Form 10-K for Fiscal Year Ended June 30, 2015

- 1. Please address that part of prior comment 2 that asked you to tell us (1) the portion of your business that may be subject to renegotiation of profits or termination of contracts or subcontracts at the election of the government and (2) the portion of your business that would be at issue in any debarment proceedings that you mention in the first paragraph on page 26.*
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The Company advises the Staff that, as indicated in our prior response dated November 10, 2015, our government contracts are generally subject to termination for convenience at the election of the government. For U.S. government contracts, upon a termination for convenience, we would generally be able to recover our incurred or committed costs, settlement expenses and profit on the work completed prior to termination. Additionally, we manufacture products and provide services as a subcontractor that could ultimately be for the benefit of U.S. government customers. For the fiscal year ended June 30, 2015, direct sales by our Security division to U.S. government customers were \$127.3 million.

Further, the Company advises the Staff that, with respect to the first paragraph on page 26 of our Form 10-K, the portion of our business that would be implicated in a debarment proceeding is our Security division. In the event that a U.S. government agency were to initiate debarment proceedings, there are various possible outcomes, which could include suspension or termination of current contracts as well as restrictions on our ability to seek and/or accept additional federal government contracts or subcontracts for a period of time. Because there is a range of possible outcomes, the Company cannot reasonably predict the outcome nor quantify the portion of our business that would be affected if debarment proceedings were to be initiated.

Form 10-Q for Fiscal Quarter Ended September 30, 2015

Net Revenues, page 21

- 2. Refer to prior comment 3 and the second paragraph under the table in this section. Please tell us the extent of the revenue increase attributable to the acquisition that you mention. Also tell us the extent to which sales in your “Latin America and Asia*

regions” decreased, and the reasons for the increases and decreases in the regions that you mention. Also revise future filings to clarify as appropriate.

The Company advises the Staff that the increase in revenue attributable to the acquisition was \$1.7 million. Excluding the impact of the acquisition stated above, sales in the Latin America and Asia regions decreased by \$1.2 million from the prior year, which we believe was attributable to timing of hospital purchases and a slowdown of patient monitoring sales in China. We believe that the rise in sales in our North America and Europe, Middle East and Africa regions are a result of increased capital spending in hospitals in the United States and in the Europe, Middle East and Africa regions. The Company will undertake to clarify this disclosure in future filings.

3. *We note that you attribute the decrease mentioned in the third paragraph to an exceptionally high prior year sale to a single customer. We also note that the “Net Revenues” discussion on page 18 of your Form 10-Q for the fiscal quarter ended September 30, 2014 describes a decrease in the same division and attributes the decrease to exceptionally high sales to a single customer in the prior fiscal year, and does not mention an exceptionally high sale to a customer in the current year. Please tell us how those disclosures can be reconciled and the reasons for the exceptionally high sales in individual quarters; clarify in future filings as appropriate.*
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The Company advises the Staff that the customer identified in each of our Forms 10-Q for the quarters ended September 30, 2014 and 2015 is the same customer to whom we have had historically high sales and to whom we still sell. Revenues from sales to this customer were \$14.5 million, \$8.3 million and \$4.1 million for the first quarter ended September 30, 2013, 2014 and 2015, respectively, which led to the comment in the Form 10-Q for each of the periods ended September 30, 2014 and 2015. Sales to this consumer products customer, who sells health and beauty products, may fluctuate significantly as a result of our customer’s end market demand. The Company will undertake to clarify this disclosure in future filings.

Cash Provided by Operating Activities, page 23

4. *Please tell us the reasons for the changes in inventory and accounts payable. Also clarify in future filings as appropriate.*

The Company advises the Staff that the \$23.6 million increase in inventory during the quarter ended September 30, 2015 was attributable to building inventory to support future sales. Further, the \$23.9 million increase in accounts payable during the quarter ended September 30, 2015 was attributable to the inventory build and the timing of payments to suppliers. The Company will undertake to clarify this disclosure in future filings.

In connection with the aforementioned responses, the Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to the Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you should have any additional questions regarding these responses, please contact me at (310) 978-0516.

Sincerely,

/s/ Alan Edrick

Alan Edrick
Executive Vice President and Chief
Financial Officer
