

November 10, 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

Filed August 24, 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 the Form 10-K for the year ended June 30, 2015 of OSI Systems, Inc. (the "Company") as set forth in your letter dated October 30, 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.

Business, page 1

1. Please tell us the identity of the customer mentioned on page F-12 as providing 10% or more of your revenue, and revise future filings to disclose the identity of the customer as required by Regulation S-K Item 101(c)(1)(vii).

The Company hereby advises the Staff that the customer mentioned on page F-12 as providing 10% or more of the Company's revenue is the Mexico Servicio de Administración Tributaria. The Company will undertake in applicable future filings to disclose the identity of customers as required by Regulation S-K Item 101(c)(1)(vii).

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Backlog, page 20

2. Please tell us the portion of your disclosed backlog that is not reasonably expected to be filled within the current fiscal year. Also tell us the portion of the disclosed backlog that represents government orders that are not yet funded, and describe to us 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. Address in your response the portion of your business that would be at issue in any debarment proceedings that you mention in the first paragraph on page 26, and whether the mutual agreement mentioned on page 44 implicates your obligation to remain in compliance with the Administrative Agreement disclosed on page 26 or otherwise affects your ability to contract with the government. Clarify in future filings as appropriate; see Regulation S-K Item 101(c)(1)(viii) and (ix).

The Company hereby advises the Staff that we believe approximately \$0.2 billion of our \$0.6 billion backlog as of June 30, 2015 is not reasonably expected to be filled within fiscal year 2016. To the Company's knowledge, we do not include in backlog any unfunded portion of government orders.

The Company further advises the Staff that, as disclosed under "Industry Overview – Security" on page 3 and under "Risk Factors" on pages 25 and 39 of our Form 10-K, our contracts with the United States and foreign governments are generally subject to termination for convenience at the election of the government.

As disclosed on pages 25 and 26 of our Form 10-K, we are party to an Administrative Agreement with the U.S. Government, which allows us to continue with our current and future business with U.S. Government agencies. If,

however, our Security division fails to remain in compliance with the Administrative Agreement, the U.S. Department of Homeland Security could initiate debarment proceedings that could implicate our Security division's dealings with the U.S. Government.

The Company further advises the Staff that the mutual agreement referenced on page 44 of the Form 10-K was a resolution of a particular contract performance obligation. It is independent of the Company's obligations under the Administrative Agreement and does not affect our ability to contract with the government.

Net Revenues, page 53

3. Please tell us the reasons for the changes mentioned in the last sentences of the first three paragraphs of this section. Also, tell us the extent of (1) the offsetting effect mentioned in those sentences and (2) the impact of the new product introductions mentioned in the second paragraph of this section; see Regulation S-K Item 303(a)(3)(iii).

The Company advises the Staff that the reasons for the changes mentioned in the last sentence of each of the three paragraphs of the Fiscal 2015 Compared with Fiscal 2014 section under Net Revenues are as follows. The increases in net revenues for the Security division were partially offset by an approximate decrease of \$7 million in revenues from the Mexico turnkey screening services program as well as small decreases in sales of certain product lines for fiscal 2015 as compared to fiscal 2014.

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Increases in net revenues in the Healthcare division were partially offset by a decrease of approximately 16% in organic sales in the Europe, Middle East and Africa regions, primarily because of economic uncertainty in those regions as well as unfavorable exchange rate fluctuations. The Company advises the Staff that the new product introductions mentioned in this section were primarily related to sales of upgraded products within our patient monitoring line, and the reference was intended to provide greater detail as to why we believe organic sales of this product line increased.

Decreases in net revenues in the Optoelectronics and Manufacturing division were offset by increased sales within the division's commercial optoelectronics business of approximately \$5.0 million. This increase was primarily attributable to increased sales to our original equipment manufacturer (OEM) customers in the defense, industrial and medical industries.

4. Please tell us, and clarify in future filings, the extent to which the "FMS Contract" provides revenue in future periods at the level disclosed for fiscal 2015. Include in your response when the contract ends.

The Company advises the Staff and will clarify in future filings that the amount of revenues from the current FMS Contract in future periods is not expected to be significant. The current FMS Contract expires June 30, 2017.

5. We note your reference to "ramped up" sales from your turnkey screening services in Mexico during fiscal 2014. Also, from your disclosure on page F-12, it appears that revenue from those services might have decreased in fiscal 2015. Please tell us, and clarify in future filings, how those services generate revenue and the reason for the decrease in revenue. For example, do you receive a fixed amount of revenue per container screened? If so, why did the number of screenings decrease?

The Company advises the Staff that billings from the Mexico turnkey screening program are generated from the operations of the sites on a fixed amount per site per month (not based upon the volume of containers screened), and revenue is recognized based upon proportional performance as described on page F-11 of our Form 10-K. Revenues from this program decreased in fiscal 2015 as compared to fiscal 2014 due to customer changes in the number of sites that are operational. The Company will undertake to clarify this disclosure in future filings.

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

- \cdot 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