

April 9, 2014

VIA EDGAR

Mr. Kevin L. Vaughn, Accounting Branch Chief
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, 2013
Filed August 16, 2013
File No. 0-23125

Dear Mr. Vaughn:

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, 2013 of OSI Systems, Inc. (the “Company”) as set forth in your letter dated April 7, 2014.

For your convenience, the Staff’s comment 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, 2013

Note 8 – Income Taxes, page F-21

- 1. We note your response to prior comment 2 describing why you believe it is impractical to determine the amount of tax that would be payable. We note the factors you cite appear to relate to potential future events that could impact the ultimate amount of tax that would be payable. Please revise future filings to*

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disclose an estimate of the amount of tax that would be payable upon the remittance of foreign earnings based on current facts and circumstances. In this regard, we would not object if you also disclosed that the amount of tax that would be payable could be further impacted by the factors that you cite in your response.

The Company will undertake in applicable future filings to comply with the Staff’s request.

In connection with the aforementioned response, 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 Company’s 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 this response, please contact me at (310) 978-0516.

Sincerely,

/s/ Alan Edrick

Alan Edrick
Executive Vice President and
Chief Financial Officer
