

March 10, 2021

VIA EDGAR

Attn: Effie Simpson and Martin James Division of Corporation Finance Office of Manufacturing U.S. Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Re: OSI Systems, Inc.

Form 10-K for the Fiscal Year Ended June 30, 2020 Filed August 21, 2020 Form 10-Q for the Period Ended December 31, 2020 Filed January 29, 2021 File No. 000-23125

Dear Ms. Simpson and Mr. James:

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 with respect to the Form 10-K for the fiscal year ended June 30, 2020 and Form 10-Q for the period ended December 31, 2020 of OSI Systems, Inc. (the "Company") as set forth in your letter dated March 2, 2021.

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 the Fiscal Year Ended June 30, 2020

Note 15. Segment Information, page F-39

1. We note the disaggregated revenue disclosures presented. In light of the significance of service revenues to total revenues and noting that your services are provided by each of your segments, please tell us what consideration was given to also separately disclosing product revenue and service revenue by segment, as well as similar disclosures on 'point-in-time' versus 'over time' revenues. Tell us how you considered the guidance in ASC 606-10-50-5 through 7 and ASC 606-10-55-89 through 91 in reaching your conclusion.

The Company has evaluated the guidance in ASC 606-10-50-5 through 7 and the related implementation guidance in ASC 606-10-55-89 through 91 with respect to additional disclosures of disaggregated revenues and has specifically considered the guidance in ASC 606-10-50-5 through 7 which requires an entity to disaggregate revenue from contracts with customers into categories that depict how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. Further, the Company considered the examples in ASC 606-10-55-91 which provide additional clarity.

In consideration of the factors in ASC 606-10-55-90, which requires that the Company consider how information about the Company's revenue has been presented for other purposes, the Company considered, among other items, disclosures outside the financial statements and information reviewed by its chief operating decision maker. The Company disaggregates revenues by product and service on the face of the statement of operations and the Company also reports total revenue by segment and geographical region which is consistent with how its chief operating decision maker reviews financial performance. This disaggregation also aligns to disclosures in the Company's quarterly earnings releases and the prepared remarks discussed as part of its quarterly earnings announcement process.

The Company considered the examples of categories of disaggregated revenues in ASC 606-10-55-91. A key depiction of how the nature, amount, timing, and uncertainty of the Company's revenue and cash flows are affected by economic factors is geographical region, as noted in example 'b'. The Company believes geographical region provides a meaningful indication of how its revenue from contracts with customers are affected by economic factors due to the global nature of its customers and operations. Within the Company's segment disclosures, it has included a disaggregation of revenues by significant geographical region. Further, as it relates to the examples in ASC 606-10-55-91, in response to the Staff's comment, the Company specifically considered example 'f' within the guidance pertaining to the timing of transfer of goods or services noting that substantially all of the Company's service revenue is recognized over time while substantially all of its product revenue is recognized on a point-in-time basis. This disaggregation of revenue between types provides clarity as to the timing of the transfer of goods or services.

For the reasons discussed above, the Company believes that the various revenue disaggregation disclosures currently reported are appropriate.

Form 10-Q for the Period Ended December 31, 2020

Note 11. Income Taxes, page 22

2. We note that you present in this note an effective tax rate excluding the impact of discrete tax items, which appears to be a non-GAAP measure. Please refer to the guidance in Item 10(e)(1)(ii)(C) of Regulation S-K which prohibits you from presenting non-GAAP measures on the face of or in the notes to your financial statements, and revise future filings to comply. Also, revise your similar disclosures on page 27 in MD&A to provide all disclosures required by Item 10(e) of Regulation S-K.

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

Results of Operations, page 26

3. We note your discussion of gross profit only addresses the impact of increased or decreased revenues. Given the significant changes we note in your cost of goods sold in the reported periods, in order to assist an investor's understanding, please revise future filings to also address the impact of changes in your cost of goods sold on your gross profit. Separately quantify and discuss factors responsible for changes in cost of goods sold, including the impact of material variances in components that offset each other within periods. Please consider providing a similar discussion at the segment level. Refer to FR-72.

The Company will undertake in future filings to comply with the Staff's request to also address the impact of significant changes in cost of goods sold on gross profit and separately quantify and discuss factors responsible for significant changes in cost of goods sold. The Company will also consider providing similar discussion at the segment level.

4. Please revise the discussion of your results of operations throughout your future filings to not only highlight the reasons for the changes in your income statement line items but to also quantify the impact of each material factor on your results and to describe the reasons underlying each change, including the impact of material variances in components that offset each other within line items. Also, in your future discussions avoid terms such as "primarily" or "partially offset". Refer to FR-72.

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

If you 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