FOIA CONFIDENTIAL TREATMENT REQUEST

CERTAIN PORTIONS OF THIS LETTER FILED VIA EDGAR HAVE BEEN OMITTED AND FILED SEPARATELY WITH THE SEC. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED FOR THE OMITTED PORTIONS, WHICH HAVE BEEN REPLACED WITH THE PLACEHOLDER "[****]."



March 22, 2013

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, 2012

Filed August 13, 2012

Form 10-Q filed January 25, 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 with respect to the Form 10-K for the year ended June 30, 2012 of OSI Systems, Inc. (the "Company") and the Form 10-Q for the quarter ended December 31, 2012 as set forth in your letter dated March 8, 2013.

Because of the commercially sensitive nature of information contained herein and confidentiality requirements of the Transportation Security Administration, this submission is accompanied by a request for confidential treatment for selected portions of this letter. The version of this letter filed via EDGAR omits confidential information included in the unredacted version delivered to the Staff in hard copy, and the redactions have been noted in the EDGAR version by bracketed asterisks "[****]". The Company has filed a separate letter with the Office of Freedom of Information and Privacy Act

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Operations (the "FOIA Office") in connection with the confidential treatment request, pursuant to Rule 83 of the Commission's Rules on Information and Requests [17 C.F.R. § 200.83] ("Rule 83"). For the Staff's reference, the Company has enclosed a copy of its letter to the FOIA Office (the "Request") with this correspondence, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment.

In accordance with Rule 83, the Company requests confidential treatment of (a) the marked portions (the "Confidential Information") of this response letter (this "Letter") and (b) the accompanying Request letter (collectively, the "Confidential Material"). Please promptly inform the undersigned of any request for disclosure of the Confidential Material made pursuant to the Freedom of Information and Privacy Act or otherwise so that the undersigned may substantiate the foregoing request for confidential treatment in accordance with Rule 83.

In accordance with Rule 83, this Letter has also been clearly marked with the legend "Confidential Treatment Requested by OSI Systems, Inc. Pursuant to 17 C.F.R. § 200.83", and each page is marked for the record with the identifying numbers and code.

Pursuant to Rule 83, a copy of the Request also is being delivered to the Commission's FOIA Office.

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, 2012

Item 11. Executive Compensation, page 55

1. It continues to be unclear from your responses to prior comments 1-3 how the factors you say you considered relate to the nature and amount of the compensation you paid. You state that "overall and both relative individual and corporate performance" in each category was considered, with no pre-determined weighting. You also state that the "various quantitative and qualitative factors" were considered in determining the amount of bonuses awarded. It is unclear, however, how the factors considered impacted the compensation you paid, either favorably for the executive or unfavorably. For example, what about each executive's risk tolerance and stated preference was considered in determining equity awards? Were those preferences accepted without

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change and, if not, explain how they differed? What qualitative and quantitative factors impacted bonuses favorably and which impacted bonuses unfavorably? How was the degree to which bonuses were impacted determined? Was positive performance in one or more factors determined to outweigh negative performance in other factors and, if so, how? What was the "Company's actual performance taken as a whole as well as its performance relative to its peer group?" How did this assessment relate to the compensation you pay? Please provide us draft disclosure in response to this comment. Such disclosure should clearly identify the factors considered and relate how those factors impacted the nature and amount of compensation you paid.

The Company acknowledges the Staff's comment and notes that the Company's executive compensation variable bonus program for the current fiscal year ending June 30, 2013 is more objective and formulaic compared to the prior year. The current year's executive compensation variable bonus program is described in detail in the Company's Proxy Statement filed October 23, 2012.

In response to the Staff's comment, the Company is providing the following supplemental information regarding the Company's executive compensation methodology for the fiscal year ended June 30, 2012. Moreover, the Company undertakes in future filings to provide the requisite disclosure required by Regulation S-K, Item 402, including providing a CD&A that is responsive to the Staff's comments.

In determining compensation awarded to the Named Executive Officers for fiscal 2012, the Compensation Committee performed a global review of both overall and relative individual NEO and corporate performance based on the qualitative and quantitative factors described in the Proxy Statement. The factors considered did not have any predetermined or mathematical weighting; rather, the Compensation Committee considered the overall performance of each executive, considering the factors, and including consideration of unplanned events and issues emerging during the fiscal year. Based on its evaluation, the Compensation Committee used its judgment in making compensation determinations for each Named Executive Officer.

For fiscal 2012, the Compensation Committee determined that it was appropriate to maintain fixed compensation levels relatively stable for all NEOs as compared to fiscal 2011. The Compensation Committee believes that the fixed component of compensation is designed to compensate each Named Executive Officer based on the duties and scope of responsibilities of his position and the experience he brings to the position, which did not change materially in fiscal 2012.

Consistent with the Company's pay-for-performance philosophy, the variable component of compensation, in the form of annual cash incentives and both time-based vesting and performance-based equity grants, comprised a significant portion

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of total compensation. In making variable compensation determinations, the Compensation Committee noted significant corporate and management achievements during fiscal year 2012 in the categories "furtherance of long-term goals", "demonstration of leadership skills and ability" and "achievement of strategic targets", including (1) significant expansion of the Company's turnkey security screening services business, which represents a potential paradigm shift in the field of security inspection; (2) successful entrance into new, previously-unaddressed markets such as the computed tomography (CT) hold baggage screening market, technology integration services market and the trace detection market, which together

represent a major expansion of the size of the Company's addressed markets; and (3) continuation of the development and launch of an entire new generation of healthcare products. The Compensation Committee factored these achievements against instances where the Company did not achieve desired results, including the delayed launch of certain products and delays in realizing certain sales.

The Compensation Committee determined that the achievements of each NEO for the fiscal year contributed significantly to the long-term goals of the Company, and substantially improved the Company's competitive standing in important markets, while the goals that were not achieved during the fiscal year did not represent significant set backs to the Company as a whole.

The Compensation Committee also took into consideration the Company's strong financial performance overall as well as relative to certain of its peer companies. The Compensation Committee further considered the stronger performance in certain of the Company's divisions as compared to others.

For the variable component of compensation, there was no mathematical formula for tying the fiscal year's events and performance to each individual executive's variable compensation, but rather that compensation element was determined in consideration of the executive's involvement in the Company's performance for that year, the Company's overall performance for the year, as well as the compensation for comparable-company executives.

In light of this global evaluation, the Compensation Committee determined that certain Named Executive Officers should receive increased variable compensation for fiscal year 2012 as compared to fiscal year 2011 in order to compensate them for the significant achievements identified above. In past years, solely in determining the allocation of the equity component between restricted stock and stock options, the Compensation Committee discussed with each Named Executive Officer his level of risk tolerance and preference for equity vehicle. Generally, each Named Executive Officer's preferences reflected his individual financial and retirement planning objectives, and the Compensation Committee considered such stated preference in the allocation of equity compensation between restricted shares

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and stock options, with restricted shares representing relatively more stable value, and stock options representing relatively greater potential volatility in value. For fiscal year 2012, in anticipation of the transition to a more objective and formulaic compensation program, each Named Executive Officer received only restricted shares.

2. We note your response to prior comment 1 regarding consideration of your performance relative to a peer group. Please expand future filings to identify the comparator companies. See Regulation S-K Compliance and Disclosure Interpretations Question 118.05.

The Company will undertake in future filings to identify the comparator companies if it engages in benchmarking as explained in Regulation S-K Compliance and Disclosure Interpretations Question 118.05.

3. Based on your response to prior comment 3, it is unclear how you determined that disclosing the "rate of return" on a historical basis would result in competitive harm to you. For example, you state that based on the evaluation you mention, competitors could derive confidential financial and operational data as well as determine your strategic direction. It is unclear from your response, however, how competitors could determine such information from the "rate of return." Please clarify. For example, describe how competitors could extrapolate the information you mention based on the historical "rate of return." Explain why would a past year's performance targets necessarily be predictive of your strategic plans for future years, given that your compensation committee could assign different weights to these goals or different goals altogether. How would a competitor's comparison of these business goals as reflected in the performance targets enable it to draw a specific conclusion with respect to your strategic activities in future years? Might there be multiple variables that affected actual performance that are unrelated to the performance targets and your strategy?

The Company respectfully advises the Staff that disclosing the rate of return threshold, historically or otherwise, would result in competitive harm for the Company. Disclosing this information would provide competitors with a sensitivity point for the Company and would potentially allow them to utilize this information in determining their pricing strategies in competitive bidding situations. This data point would give competitors information as to the Company's minimum acceptable growth metric, thereby allowing competitors to potentially undermine the Company's competitive bidding strategies. Further, in recent years, the Company has set the threshold rate of return at the same level thereby increasing the likelihood that competitors could use this information to predict the Company's current and future strategic plans to the Company's competitive disadvantage.

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Note 13 - Segment Information, page F-30

4. We note your response to prior comment 7 confirming that no revenue attributed to any individual foreign country are material. As previously requested, please disclose the basis for attributing revenues from external customers to individual countries in future filings. In this regard, refer to footnote (a) in Example 3, Case D of paragraph 280-10-55-51 of the FASB Accounting Standards Codification.

The Company will undertake in future filings to disclose that the basis for attributing revenues from external customers to individual countries is based upon the customer's location, in accordance with applicable FASB Accounting Standards Codification guidance.

Form 10-Q for the Quarterly Period Ended December 31, 2012

Note 7 – Commitments and Contingencies, page 15

5. We note your response to prior comment 8 in which you state that you believe that you have "provided sufficient chronology in Note 7 for the reader to understand that this is a December quarter-end event." However, we note that this disclosure only provides information commencing with the receipt of the show cause letter in November 2012. It appears that the concerns from the TSA arose earlier than that time though, as you state that you "did not sell systems to the TSA in fiscal 2012 and fiscal 2013." Considering that the Company knew that it was not selling systems to the TSA during fiscal 2012 and fiscal 2013, please tell us why you concluded disclosure was not necessary in the June 30, 2012 Form 10-K or September 30, 2012 Form 10-Q. Refer to Item 303 of Regulation S-K. In this regard, please tell us when you were notified that the TSA would no longer take deliveries of new units.

The Company advises the Staff that it had no sales of Secure 1000SP systems (or "AIT" systems in the TSA nomenclature) to the TSA in fiscal years 2012 and 2013 because the program was mature from a systems procurement standpoint and was not indicative of any concerns with the program. The TSA had procured enough systems to fulfill its then-current needs.

[****]

[****] – Certain text on pages OSI-6 through OSI-7 of the unredacted version of this letter has been omitted and provided separately to the Securities and Exchange Commission pursuant to a request for confidential treatment_pursuant to 17 C.F.R. § 200.83.

6. Further to the above, please clarify for us the nature of the impairment charge you recorded. Clarify what underlying assets were impaired. Discuss why you concluded the quarter ended December 31, 2012 was an appropriate time for the impairment. If the impairment relates to long-lived assets, explain how you considered the guidance in 360-10-35 of the FASB Accounting Standards Codification for the periods ended March 31, June 30 and September 30, 2012 in light of the fact that these units were the subject of significant inquiry by the TSA and Congress and also the fact that the TSA had ceased purchasing these units in 2012.

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The Company advises the Staff that the nature of the impairment and other charges the Company recorded during the quarter-ended December 31, 2012 included those costs estimated to be incurred in relation to the modification of the Company's contract with the TSA entered into on December 21, 2012. Such costs include estimates for removing AIT units from TSA locations, the write-off of capitalized software costs in conjunction with the development of the ATR software, the write-off of inventory related to the cancelled purchase order, and related legal costs. Such charges were accrued as of December 31, 2012 as they became known and estimable for the first time during the quarter-ended December 31, 2012. However, such estimates may be revised in future periods as actual charges are incurred.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 19

7. We note your response to prior comment 9. Please confirm that you will expand applicable future filings to disclose material developments regarding the proceeding with DHS and TSA, including any material risks to you.

The Company confirms that it will expand applicable future filings to disclose material developments regarding the proceeding with DHS and TSA, including any material risks to the Company.

If you should have any additional questions regarding these responses, please contact me at (310) 978-0516. My facsimile number is (310) 644-6765.

Sincerely,

/s/ Deepak Chopra

Deepak Chopra Chief Executive Officer

cc: Office of Freedom of Information and Privacy Act Operations U.S. Securities and Exchange Commission Operations Center 6432 General Green Way Alexandria, Virginia 22312-2413