

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

January 23, 2015

Via E-mail
Mr. Jeffrey A. Graves
President and Chief Executive Officer
MTS Systems Corporation
14000 Technology Drive
Eden Prairie, MN 55344

**Re:** MTS Systems Corporation

Form 10-K for the Fiscal Year Ended September 27, 2014

Filed November 26, 2014

File No. 0-2382

Dear Mr. Graves:

We have reviewed your filing and have the following comment. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 10-K for the Fiscal Year Ended September 27, 2014

Consolidated Financial Statements, page F-1

Note 8. Income Taxes, page F-28

1. We note that you repatriated \$9.6 million, \$14.5 million, and \$20.2 million of current earnings during fiscal years 2014, 2013, 2012. Additionally, we note that you have not recognized a deferred tax liability for the undistributed earnings of certain of your foreign operations because those subsidiaries have invested or will invest the undistributed earnings indefinitely. Please tell us the underlying reasons for the repatriation of foreign

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earnings in 2014, 2013 and 2012. Please also provide us with a detailed analysis that supports your conclusion that the remaining undistributed earnings of foreign earnings should be considered permanently reinvested. In this regard, explain why you believe it is appropriate to continue to make this assertion in light of the repatriation of earnings that took place over the last three years.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comment, please provide a written statement from the company acknowledging 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 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.

You may contact Gary Newberry at (202) 551-3761 or Lynn Dicker, Senior Accountant, at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3643.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn Accounting Branch Chief