



DIVISION OF
CORPORATION FINANCE

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

June 4, 2012

Via E-mail

Gregory T. Lucier
Chairman and Chief Executive Officer
(Principal Executive Officer and
Authorized Signatory)
Life Technologies Corporation
5791 Van Allen Way
Carlsbad, California 92008

**Re: Life Technologies Corporation
Form 10-K for the Fiscal Year Ended December 31, 2011
Filed February 29, 2012
Form 10-Q for the Quarterly Period Ended March 31, 2012
Filed May 3, 2012
Form 8-K Dated February 7, 2012
Filed February 7, 2012 and Amended February 29, 2012
File No. 000-25317**

Dear Mr. Lucier:

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

Please respond to this letter within 10 business days by providing us the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

2011 Form 10-K

Notes to Consolidated Financial Statements

2. Business Activity, Summary of Significant Accounting Policies and Significant Accounts
Reclassifications and Segment Information, page 59

1. We note that you operate your business under three divisions and that they are reported as one operating segment. Please provide us with an analysis of why you believe you meet the requirements of ASC 280-10-50 to report a single operating segment. Please include a

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discussion of the operating results that are reviewed by your chief operating decision maker and clarify the extent to which they review the results of any or all of your three divisions.

Form 8-K/A Dated February 7, 2012 Filed February 29, 2012

Exhibit 99.1

Non-GAAP Measurements

Consolidated Statements of Operations

2. In this exhibit you present a full statement of income to reconcile your GAAP earnings to non-GAAP earnings. Please represent to us that you will no longer present these tables in future Item 2.02 Form 8-K submissions or elsewhere. Please see Question 102.10 of our Compliance & Disclosure Interpretations for Non-GAAP Financial Measures. Please also see Instruction 2 to Item 2.02 of Form 8-K which indicates that the provisions of Item 10(e)(1)(i) apply to these public disclosures.

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

Item 1. Financial Statements

Notes to Consolidated Financial Statements (Unaudited)

9. Fair Value of Financial Instruments

Concentration of Credit Risk, page 16

3. You indicate that there have been customers in Southern Europe for which days outstanding has increased while payment is pursued. Please tell us the total amount due and the amount past due from these customers by customer and by country. Indicate those customers that are "partially or directly funded by government institutions."

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 Tabatha Akins, Staff Accountant, at (202) 551-3658 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 if you have any questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant