

Lightbridge Corporation  
1600 Tysons Blvd  
Suite 550  
McLean, VA 22102

August 25, 2010

**By EDGAR Transmission**

Division of Corporation Finance  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, DC 20549  
Attn: Daniel Gordon

**Re: Lightbridge Corporation  
Form 10-K for the Year Ended December 31, 2009  
File No. 1-34487**

Dear Mr. Gordon

We hereby submit the responses of Lightbridge Corporation (the "Company") to the comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") set forth in the Staff's letter, dated July 29, 2010, providing the Staff's comments with respect to the above referenced Annual Report on Form 10-K (the "10-K").

For the convenience of the Staff, each of the Staff's comments is included and is followed by the corresponding response of the Company. Unless the context indicates otherwise, references in this letter to "we," "us" and "our" refer to the Company on a consolidated basis.

Consolidated Balance Sheets, Page F-3

1. We see your presentation of deferred stock compensation and common stock reserved for issuance in both your December 31, 2009, consolidated balance sheets as well as the related consolidated statements of changes in stockholders' equity. We note that ASC 718-10-25-2 requires compensation costs to be recognized in the financial statements as services are provided by employees and does not permit those costs to be recognized as deferred compensation on the balance sheet before services are provided. Also refer to the transition guidance in paragraph 74 of Statement 123R. Revise your disclosures in future filings as necessary based on our comment and provide us with your proposed disclosures or tell us why you believe your current presentation is appropriate.

**Company Response:** The "Deferred stock compensation" entry presented in the Company's balance sheets of December 31, 2009 and December 31, 2008 presents the unamortized balance of non-vested stock grants and is a contra-equity offset to the value of the issued "Common Stock" or "Common stock reserved for issuance" until vesting occurs. Although the Company's presentation of the contra-equity account has no effect on the stockholders equity total we agree with the Staff that ASC 718-10-25-2 is applicable and that we should eliminate this "Deferred stock compensation" line item in future SEC filings by recording "Stock-based compensation" expense and "Additional Paid-in capital" as the services are provided. The Company properly records compensation costs on the income statement for stock grants as the services are provided in accordance with Statement 123R, and there is no prepaid asset recorded for these stock issuances. We will have an accounting reclassification footnote disclosure in the accounting policies section in our future SEC filings as follows:

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## Reclassification

Certain prior period amounts have been reclassified to the current presentation. Such reclassifications had no impact on previously reported Net income or total Stockholders' equity. The deferred stock compensation amount of \$456,500 presented on the Company's balance sheet at December 31, 2009 represented the unamortized balance of non-vested stock grants and was a contra-equity offset to the value of the stock issued under the balance sheet captions "Common Stock" or "Common stock reserved for issuance" until vesting occurs. In accordance with ASC 718-10-25-2, these costs are not to be shown as deferred stock compensation but recognized as expense as services are provided. We have reclassified the deferred stock based compensation by eliminating this balance sheet caption, "Deferred stock compensation" and recording a corresponding adjustment (reduction) to Additional paid in capital – stock and stock equivalents in the amount of \$456,500. Total Stockholders equity remains the same after this reclassification.

## Note 9. Stockholders' Equity, Page F-15

2. Please tell us how you account for share-based compensation granted to your advisory board members and consultants, specifically stating how you determined whether these individuals were employees subject to the provisions of ASC 718 or non-employees subject to ASC 505-50.

**Company Response:** The stock compensation expense incurred by Lightbridge Corporation in connection with its various stock option plans is based on the employee model of ASC 718. Under ASC 718 employee is defined as "An individual over whom the grantor of a share-based compensation award exercises or has the right to exercise sufficient control to establish an employer-employee relationship based on common law as illustrated in case law and currently under U.S. Internal Revenue Service (IRS) Revenue Ruling 87-41. Our advisory board members and consultants do not meet the employer-employee relationship as defined by the IRS and therefore are accounted for under ASC 505-50.

The Company has accounted for the share grants made to the non-employees, based on the guidance provided in ASC 505-50 (previously EITF96-18).

ASC 505-50-30-6 (previously FAS 123R, par. 7) establishes that share-based payment transactions with non-employees shall be measured at the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measured. ASC 505-50-30-11 (previously EITF 96-18) further provides that an issuer shall measure the fair value of the equity instruments in these transactions using the stock price and other measurement assumptions as of the earlier of the following dates, referred to as the measurement date:

- i. The date at which a commitment for performance by the counterparty to earn the equity instruments is reached (a performance commitment);  
and
- ii. The date at which the counterparty's performance is complete.

The Company has further assessed and concluded that there is no sufficiently large disincentive for non-performance under the share grant arrangements with the non-employees that would establish a performance commitment. Thus, the measurement date for the share grants to the non-employees would be the date at which the non-employee's performance is completed. In all cases we have judged this to be the vesting date.

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Consistent with this understanding, we have, for 2009, recalculated the amounts of stock-based compensation to all consultants, based on the vesting date being the ultimate measurement date and using the guidance of ASC 505-50-30-21. We have done the same for the stock options granted to our Strategic Advisory Council Members and Technical Advisory Board members as described in the next paragraph. Previously we had used the grant date as the measurement date for all stock options. The difference in the total stock-based compensation for the year ended December 31, 2009 would have been a reduction in stock-based compensation expense of \$841, which was not material to the company's financial statements.

Our Strategic Advisory Council Members and Technical Advisory Board members are paid quarterly in arrears and have a choice of receiving a specified amount in cash or fully vested restricted stock, at the then current quoted price, for their services. As such, the measurement date for the stock is the grant date. This agrees with our historical practice. They are also awarded stock options. As is the case with the consultants, we now believe that the measurement date is the vesting date rather than the grant date. Remeasurement at the end of each reporting period prior to vesting would also be required as called for in ASC 505-50-30-21. The effect on 2009, of adjusting the compensation expense accordingly for the Strategic Advisory Council Members and Technical Advisory Board stock options has been included in the amounts described in the previous paragraph.

**We will revise our accounting policy disclosure and accounting for the stock options issued to consultants in our future SEC filings to reflect the requirements of ASC 505-50 discussed above.**

3. Please revise in future filings to include all disclosures required by ASC 718-10-50 for each type of award granted (e.g., restricted stock and stock options), including but not limited to the following:
- The total compensation cost related to nonvested awards not yet recognized and the weighted-average period over which it is expected to be recognized;
  - A discussion of the methods used to estimate expected term and expected volatility in your calculation of the fair value of share-based compensation awards, and
  - The number and weighted average grant-date fair value of restricted stock that was nonvested at the beginning of the year, nonvested at the end of the year, and those that during the year were granted, vested and forfeited.

Provide use with your proposed disclosures.

**Company Response:** We agree with the Staff and we will revise the disclosure in our future filings for both the restricted stock grants outstanding and stock option grants outstanding to include the disclosures required by ASC 718-10-50. Our proposed disclosure for the restricted stock grants outstanding for December 31, 2009 will be in future filings as follows:

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## Restricted Stock Award Activity

The following summarizes our restricted stock unit activity:

	<u>Number of Units</u>	<u>Weighted Average Grant Date Fair Value</u>
Total shares outstanding at December 31, 2007	66,668	\$ 8.85
Units granted	16,138	7.11
Units forfeited		
Total shares outstanding at December 31, 2008	82,806	\$ 8.51
Total units vested	49,843	9.41
Total units nonvested	32,963	7.15
Total shares outstanding at December 31, 2008	82,806	\$ 8.51
Units granted	89,224	5.93
Units forfeited	<u>-11,825</u>	6.11
Total shares outstanding at December 31, 2009	160,205	\$ 7.25
Total units vested	64,547	8.92
Total units nonvested	95,658	6.13
Total outstanding at December 31, 2009	<u>160,205</u>	\$ 7.25

Scheduled vesting for outstanding restricted stock units at December 31, 2009 is as follows:

	<u>Year Ended December 31,</u>					<u>Thereafter</u>	<u>Total</u>
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>		
Scheduled vesting—restricted stock units	<u>53,470</u>	<u>21,856</u>	<u>20,332</u>				<u>95,658</u>

As of December 31, 2009, there was \$0.46 million of net unrecognized compensation cost related to unvested restricted stock-based compensation arrangements. This compensation is recognized on a straight line basis resulting in approximately \$0.27 million of the compensation expected to be expensed in the next twelve months, and the total unrecognized has a weighted average recognition period of 1.88 years.

We use the historical volatility of our stock price since January 5, 2006, the date we announced that we were becoming a public company, to estimate the future volatility of our stock. At this time we do not believe that there is a better objective method to predict the future volatility of our stock. We estimate the term of our option awards based on the full term of the award. To date we have had very few exercises of our options, and those exercises have occurred just before the expiration date of the awards. Since the strike price of most of our outstanding awards is greater than the price of our stock, generally awards have expired at the end of the term. We do not currently have sufficient information to determine the effect of potential forfeitures on the terms of our awards. We are monitoring historical data to determine a reasonable method to estimate future forfeitures, and we plan to include this estimate in our fair value calculations in 2010.

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The company hereby acknowledges that it 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.

If you would like to discuss any of the responses to the Staff's comments or if you would like to discuss any other matters, please contact the undersigned at (571) 730-1200 or Brian J. Buck, Esq. of Pillsbury Winthrop Shaw Pittman LLP, our outside counsel at (202) 663-8347.

Sincerely,

Lightbridge Corporation

By: /s/ James Guerra  
James Guerra  
Chief Operating Officer and Chief Financial Officer

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