

Mail Stop 4561

May 17, 2006

Jerry M. Kennelly  
President and Chief Executive Officer  
Riverbed Technology, Inc.  
501 Second Street  
San Francisco, CA 94107

Re: **Riverbed Technology, Inc.**  
**Form S-1 filed April 20, 2006**  
**File No. 333-133437**

Dear Mr. Kennelly:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please provide us with copies of any additional artwork, graphics or diagrams you intend to use as soon as possible for our review and comment. Please also provide screenshots or any other material that would be used as part of the online presentation of your prospectus, as discussed on page 84, to the extent they differ from the prospectus filed as part of this Form S-1.
2. Effective May 15, 2006, the age of the financial statements does not satisfy the requirements of Article 3-12 (g) of Regulation S-X. Your registration statement must be updated to include financial statements for the interim period ending March 31, 2006.

Prospectus Summary

Riverbed

Overview, page 1

3. Provide us with support for your statement that Steelhead appliances increase transmission speeds by 5 to 50 times and in some cases up to 100 times.

The Riverbed Strategy, page 2

4. Please provide support for the statement that you are a leader in the WDS market.

Risk Factors, page 7

Risks Related to Our Business and Industry

Our operating results may fluctuate significantly..., page 7

5. We note your statement that a significant portion of your quarterly sales typically occur during the last month of the quarter. Please revise to briefly address the known reasons for this distribution of sales revenue. Further, revise your "Management's Discussion and Analysis or Plan of Operation" section to discuss in greater detail the reasons behind this timing and the resulting effect on your results of operations. Please also advise if the timing of orders or seasonality may have contributed to the substantial increase in total revenue from the quarters ended June 30, 2005 to September 30, 2005 or describe the other reasons for the drastic increase. See Item 101(c)(1)(v) of Regulation S-K.

We rely on value-added resellers..., page 9

6. Identify the vendors upon whom you rely for your hardware components and discuss any material relationships. Further, it appears that you may be substantially dependent on certain vendors, such as those that manufacture your Steelhead. Accordingly, while we note you have no long-term supply arrangements, please advise of the consideration given to filing any other type contract with vendors as exhibits pursuant to Item 601(b)(10) of Regulation S-K.

We are susceptible to shortages or price fluctuations..., page 11

7. Please revise to identify the component(s) that may be available from a single or limited source. If obtaining alternate sources may have a material impact on your operations, please discuss this in greater detail.

If we lose key personnel..., page 12

8. Please advise if you maintain key person insurance policies. Please also advise if you had problems attracting personnel to date.

We may engage in future acquisitions..., page 14

9. Please advise if you are in any stages of discussion to acquire business, products or technologies from other companies.

Our international sales and operations subject us to additional risks..., page 14

10. We note your discussion in the section of the need to localize your products for international customers. However, we do not see corresponding disclosure in your "Business" or "Management's Discussion and Analysis or Plan of Operation" sections. Please revise to discuss the costs and necessary efforts to localize your products and if these customizations efforts may effect future growth. Please also specifically discuss the complexities of providing services to your growing international customer base and the consideration given to risk factor disclosure concerning the limited number of support centers globally as compared to your pace of global expansion.

Our use of open source and third-party software..., page 15

11. Please identify any third party proprietary software upon which your WDS systems are materially dependent or would require substantial efforts to replace.

We are subject to governmental export and import controls..., page 15

12. Please advise if you have any sales or operations in Cuba, Sudan, Iran, Syria or North Korea. Please also identify any countries where enacted laws may have a material effect on your ability to sell or market your products or where resellers/OEMs would not be able to resell your products.

We will incur significant increased costs as a result of operating as a public company..., page 16

13. In this section and throughout the document, where applicable, please describe in specific detail the NASDAQ Stock Market's Global Market listing standards that may materially impact your corporate governance or trading in your securities. For example, in this section briefly discuss any minimum float or share price requirements.

Use of Proceeds, page 22

14. Please identify the creditor who may be repaid from the offering proceeds.

Management's Discussion and Analysis or Plan of Operation

Overview page 28

15. We note you discuss in the second paragraph that you continue to add international personnel. In general, we note substantial discussion of expanding your international presence but very little quantitative information of the costs associated with international expansion or the negative ramifications of international expansion. In connection with comment 10, please revise your disclosure.
16. We note that you have recently increased indirect sales to OEM's and other sources as a percentage of revenue but without providing your branded name. Please provide additional disclosure on this ramification from a qualitative and quantitative standpoint, if material.
17. Although your "Management's Discussion and Analysis or Plan of Operation" section provides discussion and analysis of past financial condition and operating analysis, there does not appear to be much emphasis, if any, on your prospective financial condition and operating performance. For example, you do not discuss costs of expansion into international markets, introduction of new models of your products or other substantial anticipated costs and how they will impact your financial position, results of operations or liquidity. Revise your disclosure to include a discussion of any known trends and the impact they may have on future operations. See Section III.B.3 of SEC Release 33-8350 and Item 303(a)(3)(ii) of Regulation S-K.

Results of Operations

Revenue, page 35

18. Please briefly discuss the nature of “training” that accompanies your service.

Cost of Revenue and Gross Margin, page 36

19. Please, revise your disclosure in this section and throughout your “Management’s Discussion and Analysis or Plan of Operation” disclosure to remove vague terms, such as “primarily” or “largely” in favor of specific quantifications to the extent possible.

Research and Development Expenses, page 37

20. Please advise as to the technology assets purchased in 2005. Do you anticipate substantial additional technology purchases in 2006?
21. We note that for certain Microsoft applications such as Microsoft Exchange, you create specific streaming applications to address their use. Please advise if the release of a newer version of Microsoft Windows may affect the operations of your systems or increase your research and development requirements as discussed, for example, on page 49.

General and Administrative Expenses, page 38

22. Please also discuss the specific costs and effects of compliance with NASDAQ Global Markets listing standards or other costs of compliance with NASD rules and regulations.

Liquidity and Capital Resources, page 40

23. We note your disclosures surrounding the cash flows from operating, investing, and financing activities. Tell us how you considered Item 303 of Regulation S-K and Section IV of the “Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations” (Release 34-48960) regarding your Management’s Discussion and Analysis or Plan of Operation disclosures. In this regard, note that when preparing the discussion and analysis of operating cash flows, companies should address material changes in the underlying drivers rather than merely describe items identified on the face of the statement of cash flows, such as the reconciling items used in the indirect method of presenting cash flows.
24. Please revise to disclose the material covenants and restrictions that you must comply with under any debt instruments, including your June 2004 loan and security agreement, as amended. Please also advise if you considered discussing

the cash reserve requirements pursuant to your lease and merchant services agreements, if material.

## Business

### Overview, page 43

25. Please provide a basis for your statement that it is a “misconception” that increasing or optimizing bandwidth alone can adequately reduce inefficiencies and performance problems in wide-area distributed computing.
26. Please provide greater detail on the general development of the business, including operations prior to selling your first products in May of 2004. Discuss any prior names such as NBT, under which Riverbed operated. See Item 101(a) of Regulation S-K.
27. We note from Exhibit 21.1 that Riverbed Technology has numerous subsidiaries. Please revise your disclosure to include a brief discussion of each subsidiary as required by Item 101(a) of Regulation S-K.

### Industry Background page 43.

28. We note your reference to In-Stat data, regarding the number of remote offices, For this data or any other data you cite, please provide us with marked copies of the articles containing the data you cite. Set forth the dates of all cited reports. Tell us whether the information you attribute to these sources is generally available to the public without charge or at a nominal cost and if so, please tell us where the information is available. Please also provide the articles that discuss the awards you received as mentioned in the last paragraph preceding this section.

### Riverbed Solution, page 46

29. Please revise to provide support for the statements made in the last paragraph of this section.

### Customers, page 50

30. Please advise as to the consideration given to providing disclosure pursuant to Item 101(c)(1)(vii) regarding any dependence on one or more customers, pursuant to either your direct sales or indirect sales to OEMs. Please advise if the loss of HP or McDATA Corporation in the future would have a material

adverse effect of on your business. Finally, please summarize the material terms of Exhibits 10.16 and 10.17.

Support and Services, page 50

31. Please also discuss in greater detail the timing and number of software product upgrades, patches and maintenance releases available and the standard support periods. Finally, please discuss the nature of the support services offered as discussed in your notes to financial statement.
32. Please discuss the terms of your warranty, including a brief discussion of your warranty reserves.

Manufacturing, page 51

33. Please discuss generally any guarantees that manufactures may provide to you in terms of warranty, quality control, replacement times etc.

Competition, page 51

34. Please discuss in materially complete terms the relative position in the current market in which you operate, including quantitative and qualitative information on your relative position to the extent known. Please also consider discussing how cache-based architectures and WAN optimizations products compete with your solution or parts of your solution. For example, mention as discussed on page 9 the certain products that may be incorporated into other products by OEM manufacturers. We note you believe you are the only comprehensive WDS solution provider. Please discuss which components your primary competitors provide in certain sub-segments and describe in greater detail if certain OEM manufacturers also compete successfully in critical components.

Intellectual Property, page 51

35. Please include the duration and effect of the patents held. Also indicate probable effects of not obtaining patent protections over the “number” of pending applications. See Item 101(c)(1)(iv) of Regulation S-K. Finally please quantify the “number” of pending applications.

Management

Executive Officers, Key Employees and Directors, page 53

36. With respect to the companies for which your directors are concurrently directors, please revise this section to clearly disclose those companies that have a class of securities registered pursuant to section 12 of the Exchange Act or are subject to the requirements of section 15(d). See Item 401(e)(2) of Regulation S-K.
37. Please advise if you have any promoters. See Item 401(g) of Regulation S-K.
38. Please confirm that Mr. Irvine did not perform consulting services for Riverbed.

Equity Benefit Plans

2006 Equity Incentive Plan, page 63

39. We note your disclosure that no participant may receive options or stock appreciation rights covering more than 2,500,000 in one calendar year. Please confirm whether the limitations set forth in Sections 5.2 and 7.2 of the Equity Incentive Plan with respect to stock options and SARs should be aggregated. Please also confirm that Restricted Shares and Stock Units are not also covered under the 2,500,000 aggregate share limit.
40. Please revise to discuss the general terms of the Stock Option Agreement, where applicable. For example, please discuss in this section and where applicable the effect of involuntary termination on vesting of stock options.

Certain Relationships and Related Party Transactions, page 68

41. Please disclose the entities associated with Eric Wolford.



Principal and Selling Stockholders, page 70

42. We note your statement that information is provided as of December 31, 2005. Please note that the selling shareholder information should be provided as of the anticipated effective date.
43. Please identify the natural person(s) with sole or shared voting or dispositive power over the shares held by Lightspeed Venture Partners. Refer to interpretation 4S of the Regulation S-K section of the March 1999 supplement to the Publicly Available Telephone Interpretation Manual and interpretation I.60 of the July 1997 Publicly Available Telephone Interpretation Manual, which are available on our website.
44. Further, we note footnote disclosure that Mr. Swartz and Mr. Modersitzki disclaim beneficial ownership of such securities "except to the extent of their pecuniary interest therein." Please remove this statement or explain this disclaimer in greater detail. Please also disclose the natural persons that, through their non-pecuniary interest, may exert voting or dispositive control over the shares held by the selling stockholders and provide an analysis of why disclosure with the above statement provides investors with information on all the natural persons who retain voting or investment control over the shares beneficially held by these entities.
45. Please advise that none of the selling stockholders are registered broker-dealers, and unless a registered broker-dealer that is a selling stockholder acquired its shares as transaction-based compensation for investment banking services, revise the prospectus to name the broker-dealer as an underwriter. Please also state in your response letter that none of the selling stockholders are affiliated with a registered broker-dealer and if not, disclose this in the prospectus and briefly describe the affiliation. With respect to any selling stockholder that is an affiliate of a registered broker-dealer, disclose whether such selling stockholder purchased its shares in the ordinary course of business, and whether at the time of the purchase of the securities to be resold, the seller had any agreements or understandings, directly or indirectly, with any person to distribute the securities.
46. Please revise to disclose how Burn3 LLC and Homestake Partners L.P. received their shares subject to resale.

Description of Capital Stock, page 74

47. Please advise why you have not provided the information responsive to Item 201(d) of Regulation S-K.

Underwriting, page 81

48. Please supplementally confirm that you have no intent to offer a directed share program in conjunction with this offering.
49. We note that a prospectus in electronic format may be made available on the websites of lead managers and other underwriters. Please identify the other underwriters who post the prospectus in electronic format and if you become aware of any additional members of the underwriting syndicate that may engage in electronic offers, sales or distributions after you respond to this comment, promptly supplement your response to identify those members and provide us with a description of their procedures.

Consolidated Financial Statements

Note 1. Organization and Significant Accounting Policies

Revenue Recognition, page F-8

50. You state that you recognize revenue when you have delivered the products. However, you also state that product revenue is generally recognized upon transfer of title at shipment. Please clarify when you recognize revenue and revise your disclosures accordingly.
51. You state that you recognize revenue when customer payment is free of contingencies and significant uncertainties. Please describe the nature and the accounting for these contingencies and uncertainties. Cite the accounting literature that supports your accounting.
52. We note that prior to the third quarter of 2005, you could not establish VSOE for the fair value of support contracts provided to your reseller class of customers. We further note that you recognized all revenue ratably over the term of the support contract. Tell us why you now believe that you can establish VSOE for this class of customers. Tell us why you believe that you could establish VSOE for your "direct sales" class of customers. In addition, indicate how you presented the revenue recognized prior to the third quarter 2005 from sales to reseller customers in your Statements of Operations. That is, indicate how your presentation complies with Rule 5-03(1) of Regulation S-X.
53. You disclose that VSOE of fair value for elements of an arrangement is based upon the normal pricing and discounting practices for those services. Describe the nature of those services. Indicate how you are measuring and recognizing revenue from the services. Indicate how your discounting practices effects your

ability to establish VSOE for the services. See paragraph 10 and 12 of SOP 97-2, as amended.

Stock Based Compensation, page F-9

54. We note your disclosure that you engaged an unrelated third-party appraiser to assist management in the reassessment of the estimated fair value of your common stock in light of the expected completion of your initial public offering. Since you did not obtain contemporaneous valuations performed by an unrelated valuation specialist as defined by the AICPA Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, tell us and revise to disclose the following information related to issuances of equity instruments:
- Discuss the significant factors, assumptions, and methodologies used in determining the fair value of the underlying common stock; and
  - Discuss each significant factor contributing to the difference between the fair value as of the date of each grant and the estimated IPO price or the fair value as determined by a contemporaneous valuation by an unrelated valuation specialist obtained subsequent to the grants but prior to the IPO.
55. Tell us your proposed IPO price, when you first initiated discussions with underwriters and when the underwriters first communicated their estimated price range for the Company's stock.
56. In addition, if a third-party valuation specialist was used, please include the expert's consent pursuant to Section 436(b) of Regulation C.
57. We note that you are planning on adopting SFAS 123(R) using the modified prospective transition method. You further state that beginning January 1, 2006 that compensation cost will include compensation cost based on the intrinsic value for awards not vested as of December 31, 2005 (your page F-12). However, we note that you state that under the modified prospective transition method you will recognize compensation for stock options outstanding at December 31, 2005 and to awards issued after December 31, 2005. You then state that stock-based compensation will be measured based on the fair value of all stock awards on the dates of grant. Please clarify how you will be accounting for awards that are unvested as of December 31, 2005.

Stock Plan, page F-22

58. We note that you have disclosed information about stock option grants and other equity related transactions for the year ended December 31, 2005. Provide us the following information in chronological order for stock option grants and other

equity related transactions (including the issuance of the Series D Convertible Preferred Stock) from January 1, 2006 through the filing of the registration statement:

- The type of security;
- The date of grant/issuance;
- Description/name of option or equity holder;
- The reason for the grant or equity related issue;
- The number of options or equity instruments granted or issued;
- The exercise price or conversion price;
- The fair value of underlying shares of common stock;
- The total amount of compensation deferred, beneficial conversion feature and expense recognized and reconciled to your financial statement disclosures and the magnitude and timing of the amortization expense;
- Reference the authoritative accounting guidance relied upon for each non-option grant equity transaction (e.g., EITF 00-27).

59. Continue to provide us with updates to the requested information for all equity related transactions through the effective date of the registration statement.

Note 13. Segment Information, page F-25

60. You state that there are no segment managers who are held accountable for components below the consolidation unit level. You further state that “accordingly, we are considered to be in a single reporting segment and operating unit structure.” Explain why you believe that since there are no segment managers that you do not have more than one operating segment under paragraph 10 of SFAS 131. Tell us how you considered whether the chief operating decision maker may be the segment manager. See paragraph 12 of SFAS 131. Also, consider whether you can have an operating segment without a segment manager.

Part II

Recent Sales of Unregistered Securities, page II-2

61. With respect to your 4(2) issuances, please state whether the purchasers were accredited or sophisticated.

Exhibits and Financial Statement Schedules, page II-3

62. We note that there are a number of material exhibits to be filed by amendment. We will need sufficient time to process the amendment when the amendments are included. Please understand that the filing of these exhibits may cause us to

raise issues on areas not previously commented upon.

Undertakings, page II-5

63. Please advise as to the applicability of the undertaking for Item 512(f) of Regulation S-K and confirm the accuracy of your undertakings in light of the Securities Offering Reform.

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As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing reviewed by the staff to be certain that they have provided all information investors require for an informed decision. 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

Jerry M. Kennelly  
Riverbed Technology, Inc.  
May 17, 2006  
Page 14

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rule 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Jason Niethamer, Staff Accountant, at (202) 551-3855 or Stephen Krikorian, Accounting Branch Chief at (202) 551-3730 if you have questions regarding comments on the financial statements and related matters. If you have any other questions please call Adam Halper at (202) 551-3482 or Anne Nguyen, Special Counsel at (202) 551-3611. If you need further assistance, you may call me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs  
Assistant Director

cc: Robert V. Gunderson, Jr. & Craig M. Schmitz  
Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP  
155 Constitution Drive  
Menlo Park, CA 94025  
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