



DIVISION OF
CORPORATION FINANCE

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

via fax (858) 799-5475

November 30, 2010

Mr. Michael Piraino
Senior Vice President and Chief Financial Officer
Accelrys, Inc.
10188 Telesis Court
Suite 100
San Diego, California 92121

Re: Accelrys, Inc.
Form 10-K for the Fiscal Year Ended March 31, 2010
Filed May 28, 2010
Form 10-Q for the Quarter Ended September 30, 2010
Filed November 9, 2010
Form 8-K filed July 2, 2010
File No. 0-27188

Dear Mr. Piraino:

We have reviewed your filings and have the following comments. 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 amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended March 31, 2010

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 29

General

1. Please tell us when you invoice your customers for the sale of your software and maintenance contracts (i.e. monthly, quarterly, annually, etc.) and clarify whether the deferred revenue balance represents all unearned revenue for these arrangements. To the extent that you do not invoice for the entire arrangement up-front, then tell us how you considered disclosing the amount of backlog (i.e. orders) resulting from your recurring revenue arrangements pursuant to

Item 101(c)(viii) of Regulation S-K. Also, if revenues recognized from these arrangements have historically had or are expected to have a significant impact on the variability of your results, tell us how you considered including a discussion and analysis regarding changes in your backlog and/or deferred revenue as part of your MD&A discussion on revenues.

Note 2. Significant Accounting Policies

Revenue Recognition, page 53

2. We note the disclosures on page 24 of your Form 10-K, which state that when sold separately professional services revenues are recorded under the proportional performance or completed performance method. We further note the disclosures on page 8 of your September 30, 2010 Form 10-Q where you indicate that such revenues are recognized as services are delivered. Clarify the reason for the change in your disclosures. To the extent that this relates to a change in accounting policy, then tell us how your disclosures comply with ASC 250-10-50.

Form 10-Q for the Quarter Ended September 30, 2010

Item 1. Condensed Consolidated Financial Statements

Condensed Consolidated Statements of Operations

3. We note that historically the company classified all your revenues on one line item in the consolidated statements of income. Please tell us if such revenue is comprised solely of bundled arrangements that include both products and services for which revenue is recognized ratably over the term of the arrangement. To the extent that your revenue line item also included products or services that were sold separately from your bundled arrangements, then tell us how you considered disclosing the revenues and cost of revenues from such product and services, if any, separately from the revenues for your bundled arrangements. We refer you to Rule 5-03(b)(1) and (2) of Regulation S-X.
4. In addition, we note that historically Symyx presented individual line items for their (a) service, (b) product and (c) license fees, content and royalty revenues and cost of revenues. Tell us the basis for Symyx's historical presentation and explain further why you have now presented all such revenues and cost of revenues in one line item in your September 30, 2010 Form 10-Q. In this regard, explain further how your current presentation for the Symyx product and service revenues and cost of revenues complies with the guidance in Rule 5-03(b)(1) and (2) of Regulation S-X.

Form 8-K filed July 2, 2010

5. In the Form 8-K filed on July 2, 2010, you indicate that the company will provide pro forma financial information for the Symyx acquisition no later than 71 calendar days after the date in which the current report on Form 8-K was required to be filed. However, it appears that you have not yet filed such amendment. Please tell us when you plan to file the pro forma financial

information as required by Item 9.01(b) of Form 8-K. In addition, tell us which financial statement periods (for both Accelrys and Symyx) you intend to include in the pro forma financial information in order to comply with the requirements of Article 11 of Regulation S-X.

6. We note that you incorporated by reference the financial statements as required by Item 9.01(a) for the Symyx acquisition into the July 2, 2010 Form 8-K. Tell us how you considered including copies of the pertinent pages of the Form 10-K and Form 10-Q as exhibits to the Form 8-K along with the consent of Symyx's independent registered public accountant. We refer you to the guidance in Section 234.01 of the Exchange Act Rules' Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/exchangeactrules-interps.htm>.

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 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 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 Megan Akst, Staff Accountant, at (202) 551-3407 if you have any questions regarding comments on the financial statements and related matters. If you need further assistance, you may contact me at (202) 551-3499.

Sincerely,

Kathleen Collins
Accounting Branch Chief