



DIVISION OF  
CORPORATION FINANCE

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

October 10, 2012

Via E-mail

Eric Soyer  
Chief Financial Officer  
EDAP TMS S.A.  
Parc d'Activites la Poudrette-Lamartine  
4/6 Rue du Dauphiné  
69120 Vaulx-en-Velin  
France

**Re: EDAP TMS S.A.  
Form 20-F for the Fiscal Year Ended December 31, 2011  
Filed April 26, 2012  
File No. 000-29374**

Dear Mr. Soyer:

We have reviewed your response letter dated September 14, 2012 and filing 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 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, please tell us why in your response.

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

Form 20-F for the Fiscal Year Ended December 31, 2011

Item 5. Operating and Financial Review and Prospects

Operating Results, page 31

1. We note from your response to prior comment 1 that in future filings you will include a sub-total showing the specified measures excluding the FDA PMA trials segment in the notes to your financial statements. Please note that the presentation of a total or subtotal of segment profit or loss that is prepared for purposes of the reconciliation required by ASC 280-10-50-30 would still be considered a non-GAAP financial measure. Please refer to Question 104.04 of the CD&I on Non-GAAP Financial Measures. To the extent that you include non-GAAP measures in your MD&A in future filings you should

include all of the disclosures required by item 10(e) of Regulation S-K, including reconciliations. Please provide us with a copy of your proposed revised disclosure.

Signatures, page 68

2. We note your response to prior comment 2. Please provide us with a copy of the signature page of your Form 20-F that was manually signed by Messrs. Oczachowski and Soyer.

Item 18. Financial Statements

Note 31. Subsequent Significant Events as of April 26, 2012, page F-41

b) Exchange Agreement regarding the Convertible Debentures and Warrants, page F-42

3. Please refer to prior comment 3. We see that the €7.7 million of New Debentures (\$10 million) has an estimated preliminary fair value of €4.6 million (\$5.9 million) at inception. Please describe for us in greater detail the valuation procedures performed and valuation model utilized to determine the fair value of the New Debentures. Please also provide us a qualitative description of the facts and circumstances which support the discount to the note.
4. We note from your response to prior comment 4 that you provided the pro forma financial data under ASC 855-10-50-3 which recommends that companies consider supplementing the historical financial statements with pro forma financial data for significant non-recognized subsequent events. We note that your disclosure does not include a discussion and quantification of the pro forma adjustments and only includes selected line items from the balance sheet and statement of operations. In future filings, when you present pro forma data, please comply with the form and content requirements of Rule 11-02(b) of Regulation S-X. For example, in this case, the information disclosed should include a full pro forma balance sheet and pro forma statement of operations accompanied by a clear discussion of the information being presented, the assumptions made, and a clear description with appropriate quantification of the adjustments included in the pro forma data.

Eric Soyer  
EDAP TMS S.A.  
October 10, 2012  
Page 3

You may contact Kevin Kuhar, Staff Accountant, at (202) 551-3662 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or Geoff Kruczek at (202) 551-3641 if you have questions on other comments. In this regard, do not hesitate to contact me at (202) 551-3671 with any other questions.

Sincerely,

/s/ Kate Tillan for

Martin James  
Senior Assistant Chief Accountant