



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	MS: 2013_BJAST_3277
Title of the Manuscript:	Analytical Technique for Predicting Passenger Car Gearbox Structure Noise Using Vibration response analysis.

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	This manuscript presents an Analytical Technique for Predicting Passenger Car Gearbox Structure Noise Using Vibration response analysis. The authors have developed a concept of a method for predicting the contributions to noise radiated by a vehicle gearbox structure using vibration response measured. This is an important experimental investigation, which may have potential applications for predicting the contributions to noise radiated by various mechanical systems with different excitation sources. 1- Several numerical studies for increased acoustic comfort within	1- The confirmation is shown in Figs. 3 and 4 (for Noise); and Figs. 5 and 6 (for vibration) and are presented in item 5, second paragraph, Page No.



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	the car have been carried out for several years. It is generally admitted that the dynamic excitation from the changing stiffness of the meshing teeth is a primary source of gearbox vibration and radiated noise. Can you confirm this proposal from your experimental results presented in this paper? 2- The authors should present a kinematic study of the vehicle gearbox considered in this work in order to compute the gearmesh frequencies and give more precision on the frequencies contained in experimental signals. 3- The authors should give more information for the emergence of peaks having significant amplitudes for Figs 7, 8, and 10. 4- The authors should check Eq. (6). 5- The authors should check the manuscript carefully to prevent any grammatical or	8. 2- The gear mesh frequency has been computed for the shaft speed (motor speed) of 1000 rpm and presented in the manuscript, item 5.1, paragraph No. 2. Page 9, while its value is located in the figures as denoted by red arrows. 3- More information is done in item 5.1, Pages Nos. 9. 4- Equation (6) has been checked, Page No. 4 5- The manuscript has been checked and corrected for all the grammatical or syntax errors and badly constructed sentences.
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	syntax errors, and badly constructed sentences.	
<u>Optional/General</u> comments		