
**Measurement of noise emitted by
accelerating road vehicles — Engineering
method —**

Part 1:
M and N categories

*Mesurage du bruit émis par les véhicules routiers en accélération —
Méthode d'expertise —*

Partie 1: Catégories M et N



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	2
4 Symbols and abbreviated terms	7
5 Specification of the acceleration for vehicles of categories M1 and M2 having a maximum authorized mass not exceeding 3 500 kg, and of category N1	9
5.1 General.....	9
5.2 Calculation of acceleration	9
5.3 Calculation of the target acceleration.....	10
5.4 Calculation of the reference acceleration	10
5.5 Partial power factor k_p	11
6 Instrumentation.....	11
6.1 Instruments for acoustical measurement	11
6.2 Instrumentation for speed measurements	11
6.3 Meteorological instrumentation	12
7 Acoustical environment, meteorological conditions and background noise	12
7.1 Test site	12
7.2 Meteorological conditions	13
7.3 Background noise.....	13
8 Test procedures	14
8.1 Microphone positions.....	14
8.2 Conditions of the vehicle	14
8.3 Operating conditions.....	17
8.4 Measurement readings and reported values	20
8.5 Measurement uncertainty	22
9 Test report	22
Annex A (informative) Technical background for development of vehicle noise test procedure based on in-use operation in urban conditions	24
Annex B (informative) Measurement uncertainty — Framework for analysis according to ISO Guide 98 (GUM).....	44
Annex C (informative) Flowchart of the procedure for categories M1 and M2 having a maximum authorized mass not exceeding 3 500 kg, and category N1.....	47
Annex D (informative) Flowchart for vehicles of category M2 having a maximum authorized mass exceeding 3 500 kg, and categories M3, N2 and N3.....	51
Annex E (informative) Indoor test operation	52
Bibliography	55