



Acoustics—Description and measurement of environmental noise



This Australian Standard® was prepared by Committee EV-010, Acoustics Community Noise. It was approved on behalf of the Council of Standards Australia on 8 August 2018. This Standard was published on 24 August 2018.

The following are represented on Committee EV-010:

- Association of Australian Acoustical Consultants
 - Australian Acoustical Society
 - Austroads
 - Bureau of Steel Manufacturers of Australia
 - Department of Defence (Australian Government)
 - Engineers Australia
 - National Acoustic Laboratories
 - University of Sydney
-

This Standard was issued in draft form for comment as DR AS 1055:2018.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Acoustics—Description and measurement of environmental noise

Originated as part of AS 1055—1973.
Previous editions AS 1055.1:1989, AS 1055.2:1989, AS
1055.3:1989.
Revised and redesignated as AS 1055:2018.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76072 164 0

PREFACE

This Standard was prepared by the Australian Committee EV-010, Acoustics, Community Noise, to supersede AS 1055.1—1997, *Acoustics—Description and measurement of environmental noise, Part 1: General procedures*, AS 1055.2—1997, *Acoustics—Description and measurement of environmental noise, Part 2: Application to specific situations*, and AS 1055.3—1997, *Acoustics—Description and measurement of environmental noise, Part 3: Acquisition of data pertinent to land use*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard. The previous three-part AS 1055 series has been consolidated into this single document.

The objective of this Standard is for use in the evaluation of environmental noise in order to meet the needs of public bodies and persons interested in its management. It applies primarily to noise emitted from industrial, commercial and residential premises, and is intended for use in the evaluation of existing problems, as well as for planning purposes. It may be used for noise that includes impulsive components, but it is not suitable for noise that consists solely of discrete impulses (e.g. shooting, blasting).

The objective of this revision is to reflect the technological advances in acoustical measurement techniques since the previous revision of 1997 and different approaches taken by regulatory authorities in Australia to the measurement and assessment of environmental noise.

This Standard is not a regulatory document and users should identify the relevant requirements of regulatory authorities and the details of specific requirements laid down in each State or Territory.

It has been assumed that the user of this Standard is adequately trained in the science of acoustics and thoroughly experienced in noise measurement and assessment, but to familiarize the user with some of the special terms introduced in this Standard, an example of its application is included (see Appendix A).

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendices to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

IMPORTANT COPYRIGHT INFORMATION

Appendix E has been reprinted, with permission, from Torben Holm Pedersen: Amendment to ‘Audibility of Impulsive Sounds in Environmental Noise’ in *Inter-Noise 2000 Proceedings*, DELTA AV1533/00.

CONTENTS

	<i>Page</i>
FOREWORD.....	4
1 SCOPE.....	5
2 NORMATIVE DOCUMENTS	5
3 DEFINITIONS.....	6
4 SYMBOLS	9
5 INSTRUMENTATION.....	10
6 MEASUREMENTS	11
7 INFORMATION TO BE RECORDED FOR GENERAL SOUND LEVEL SURVEYS	18
8 INVESTIGATION OF SPECIFIC ENVIRONMENTAL NOISE SITUATIONS	19
9 SPECIFICATION OF NOISE LIMITS.....	22
10 CHECKING COMPLIANCE WITH NOISE LIMITS	24
11 PREDICTION OF NOISE LEVELS.....	25
12 UNCERTAINTY IN MEASUREMENTS	26
APPENDICES	
A GUIDELINES FOR THE APPLICATION OF THIS STANDARD.....	27
B DIAGRAMMATIC REPRESENTATION OF STEADY SOUND WITH STEPPED VARIATIONS OF LEVEL	31
C BEAUFORT WIND SCALE	32
D OBJECTIVE METHODS FOR APPLICATION OF A TONAL ADJUSTMENT IN RECEIVER NOISE	33
E OBJECTIVE METHOD FOR APPLICATION OF AN IMPULSE ADJUSTMENT TO RECEIVER NOISE.....	38
F METHODS FOR ASSESSING UNCERTAINTY	49
BIBLIOGRAPHY.....	51

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-