

Australian Standard™

**Hazard and operability studies  
(HAZOP studies)—Application guide**

This Australian Standard was prepared by Committee QR-005, Reliability and Maintainability. It was approved on behalf of the Council of Standards Australia on 29 May 2003 and published on 25 July 2003.

---

The following are represented on Committee QR-005:

AirServices Australia  
Australian Organisation for Quality  
Certification Bodies (Australia)  
Department of Defence (Australia)  
Institution of Engineers Australia  
University of New South Wales

---

#### **Keeping Standards up-to-date**

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.com.au](mailto:mail@standards.com.au), or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

---

Australian Standard™

**Hazard and operability studies  
(HAZOP studies)—Application guide**

First published as AS IEC 61882—2003.

**COPYRIGHT**

© Standards Australia International

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.

Published by Standards Australia International Ltd  
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5433 3

## PREFACE

This Standard was prepared by the Standards Australia Committee QR-005, Reliability and Maintainability.

This Standard is identical with, and has been reproduced, from IEC 61882:2001, *Hazard and operability studies (HAZOP studies) — Application guide*.

The objective of this Standard is to provide a guide for HAZOP studies of systems utilizing the specific set of guide words defined in this document. It also gives guidance on the application of the technique and on the HAZOP study procedure, including definition, preparation, examination sessions and resulting documentation and follow-up.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this International Standard' should read 'this Australian Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

## CONTENTS

INTRODUCTION .....	v
1 Scope .....	1
2 Normative references .....	1
3 Definitions .....	1
4 Principles of HAZOP .....	2
4.1 Overview .....	2
4.2 Principles of examination .....	5
4.3 Design representation .....	6
4.3.1 General .....	6
4.3.2 Design requirements and design intent .....	7
5 Applications of HAZOP .....	7
5.1 General .....	7
5.2 Relation to other analysis tools .....	8
5.3 HAZOP limitations .....	8
5.4 Hazard identification studies during different system life cycle phases .....	9
5.4.1 Concept and definition phase .....	9
5.4.2 Design and development phase .....	9
5.4.3 Manufacturing and installation phase .....	9
5.4.4 Operation and maintenance phase .....	9
5.4.5 Decommissioning or disposal phase .....	10
6 The HAZOP study procedure .....	10
6.1 Initiation of the study .....	10
6.2 Definition of scope and objectives of the study .....	10
6.2.1 Scope of the study .....	10
6.2.2 Objectives of the study .....	10
6.3 Roles and responsibilities .....	11
6.4 Preparatory work .....	12
6.4.1 General .....	12
6.4.2 Design description .....	13
6.4.3 Guide words and deviations .....	13
6.5 The examination .....	14
6.6 Documentation .....	18
6.6.1 General .....	18
6.6.2 Styles of recording .....	18
6.6.3 Output of the study .....	18
6.6.4 Reporting requirements .....	19
6.6.5 Signing off the documentation .....	19
6.7 Follow-up and responsibility .....	19
7 Audit .....	20

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](#)
-