

Australian Standard™

**Environmental management—  
Life cycle assessment—  
Data documentation format**

This Australian Standard was prepared by Committee EV-005, Life Cycle Analysis—Environmental. It was approved on behalf of the Council of Standards Australia on 17 June 2003 and published on 12 August 2003.

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**Environmental management—  
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Data documentation format**

First published as AS ISO 14048—2003.

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

ISBN 0 7337 5431 7

## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EV-005, Life Cycle Analysis—Environmental.

This Standard is identical with and has been reproduced from ISO/TS 14048:2002, *Environmental management—Life cycle assessment—Data documentation format*.

The objective of this Standard is to provide the requirements and structure for a data documentation format, to be used for transparent and unambiguous documentation and exchange of Life Cycle Assessment (LCA) and Life Cycle Inventory (LCI) data.

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 substitutes for a comma when referring to a decimal marker.

This Standard provides for the use of the following Australian/New Zealand Standards as equivalents to particular International Standards referenced herein:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS/NZS	ISO
9000	Quality management systems— Fundamentals and vocabulary	9000	Quality management systems— Fundamentals and vocabulary
14040	Environmental management—Life cycle assessment—Principles and framework	14040	Environmental management—Life cycle assessment—Principles and framework
14041	Environmental management—Life cycle assessment—Goal and scope definition and inventory analysis	14041	Environmental management—Life cycle assessment—Goal and scope definition and inventory analysis
14042	Environmental management—Life cycle assessment—Life cycle impact assessment	14042	Environmental management—Life cycle assessment—Life cycle impact assessment
14043	Environmental management—Life cycle assessment—Life cycle interpretation	14043	Environmental management—Life cycle assessment—Life cycle interpretation

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## INTRODUCTION

This Technical Specification provides a framework and requirements for the unambiguous documentation of Life Cycle Inventory analysis (LCI) data. Following the general framework for Life Cycle Assessment (LCA), laid down in ISO 14040, and the requirements and guidance on LCI, provided in ISO 14041, this specification intends to support a transparent reporting, interpretation and review of data collection, data calculation, data quality and data reporting, as well as facilitating data exchange. This Technical Specification supports LCA use and development, and is aimed primarily for data suppliers, LCA practitioners and LCA information system developers.

The data documentation format facilitates the reporting of LCI data and compliance with the requirements from ISO 14040 and ISO 14041 on data collection, data documentation and data quality. It also facilitates interpretation of LCI data as described in ISO 14043. In addition, the data documentation format allows the documentation and use of important information for Life Cycle Impact Assessment (LCIA), ISO 14042, including environmental information, environment condition and location.

The data documentation format is also intended to facilitate the exchange of LCI data without loss of transparency. This specification does not provide specific requirements for implementation of data exchange. However, the specification allows the flexibility to design different data exchange and data communication formats, as well as software tools that are fully consistent with the data documentation requirements herein.

Although primarily intended for documentation of life cycle data, the data documentation format can also be used for the management of environmental data, e.g. for reporting, performance assessment and benchmarking.

As practice emerges or needs for a broader use of data documentation format arise, the contained format and structure may be expanded to include additional information, such as from environmental performance evaluation, health and safety, and life cycle costing.

This Technical Specification contains a comprehensive list of requirements, rather than a procedural specification. The document specifies how the general documentation requirements for LCI data, as expressed in the ISO 14040 standards, is divided into data fields. Each data field holds text, in some cases selected from a specific nomenclature, or quantitative data. The meaning of each data field is specified in a short descriptive text. The structure of the document itself specifies the relationship between the data fields.

The specification, explanation and implementation of the data documentation format is described in different parts of the document as follows:

- clause 5 covers the specification and structure of the data documentation format and the names of all of the data fields;
- clause 6 covers the specification of the data types used in the data documentation format;
- clause 7 covers the specification of nomenclatures used in the data documentation format;
- annex A contains formatting requirements and explanatory descriptions of each data field to help the user understand which information to place in each data field;
- annex B contains a detailed example of the use of the data documentation format.

## AUSTRALIAN STANDARD

# Environmental management — Life cycle assessment — Data documentation format

## 1 Scope

This Technical Specification provides the requirements and a structure for a data documentation format, to be used for transparent and unambiguous documentation and exchange of Life Cycle Assessment (LCA) and Life Cycle Inventory (LCI) data, thus permitting consistent documentation of data, reporting of data collection, data calculation and data quality, by specifying and structuring relevant information.

The data documentation format specifies requirements on division of data documentation into data fields, each with an explanatory description. The description of each data field is further specified by the structure of the data documentation format.

This Technical Specification is applicable to the specification and structuring of questionnaire forms and information systems. However, it can also be applied to other aspects of the management of environmental data.

This Technical Specification does not include requirements on completeness of data documentation. The data documentation format is independent of any software or database platform for implementation.

This Technical Specification does not require any specific sequential, graphic or procedural solutions for the presentation or treatment of data, nor does it describe specific modelling methodologies for LCI and LCA data.

## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this Technical Specification. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this Technical Specification are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 8601:2000, *Data elements and interchange formats — Information interchange — Representation of dates and times*

ISO 9000:2000, *Quality management systems — Fundamentals and vocabulary*

ISO 14040:1997, *Environmental management — Life cycle assessment — Principles and framework*

ISO 14041:1998, *Environmental management — Life cycle assessment — Goal and scope definition and inventory analysis*

ISO 14042:2000, *Environmental management — Life cycle assessment — Life cycle impact assessment*

ISO 14043:2000, *Environmental management — Life cycle assessment — Life cycle interpretation*