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IEC 62402 Ed. 1.0 (2007)

AS IEC 62402:2014

Australian STANDARD

Obsolescence management—Application guide

STANDARDS Australia

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- Asset Management Council
- Australian Organisation for Quality
- Department of Defence (Australia)
- Engineers Australia
- Independent Transport Safety and Reliability Regulator
- Institution of Professional Engineers New Zealand
- New Zealand Society for Risk Management
- Risk Management Institution of Australasia
- The University of New South Wales
- University of Wollongong

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Australian Standard®

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee QR-005, Dependability. 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 objective of this Standard is to provide Australian industries with guidance for establishing a framework for obsolescence management and for planning a cost-effective obsolescence management process that is applicable through all phases of the product life cycle.

IEC 62402:2007 was published prior to the publication of ISO Guide 73:2009, *Risk management—Vocabulary*, AS/NZS ISO 31000:2009, *Risk management—Principles and guidelines* and ISO/IEC 31010:2009, *Risk management—Risk assessment techniques*, therefore when referring to risk and risk management older terminology is used than is specified in these Standards.

The particular interpretation of the risk management steps of Figure 5 do not conform to ISO 31000 and, in addition to terminology differences, propose a process which is more limited in scope than would be suggested by AS/NZS ISO 31000. In particular a list of risks for analysis is proposed in the IEC 62402 where an approach following AS/NZS ISO 31000 would suggest that the possibility of additional effects on objectives should be sought based on a good understanding of the organization, its objectives and context and the context of use of the item. Analysis of risk should include understanding the risk as well as simply seeking to estimate the level of risk

Readers are advised to refer to AS/NZS ISO 31000 when seeking to manage risk associated with obsolescence and to ISO/IEC 31010 for some useful techniques for assessing risk

This Standard is identical with, and has been reproduced from IEC 62402 Ed. 1.0 (2007), *Obsolescence management—Application guide.*

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

(a) In the source text ‘this International Standard’ should read ‘this Australian Standard’.

(b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian Standard*	
IEC		AS IEC	
60300	Dependability management	60300	Dependability management
60300-1	Part 1: Dependability management systems	60300.1	Part 1: Dependability management systems
60300-2	Part 2: Guidelines for dependability management	60300.2	Part 2: Guidance for dependability programme management

Only normative references that have been adopted as Australian or Australian/New Zealand Standard have been listed.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

CONTENTS

Page

INTRODUCTION

Obsolescence affects all products and it impacts upon all stages of their life. The term product includes

- capital equipment;
- infrastructure;
- consumer durables;
- consumables;
- software products.

Obsolescence is inevitable and it cannot be avoided, but forethought and careful planning can minimize its impact and its potential high costs. The objective of obsolescence management is to ensure that obsolescence is managed as an integral part of design, development, production and in-service support in order to minimize cost and detrimental impact throughout the product life cycle.

Obsolescence presents itself in two ways:

- the item is no longer suitable for current demands, or
- the item is no longer available from the original manufacturer, e.g. due to economic constraints.

From the user's point of view, obsolescence then manifests itself as difficulty in obtaining supplies. If the end-user is the general public, it will be in the interest of the supplier to protect his brand image by having a defined obsolescence policy.

Commercial-off-the-shelf (COTS) products and custom designed items, e.g. new design tools and new production processes, tend to have a much shorter life in terms of availability and supportability than in the past. With the increased use of commercial items in complex products expecting to have a long life cycle, it has become essential to include obsolescence management within programme plans from the earliest stages. Furthermore environmental considerations have the potential to affect the use of some materials during the life of the product and should be considered from the outset.

Obsolescence management is essential to achieve optimum cost-effectiveness throughout the life cycle of a product. The purpose of this standard is to provide guidance on planning a cost effective obsolescence management process that takes into account essential factors to ensure product life cycle costs are considered and applied. Obsolescence management should also include the maintenance of the relevant knowledge and skill base sets.

Clause 4 provides overview of the process and its relation to others.

Clauses 5, 6 and 8 give guidance on management responsibility, resources, measurement and improvement with regard to obsolescence management.

Clause 7 gives guidance on planning, strategies and options described for hardware (including integral software).

Clause 9 gives guidance on planning, strategies and options for software that is separable from its hardware.

AUSTRALIAN STANDARD

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1 Scope

This International Standard gives guidance for establishing a framework for obsolescence management and for planning a cost-effective obsolescence management process that is applicable through all phases of the product life cycle, the term ‘product’ includes:

- capital equipment;
- infrastructure;
- consumer durables;
- consumables;
- software products.

Obsolescence management covers the following areas:

a) design of new products;

b) new technology insertion into existing products;

c) support and maintenance of legacy products.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-191, *International Electrotechnical Vocabulary (IEV) – Part 191: Dependability and quality of service*

IEC 60300-1, *Dependability management – Part 1: Dependability management systems*

IEC 60300-2:2004, *Dependability management – Part 2: Guidelines for dependability management*

IEC 62198, *Project risk management – Application guidelines*

IEC/TS 62239, *Process management for avionics – Preparation of an electronic components management plan*

IEC 62258 (all parts), *Semiconductor die products*

IEC 62309, *Dependability of products containing reused parts – Requirements for functionality and tests*