

Australian/New Zealand Standard™

Obsolescence management



AS/NZS IEC 62402:2020

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- Department of Defence (Australian Government)
- Engineering New Zealand
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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee QR-005, Dependability, to supersede AS IEC 62402:2014.

The objective of this Standard is to provide requirements and guidance for obsolescence management applicable to any organization that is dependent on another organization to obtain value from the usefulness of the items that it provides. A cost-effective obsolescence management process and the activities used to implement the process are applicable throughout all phases of an item's life cycle.

This document covers the following areas:

- (a) Establishing an obsolescence management policy.
- (b) Establishing an infrastructure and an organization.
- (c) Developing an obsolescence management plan (OMP).
- (d) Developing strategies to minimize obsolescence during design.
- (e) Determining an obsolescence management approach.
- (f) Selecting obsolescence resolution and implementation.
- (g) Measuring and improving the performance of the outcomes of the obsolescence management activities.

This Standard is identical with, and has been reproduced from, IEC 62402:2019, *Obsolescence management*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OBSOLESCENCE MANAGEMENT

FOREWORD

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International Standard IEC 62402 has been prepared by IEC technical committee 56: Dependability.

This second edition cancels and replaces the first edition published in 2007. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) this document has now been written with requirements as a standard, not a guide;
- b) this document continues to have guidance in the informative annexes;
- c) this document has been written as a general process for all technologies and items.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
56/1838/FDIS	56/1843/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

For the purposes of this document, obsolescence management is a discipline used at all phases of an item's life cycle to ensure an item and its sub items can continue to fulfil their requirements over their expected useful life.

This document takes a different view of obsolescence from the standard dictionary definition. Instead of an item becoming outdated or no longer used, this document views obsolescence as the transition of a required item still in use from available to unavailable from the manufacturer. Any item that remains in use will be subject to obsolescence. Obsolescence manifests itself as difficulty in obtaining supplies, spares and/or support.

This document defines the requirements for managing the obsolescence of any type of item. Obsolescence management helps prevent unnecessary losses (for example loss of commercial service or capability) and treat risks associated with obsolescence. The assessment of risk associated with obsolescence takes account of factors including but not limited to: the likelihood of an item becoming obsolete during its expected useful life, the likelihood of an impact occurring during that projected useful life, and the severity of that impact. Obsolescence management treats risks associated with obsolescence by reducing the likelihood or severity of impact, or both.

It has become essential to include obsolescence management within planning activities from the earliest life cycle phases. The guidance provided in this document could be characterized as strategic obsolescence management when obsolescence management is planned and implemented during the early life cycle phases.

Even though this situation may not be a direct case of obsolescence, this document will also be of assistance in the management of items that have diminished manufacturing sources and materiel shortages that can result in long lead times, reduced availability and ultimately obsolescence of those items.

Managing obsolescence contributes to the dependability of an item, particularly supportability, which is defined as the 'ability to be supported to sustain the required availability with a defined operational profile and given logistic and maintenance resources'. As such, obsolescence management may be performed as part of an overall dependability management programme as described in IEC 60300-1 [1]¹.

¹ Numbers in square brackets refer to the Bibliography.

OBSOLESCENCE MANAGEMENT

1 Scope

This document provides requirements and guidance for obsolescence management applicable to any organization that is dependent on another organization to obtain value from the usefulness of the items that it provides. A cost-effective obsolescence management process and the activities used to implement the process are applicable throughout all phases of an item's life cycle.

This document covers the following areas:

- establishing an obsolescence management policy;
- establishing an infrastructure and an organization;
- developing an obsolescence management plan (OMP);
- developing strategies to minimize obsolescence during design;
- determining an obsolescence management approach;
- selecting obsolescence resolution and implementation;
- measuring and improving the performance of the outcomes of the obsolescence management activities.

Guidance on obsolescence management is included as notes, in the informative annexes and references in the Bibliography.

2 Normative references

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1.1

alternative item

item whose characteristics can be different from that specified for one or more reasons

EXAMPLE Items with different quality or reliability level, tolerance, parameters, temperature range.

Note 1 to entry: See also 'substitutes' (10.4).

3.1.2

commercial off-the-shelf

COTS

conforming to the manufacturer's datasheet and available to any purchaser