



BSI Standards Publication

Obsolescence management

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National foreword

This British Standard is the UK implementation of EN 62402:2007 EN IEC 62402:2019. It is identical to IEC 62402:2007 2019. It supersedes BS 7000-5:2001 BS EN 62402:2007, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee OS/1 DS/1/2, Obsolescence management.

A list of organizations represented on this committee can be obtained on request to its secretary.

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July ~~2007~~2019

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Supersedes EN 62402:2007 and all of its amendments
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Obsolescence management
Application guide
 (~~IEC 62402:2007~~IEC 62402:2019)

Gestion de l'obsolescence ~~Guide d'application~~
 (~~CEI 62402:2007~~IEC 62402:2019)

Anleitung zum Obsoleszenzmanagement
 (~~IEC 62402:2007~~IEC 62402:2019)

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 Comité Européen de Normalisation Electrotechnique
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Foreword European foreword

The text of document 56/1189 1838/FDIS, future edition 12 of IEC 62402, prepared by IEC/TC 56 "Dependability" was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN IEC 62402:2019 on 2007-07-01.

The following dates were are fixed:

- latest date by which the EN document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) ~~2008-04-01~~ 2020-04-03
- latest date by which the national standards conflicting with the EN document have to be withdrawn (dow) ~~2010-07-01~~ 2022-07-03

Annex ZA has been added by CENELEC.

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The text of the International Standard IEC 62402:2007 IEC 62402:2019 was approved by CENELEC as a European Standard without any modification.

IEC 60300-1	NOTE	Harmonized as EN 60300-1
IEC 62239-1	NOTE	Harmonized as EN IEC 62239-1
IEC/ISO 31010	NOTE	Harmonized as EN 31010
IEC 62474	NOTE	Harmonized as EN IEC 62474
IEC 62668-1	NOTE	Harmonized as EN 62668-1 ¹
IEC 62435-1	NOTE	Harmonized as EN 62435-1
IEC 62435-4	NOTE	Harmonized as EN IEC 62435-4
IEC 62668-2	NOTE	Harmonized as EN IEC 62668-2 ²

¹ Under preparation. Stage at the time of publication: prEN 62668-1

² Under preparation. Stage at the time of publication: FprEN IEC 62668-2

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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.

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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.

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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.

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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 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.~~

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

~~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.~~