

Design management systems —

Part 5: Guide to managing obsolescence

ICS 03.100.01

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee MS/4, Design management systems, to Panel MS/4/-/9, Obsolescence, upon which the following bodies were represented:

- Association of Innovation Management
- Association of MBAs
- Association of Project Managers
- BEAMA Ltd.
- British Standards Society
- BSI Consumer Policy Committee
- Chartered Society of Designers
- Defence Manufacturers Association
- Design Council
- Department of Trade and Industry (Design Policy and Services)
- Electricity Association
- Federation of Small Businesses
- Forum for Private Business
- Institute of Quality Assurance
- Institution of Civil Engineers
- Institution of Engineering Designers
- Institution of Electrical Engineers
- Institution of Mechanical Engineers
- Ministry of Defence
- Royal Institute of British Architects
- UMIST
- University of Glasgow
- University of Leeds

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Foreword

This part of BS 7000-5 has been prepared by Panel MS/4/-/9.

This standard was developed from the UK Ministry of Defence Standard Def Stan 00-71/Issue 2 which is a revision of Interim Def Stan 00-71/Issue 1.

BS 7000, *Design management systems* currently comprises the following parts:

- *Part 1: Guide to managing innovation;*
- *Part 2: Guide to managing the design of manufactured products;*
- *Part 3: Guide to managing service design;*
- *Part 4: Guide to managing design in construction;*
- *Part 5: Guide to managing obsolescence (this part);*
- *Part 10: Glossary of terms used in design management.*

Other parts might be added.

Because of the novel nature of this subject matter Technical Committee MS/4 invites users to submit technical comments, observations and suggestions to the Committee Secretary at BSI (see address on back cover). This will assist the Committee when it reviews the standard in due course and when it considers the preparation of further parts of BS 7000.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 13 and a back cover.

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Introduction

Obsolescence affects all products and it impacts upon all stages of the life of products. Obsolescence is inevitable and it cannot be ignored but forethought and careful planning can minimize its impact and its potentially 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.

Commercial off-the-shelf (COTS) products and project-specific parts, e.g. new design tools and production processes, tend to have a much shorter life than those traditionally used. With the increased use of commercial parts in systems it has become essential to include obsolescence management within programme plans from the earliest stages. Furthermore environmental legislation has the potential to affect the use of some materials and should be considered at the outset of projects.

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. Clauses 4 and 5 give guidance on how to choose an appropriate obsolescence management plan. Clauses 6, 7 and 8 give guidance, detailed as follows, on how to carry out an effective management plan.

- Clause 6 gives guidance on a reactive strategy.
- Clause 7 gives guidance on a proactive strategy.
- Clause 8 gives guidance on strategies for dealing with the obsolescence of software.

1 Scope

This British 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. This standard is applicable to all products that include electronic, electrical and electro-mechanical components, although its use can be extended to include other products and processes.

Obsolescence management covers the following areas:

- a) new products;
- b) technology insertion;
- c) legacy equipment.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

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

BS 6079-2:2000, *Project management — Vocabulary*.

3 Terms and definitions

For the purposes of this standard the terms and definitions given in BS EN ISO 9000:2000, BS 6079-2:2000 and the following apply.

3.1

application-specific integrated circuit (ASIC)

integrated circuit whose physical design is customized by or on behalf of the customer

NOTE The contrasting term “standard product” refers to devices whose physical design is fixed by the supplier.

3.2

bespoke

written or adapted to meet the specific need of the customer

NOTE If an item is bespoke it may not have universal application.

3.3

cannibalization

practice of using components, parts or assemblies, taken from within an inventory or product, in order to support other systems, plant or equipment

3.4

commercial-off-the-shelf (COTS)

conforming to the manufacturer's data sheet and available to any purchaser

3.5

hardware

physical components of a system including its associated data and documentation

3.6

integrated logistic support (ILS)

disciplined management approach, aimed at optimizing product whole-life costs (WLCs)

NOTE Integrated logistic support includes elements for influencing product design and determining support requirements to achieve supportable and supported products. (For further information see Defence Standard 00-60, Integrated logistic support.¹⁾)

3.7

lifetime buy

purchase of a supply of components sufficient to support the product throughout its life cycle or until the next planned technology update

3.8

logistic support analysis record (LSAR)

data table recording the results of the analysis of the provision of supplies and services necessary for maintaining materiel readiness

3.9

materiel

systems, equipment, stores, supplies, spares and related documentation, manuals, computer software and firmware

3.10

obsolescence management plan

description of the strategies for the identification and mitigation of the effects of obsolescence through all stages of the life of a product

3.11

obsolescent

⟨hardware⟩ subject to an announced future end of production date by the manufacturer

3.12

obsolescent

⟨software⟩ subject to an announced future end of support date

3.13

obsolete

⟨hardware⟩ no longer in production by the manufacturer

3.14

obsolete

⟨software⟩ no longer supported

3.15

post-design services

service for further development work undertaken after acceptance into service to ensure that the item of materiel continues to meet its approved specification or staff requirement

¹⁾ Defence Standards are available from www.dstan.mod.uk and the DStan Helpdesk, UK Defence Standardization, Room 1138, Kentigern House, 65 Brown Street, Glasgow, G2 8EX. Tel: +44 (0) 141 224 2531. Fax: +44 (0) 141 224 2503.