BS EN 62542:2013

BSI Standards Publication

Environmental standardization for electrical and electronic products and systems — Glossary of terms

bsi.

...making excellence a habit.™

National foreword

This British Standard is the UK implementation of EN 62542:2013. It is identical to IEC 62542:2013.

The UK participation in its preparation was entrusted to Technical Committee GEL/111, Electrotechnical environment committee.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013.
Published by BSI Standards Limited 2013

ISBN 978 0 580 65111 3
ICS 01.120; 13.020.30; 29.020

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2013.

Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62542

August 2013

ICS 01.120; 13.020.30; 29.020

English version

Environmental standardization for electrical and electronic products and systems - Glossary of terms

(IEC 62542:2013)

Normalisation environnementale pour les produits et les systèmes électriques et électroniques – Glossaire des termes
(CEI 62542:2013)

Umweltschutznormung für elektrische und elektronische Produkte und Systeme - Sammlung von Begriffen
(IEC 62542:2013)

This European Standard was approved by CENELEC on 2013-08-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

© 2013 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

Ref. No. EN 62542:2013 E

Foreword

The text of document 111/302/FDIS, future edition 1 of IEC 62542, prepared by IEC TC 111 "Environmental standardization for electrical and electronic products and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62542:2013.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-05-01
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-08-01

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62542:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62075:2012	NOTE	Harmonised as EN 62075:2012 (not modified).
IEC 62321:2008	NOTE	Harmonised as EN 62321:2009 (not modified).
IEC 62430:2009	NOTE	Harmonised as EN 62430:2009 (not modified).
IEC 62474:2012	NOTE	Harmonised as EN 62474:2012 (not modified).
ISO 9000:2005	NOTE	Harmonised as EN ISO 9000:2005 (not modified).
ISO 14001:2004	NOTE	Harmonised as EN ISO 14001:2004 (not modified).
ISO 14021:1999	NOTE	Harmonised as EN ISO 14021:2001 (not modified).
ISO 14040:2006	NOTE	Harmonised as EN ISO 14040:2006 (not modified).
ISO 14050:2009	NOTE	Harmonised as EN ISO 14050:2010 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC Guide 108	-	Guidelines for ensuring the coherency of IEC publications - Application of horizontal standards	-	-

CONTENTS

INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 General terms relating to environmental protection and management 6
4 Terms relating to determination and declaration of substances and materials 9
5 Terms relating to energy efficiency and power consumption 11
6 Terms relating to resource conservation and re-use 13
Annex A (informative) Operating conditions of equipment in respect of power demand 16
Annex B (informative) Index of terms 17
Bibliography 18

Table A.1 – Operating conditions of equipment in respect to power demand 16

INTRODUCTION

The definitions noted in this International Standard are intended to be considered by all new and existing IEC standards under maintenance that are meant to fulfil standardization needs, associated directly or indirectly, with an environmental topic or which may reference environmental aspects/impacts, even if the standard is not exclusively an environmental one. In addition this standard aims to utilise and harmonize definitions in other related documents.

This standard will be updated periodically as relevant international standardization documents evolve.

Wherever possible, the terms and definitions included herein have been taken from other IEC or ISO deliverables, either verbatim or modified if appropriate so as to make them suitable for use in a wide range of IEC deliverables on environmental matters. This standard also contains definitions for terms that are likely to be required by IEC deliverables on environmental matters, but are not yet described elsewhere.

ENVIRONMENTAL STANDARDIZATION FOR ELECTRICAL AND ELECTRONIC PRODUCTS AND SYSTEMS – GLOSSARY OF TERMS

1 Scope

This International Standard specifies generic terms and definitions that are related to environmental standardization within the IEC. It serves as a glossary of terminology to be considered for environmental aspects of relevant work in IEC.

The terms cover environmental issues that are relevant for electrotechnical products across all product life cycle stages, including but not limited to

- design and supply chain aspects in general,
- use and declaration of materials,
- analytics of environmentally relevant substances,
- aspects relating to climate protection,
- power consumption and energy efficiency,
- environmental information,
- end of life treatment.

This horizontal standard is primarily intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 108.

One of the responsibilities of a technical committee is, wherever applicable, to make use of horizontal standards in the preparation of its publications. The contents of this horizontal standard will not apply unless specifically referred to or included in the relevant publications.

2 Normative references

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

Guide 108, *Guidelines for ensuring the coherency of IEC publications – Application of horizontal standards*

3 General terms relating to environmental protection and management

3.1
design and development
activities that take an idea or requirement and transform these into a product

Note 1 to entry: The process of design and development usually follows a series of defined steps starting with an initial idea, transforming that into a formal specification, and resulting in the creation of a working prototype and whatever documentation is required to support production of the goods or provision of the service.

[SOURCE: IEC 62430:2009, definition 3.1]

3.2
electronic assembly
set of components, at least one of which is an electronic component, assembled into a single unit

EXAMPLE Group of components mounted on a printed wiring board [printed circuit board].

3.3
electronic component
electronic device that cannot be taken apart without destruction or impairment of its intended use

EXAMPLE Resistors, capacitors, diodes, integrated circuits, hybrids, application specific integrated circuits, wound components and relays.

Note 1 to entry: Electronic components are sometimes called electronic parts, or piece parts.

3.4
emission
direct or indirect release from a product or process into the air, water or soil

EXAMPLE A release could include one or more substances, heat, light, sound, electromagnetic fields, etc.

3.5
environment
surroundings in which a product or system exists, including air, water, land, natural resources, flora, fauna, humans and their interrelation

[SOURCE: ISO 14001:2004, definition 3.5, modified – “in which an organization operates” replaced by “in which a product or system exists”]

3.6
environmental aspect
element of an organization's activities or products that can interact with the environment

Note 1 to entry: A significant environmental aspect has or can have a significant environmental impact.

[SOURCE: IEC 62430:2009, definition 3.3]

3.7
environmental impact
any change to the environment, whether adverse or beneficial, wholly or partly resulting from environmental aspects

[SOURCE: ISO 14001:2004, definition 3.7, modified – “an organization’s” before “environmental aspects" deleted]

3.8
environmental management system
EMS
part of an organization’s management system used to develop and implement its environmental policy and manage its environmental aspects

Note 1 to entry: A management system is a set of interrelated elements used to establish policy and objectives and to achieve those objectives.

Note 2 to entry: A management system includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources.

[SOURCE: ISO 14001:2004, definition 3.8]

3.9
environmental parameter
quantifiable attribute of an environmental aspect

EXAMPLE Environmental parameters include the type and quantity of materials used (weight, volume), power consumption, emissions, rate of recyclability, etc.

[SOURCE: IEC 62430:2009, definition 3.5]

3.10
environmentally conscious design
ECD
systematic approach which takes into account environmental aspects in the design and development process with the aim to reduce adverse environmental impacts

[SOURCE: IEC 62430:2009, definition 3.6]

3.11
environmentally conscious design tool
formalized method which facilitates qualitative or quantitative analysis, comparison and/or solution finding during the ECD process

[SOURCE: IEC 62430:2009, definition 3.7]

3.12
life cycle
consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to the final disposal

[SOURCE: ISO 14040:2006, definition 3.1]

3.13
life cycle assessment
LCA
compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle

[SOURCE: ISO 14040:2006, definition 3.2]

3.14
life cycle stage
element of a life cycle

Note 1 to entry: The term "life cycle phase" is sometimes used interchangeably with "life cycle stage"'.

Note 2 to entry: Examples of life cycle stages: raw material acquisition and production; manufacturing; packaging and distribution; installation and use, maintenance and upgrading and end of life.

[SOURCE: IEC 62430:2009, definition 3.10]

3.15
life cycle thinking
LCT
consideration of all relevant environmental aspects during the entire life cycle of products

[SOURCE: IEC 62430:2009, definition 3.11]

3.16
process
set of interrelated or interacting activities which transform inputs into outputs

Note 1 to entry: Inputs to a process are generally outputs of other processes.

Note 2 to entry: Processes in an organization are generally planned and carried out under controlled conditions to add value.

[SOURCE: ISO 9000:2005, definition 3.4.1, modified – "NOTE 3 A process where the conformity of the resulting product cannot be readily or economically verified is frequently referred to as a "special process". deleted]

3.17
product category
group of technologically or functionally similar products where the environmental aspects can reasonably be expected to be similar

[SOURCE: IEC 62430:2009, definition 3.15]

3.18
product
any goods or service

Note 1 to entry: This includes interconnected and/or interrelated goods or services.

[SOURCE: IEC 62430:2009, definition 3.14]

3.19
stakeholder
individual, group or organization that has an interest in an organization or activity

Note 1 to entry: Usually a stakeholder can affect or is affected by the organization or the activity.

Note 2 to entry: “Interested party” is sometimes used as a synonym for “stakeholder”.

[SOURCE: IEC 62430:2009, definition 3.16, modified – Note 2 to entry added]

4 Terms relating to determination and declaration of substances and materials

4.1
declarable substance and declarable substance group
substance and substance group that meet the criteria stated in IEC 62474 and are specified in the IEC 62474 database

Note 1 to entry: Declarable substances and declarable substance groups are listed in the IEC 62474 database with either a mandatory or optional reporting requirement above the specified threshold in the IEC 62474 database.

[SOURCE: IEC 62474:2012, definition 3.2, modified – in the Note 1 to entry, “Such substances and substance groups” replaced by "Declarable substances and declarable substance groups”]

4.2
hazardous mixture
hazardous preparation
mixture that has, according to defined classification criteria, the potential for adversely impacting human health and/or the environment

Note 1 to entry: The criteria for determining whether a mixture (or preparation) is classified as hazardous are defined by law or regulation.

4.3
material
substance or mixture within a product or product part

[SOURCE: IEC 62474:2012, definition 3.4]

4.4
matrix
substance or mixture and its form or state in which analyte is embedded or to which analyte is attached

4.5
mixture
preparation
mixture or solution composed of two or more substances in which they do not react

Note 1 to entry: An alloy is treated as a mixture.

[SOURCE: IEC 62474:2012, definition 3.6]

4.6
performance-based measurement system
PBMS
set of processes wherein the data needs, mandates or limitations of a program or project are specified, serving as criteria for selecting appropriate methods to meet those needs in a cost-effective manner

Note 1 to entry: The criteria may be published in regulations, technical guidance documents, permits, work plans or enforcement orders.

[SOURCE: IEC 62321:2008, definition 3.1.11]

4.7
reporting threshold level
concentration limit at or above which the presence of a substance in a material or product is declared if declaration of the substance is mandatory according to the IEC 62474 database, or if it is agreed on to be declared

[SOURCE: IEC 62474:2012, definition 3.12]

4.8
screening
analytical procedure to determine the presence or absence of substances in the representative part or section of a product, relative to the value or values chosen as the criterion for presence, absence or further testing

Note 1 to entry: If the screening method produces values that are not conclusive, then additional analysis or other follow-up actions may be necessary to make a final presence/absence decision.

4.9
substance
chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition

Note 1 to entry: Definition is taken from *Globally harmonized system of classification and labelling (GHS)*: 2003, Chapter 1.2, Definitions and abbreviations.

[SOURCE: IEC 62474:2012, definition 3.13]

4.10
substance group
one or more substances, where in the case of multiple substances they share at least one chemical sub-structure, or chemical or physical property under a generic name

[SOURCE: IEC 62474:2012, definition 3.14]

5 Terms relating to energy efficiency and power consumption

The terms relating to energy efficiency and power consumption described in this clause are intended to be applicable to all electrotechnical products. Table A.1 provides a structured overview as an aid to understanding these concepts. Where particular product sectors need to define additional terms to fulfil their particular needs, they should aim to do so within the structure of these concepts.

5.1
disconnected
condition of the equipment during which all connections to power sources supplying the equipment are removed or galvanically isolated and no functions depending on those power sources are provided

Note 1 to entry: The term "power source" includes power sources external and internal to the equipment.

5.2
duty cycle
combined fractions of time a product spends in specific power modes representing a certain use case

5.3
idle mode
condition during which the equipment can promptly provide a primary function but is not doing so

5.4
mode
distinct condition

Note 1 to entry: Any transition of equipment from or towards a neighbouring mode, either through user intervention or automatically initiated, should not be considered to form part of either mode.

Note 2 to entry: Delay between a stimulus and a response might be traded against power consumption in the current mode.

5.5
network integrity function
function to maintain a communication path external to the equipment

Note 1 to entry: The communication could be via wired or wireless interfaces.

Note 2 to entry: In order to communicate, it is necessary for the equipment to have at least one network port activated.

Note 3 to entry: The equipment is also considered to offer a network integrity function even though the equipment is not connected to the respective network (e.g. network cable unplugged)

5.6
off mode
condition during which the equipment only provides tertiary function(s)

5.7
on mode
condition during which the equipment provides at least one primary function or can promptly provide a primary function

5.8
operation mode
condition during which the equipment is performing at least one primary function

5.9
partial on mode
condition during which the equipment provides at least one secondary function but no primary function

Note 1 to entry: The terms "standby mode" or "sleep mode" also describe the partial on mode.

5.10
power management
automatic control mechanism that achieves the smallest input power consistent with a pre-determined level of functionality

5.11
primary function
function providing the intended purpose

5.12
protective function
function that operates after the occurrence of a failure in the equipment so as to prevent harm to persons or damage to property

EXAMPLE 1 A back-siphonage device fitted to a dish washer, this can operate in an off mode.

EXAMPLE 2 Flood protection device fitted to a washing machine, this can operate in an off mode or partial on mode.

EXAMPLE 3 No movement deactivation switch fitted to a cloths iron, this can operate in an on mode.

5.13
reactivation function
function allowing equipment to be switched into an on mode with an internal signal, with its remote control unit, or manually

Note 1 to entry: The reactivation function may be indicated using a simple optical device (e.g. a light emitting diode (LED)).

Note 2 to entry: A mode change during the reactivation function cannot be initiated by a network command.

EXAMPLE A timer could provide the internal signal leading to reactivation.

5.14
secondary function
function that enables, supplements or enhances a primary function

5.15
status information function
function by which the equipment provides simple use-orientated information

Note 1 to entry: Status information can be, for example, date, clock time, timer information; or past or future operation.

5.16
tertiary function
function other than a primary or a secondary function

EXAMPLE 1 An EMC filter, if present, provides its function in off mode, partial on mode and on mode.

EXAMPLE 2 Status indication.

6 Terms relating to resource conservation and re-use

6.1
disassembly
process whereby an item is taken apart in such a way that it could subsequently be reassembled and made operational

Note 1 to entry: The process typically uses simple tools, such as screwdrivers, pliers and wrenches.

[SOURCE: IEC/PAS 62596:2009, definition 3.1.5, modified – to make wording compliant with IEC rules, part of the original definition is now in the Note to entry and part of the original NOTE is now in the definition.]

6.2
disjointment
process whereby materials are separated by mechanical means such that the item cannot subsequently be reassembled to make it operational

Note 1 to entry: The process typically employs actions such as cutting, grinding, scratching and abrasive processes.

[SOURCE: IEC/PAS 62596:2009, definition 3.1.6, modified – to make wording compliant with IEC rules, part of the original definition is now in the Note to entry and part of the original NOTE is now in the definition.]

6.3
end of life
life cycle stage of a product starting when it is removed from its intended use stage

[SOURCE: IEC 62075:2012, definition 3.4, modified – “a use stage” replaced by “its intended use stage”]

6.4
energy recovery
production of useful energy through direct and controlled combustion or other processing of waste

Note 1 to entry: Waste incinerators producing hot water, steam and/or electricity are a common form of energy recovery.

6.5
feedstock recycling
chemical recycling
conversion to monomer or production of new materials by changing the chemical structure of waste polymers through cracking, gasification or depolymerisation, excluding energy recovery and incineration

Note 1 to entry: Feedstock recycling and chemical recycling are synonyms.

[SOURCE: ISO 15270:2008, definition 3.14, modified – deletion of "raw" before "materials" and “plastics waste” replaced by “waste polymers”]

6.6
material recovery
material-processing operations including mechanical recycling, feedstock (chemical) recycling and organic recycling, but excluding energy recovery

[SOURCE: ISO 15270:2008, definition 3.20]

6.7
mechanical recycling
processing of waste into secondary raw material or products without significantly changing the chemical structure of the material

Note 1 to entry: Secondary raw material is a synonym of recyclate.

[SOURCE: ISO 15270:2008, definition 3.21 – modified – deletion of “plastics” before “waste" in the main definition and before “secondary raw material” in the Note 1 to entry]

6.8
organic recycling
controlled microbiological treatment of biodegradable waste under aerobic or anaerobic conditions

Note 1 to entry: The term "biological recycling" is used synonymously.

[SOURCE: ISO 15270:2008, definition 3.23, modified – deletion of “plastics” before “waste”]

6.9
recyclability
ability of waste materials to be processed for the original purpose or for other purposes, excluding energy recovery

6.10
recycling
processing of waste materials for the original purpose or for other purposes, excluding energy recovery

Note 1 to entry: The term "recycling" is used synonymously with the term "material recovery".

[SOURCE: ISO 15270:2008, definition 3.30, modified – deletion of “plastics” before “waste materials”; addition of the Note 1 to entry]

6.11
refurbishing
functional or aesthetical maintenance or repair of an item to restore to original, upgraded, or other predetermined form and functionality

6.12
remanufacture
production process that creates products using parts taken from previously used products

6.13
upgradability
characteristic of a product that allows its modules or parts to be separately upgraded or replaced without having to replace the entire product

[SOURCE: ISO 14021:1999, definition 3.1.4]

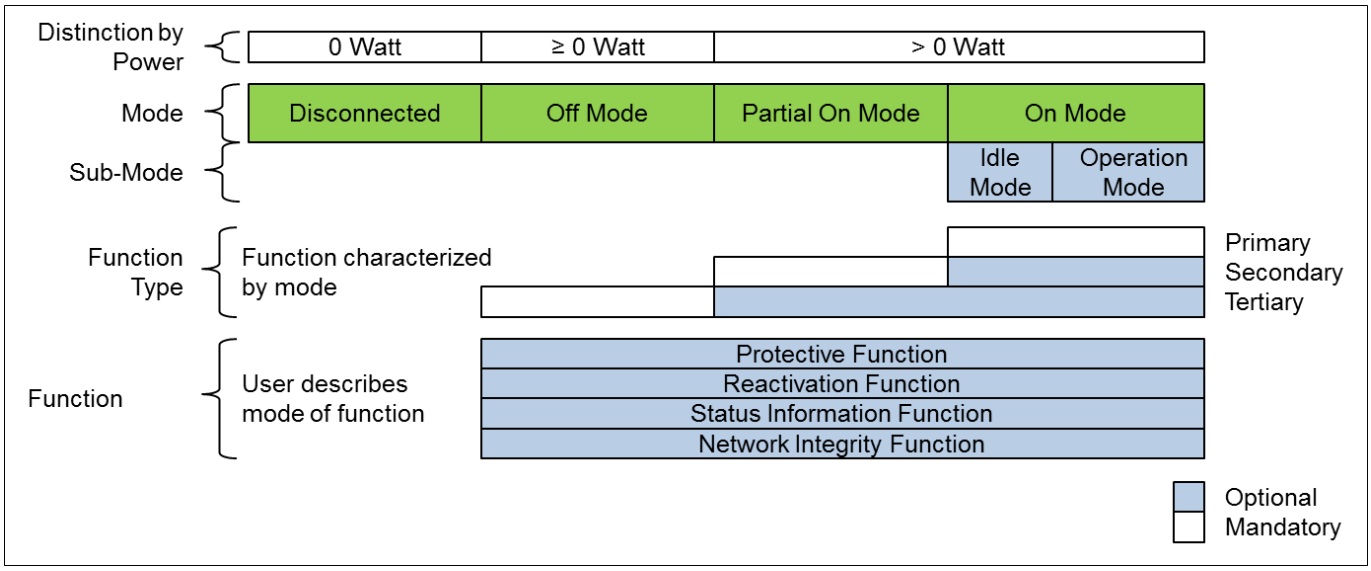
6.14
upgrading
process to enhance the functionality or capacity of a product

[SOURCE: IEC 62075:2012, definition 3.23]

Annex A
(informative)

Operating conditions of equipment in respect of power demand

Table A.1 – Operating conditions of equipment in respect to power demand



As the number of functions increases from left to right in Table A.1, the relevant modes will generally have higher energy consumption. The existence of a mode in Table A.1 does not imply that a particular piece of equipment will offer that mode.

Annex B
(informative)

Index of terms

chemical recycling, 12
declarable substance and declarable substance group, 8
design and development, 5
disassembly, 12
disconnected, 10
disjointment, 12
duty cycle, 10
ECD, 6
electronic assembly, 5
electronic component, 5
emission, 6
EMS, 6
end of life, 12
energy recovery, 12
environment, 6
environmental aspect, 6
environmental impact, 6
environmental management system, 6
environmental parameter, 6
environmentally conscious design, 6
environmentally conscious design tool, 7
feedstock recycling, 12
hazardous mixture (or preparation), 8
idle mode, 10
LCA, 7
LCT, 7
life cycle, 7
life cycle assessment, 7
life cycle stage, 7
life cycle thinking, 7
material, 8
material recovery, 12
matrix, 8
mechanical recycling, 12
mixture, 8
mode, 10
network integrity function, 10
off mode, 10
on mode, 10
operation mode, 11
organic recycling, 13
partial on mode, 11
PBMS, 9
performance-based measurement system, 9
power management, 11
preparation, 8
primary function, 11
process, 7
product, 8
product category, 7
product family, 9
protective function, 11
reactivation function, 11
recyclability, 13
recycling, 13
refurbish, 13
remanufacture, 13
reporting threshold level, 9
screening, 9
secondary function, 11
stakeholder, 8
status information function, 11
substance, 9
substance group, 9
tertiary function, 11
upgradability, 13
upgrading, 13

Bibliography

IEC 60050 (all parts), *International Electrotechnical Vocabulary*

IEC 62075:2012, *Audio/video, information and communication technology equipment – Environmentally conscious design*

IEC 62301:2011, *Household electrical appliances –Measurement of standby power*

IEC 62321:2008, *Electrotechnical products – Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers)*

IEC 62430:2009, *Environmentally conscious design for electrical and electronic products*

IEC 62474:2012, *Material declaration for products of and for the electrotechnical industry*

IEC/PAS 62596:2009, *Electrotechnical products – Determination of restricted substances – Sampling procedure – Guidelines*

IEC Guide 109:2012, *Environmental aspects – Inclusion in electrotechnical product standards*

ISO 9000:2005, *Quality management systems – Fundamentals and vocabulary*

ISO 14001:2004, *Environmental management systems – Requirements with guidance for use*

ISO 14021:1999, *Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)*

ISO 14040:2006, *Environmental management – Life cycle assessment – Principles and framework*

ISO 14050:2009, *Environmental management – Vocabulary*

ISO 15270:2008, *Plastics – Guidelines for the recovery and recycling of plastics waste*

_____

This page deliberately left blank

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

British Standards Institution (BSI)

BSI is the national body responsible for preparing British Standards and other standards-related publications, information and services.

BSI is incorporated by Royal Charter. British Standards and other standardization products are published by BSI Standards Limited.

About us

We bring together business, industry, government, consumers, innovators and others to shape their combined experience and expertise into standards -based solutions.

The knowledge embodied in our standards has been carefully assembled in a dependable format and refined through our open consultation process. Organizations of all sizes and across all sectors choose standards to help them achieve their goals.

Information on standards

We can provide you with the knowledge that your organization needs to succeed. Find out more about British Standards by visiting our website at bsigroup.com/standards or contacting our Customer Services team or Knowledge Centre.

Buying standards

You can buy and download PDF versions of BSI publications, including British and adopted European and international standards, through our website at bsigroup.com/shop, where hard copies can also be purchased.

If you need international and foreign standards from other Standards Development Organizations, hard copies can be ordered from our Customer Services team.

Subscriptions

Our range of subscription services are designed to make using standards easier for you. For further information on our subscription products go to bsigroup.com/subscriptions.

With **British Standards Online (BSOL)** you'll have instant access to over 55,000 British and adopted European and international standards from your desktop. It's available 24/7 and is refreshed daily so you'll always be up to date.

You can keep in touch with standards developments and receive substantial discounts on the purchase price of standards, both in single copy and subscription format, by becoming a **BSI Subscribing Member**.

PLUS is an updating service exclusive to BSI Subscribing Members. You will automatically receive the latest hard copy of your standards when they're revised or replaced.

To find out more about becoming a BSI Subscribing Member and the benefits of membership, please visit bsigroup.com/shop.

With a **Multi-User Network Licence (MUNL)** you are able to host standards publications on your intranet. Licences can cover as few or as many users as you wish. With updates supplied as soon as they're available, you can be sure your documentation is current. For further information, email bsmusales@bsigroup.com.

BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK

Revisions

Our British Standards and other publications are updated by amendment or revision.

We continually improve the quality of our products and services to benefit your business. If you find an inaccuracy or ambiguity within a British Standard or other BSI publication please inform the Knowledge Centre.

Copyright

All the data, software and documentation set out in all British Standards and other BSI publications are the property of and copyrighted by BSI, or some person or entity that owns copyright in the information used (such as the international standardization bodies) and has formally licensed such information to BSI for commercial publication and use. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI. Details and advice can be obtained from the Copyright & Licensing Department.

Useful Contacts:

Customer Services
Tel: +44 845 086 9001
Email (orders): orders@bsigroup.com
Email (enquiries): cservices@bsigroup.com

Subscriptions
Tel: +44 845 086 9001
Email: subscriptions@bsigroup.com

Knowledge Centre
Tel: +44 20 8996 7004
Email: knowledgecentre@bsigroup.com

Copyright & Licensing
Tel: +44 20 8996 7070
Email: copyright@bsigroup.com

bsi.

...making excellence a habit.™