Irish Standard
I.S. EN 62508:2010

Guidance on human aspects of dependability (IEC 62508:2010 (EQV))

I.S. EN 62508:2010

Incorporating amendments/corrigenda issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62508

October 2010

ICS 03.120.01

English version

Guidance on human aspects of dependability
(IEC 62508:2010)

Lignes directrices relatives aux facteurs humains dans la sûreté de fonctionnement
(CEI 62508:2010)

Leitlinien zu den menschlichen Aspekten der Zuverlässigkeit
(IEC 62508:2010)

This European Standard was approved by CENELEC on 2010-10-01. 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 Central Secretariat 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 Central Secretariat 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

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Ref. No. EN 62508:2010 E

Foreword

The text of document 56/1365/FDIS, future edition 1 of IEC 62508, prepared by IEC TC 56, Dependability, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62508 on 2010-10-01.

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

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2011-07-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-10-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62508:2010 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 60812:2006	NOTE Harmonized as EN 60812:2006 (not modified).
ISO 6385:2004	NOTE Harmonized as EN ISO 6385:2004 (not modified).
ISO 9000:2005	NOTE Harmonized as EN ISO 9000:2005 (not modified).
ISO 9241-1:1997	NOTE Harmonized as EN ISO 9241-1:1997 (not modified).
ISO 9241-2:1992	NOTE Harmonized as EN ISO 9241-2:1993 (not modified).
ISO 9241-3:1992	NOTE Harmonized as EN 29241-3:1993 (not modified).
ISO 9241-4:1998	NOTE Harmonized as EN ISO 9241-4:1998 (not modified).
ISO 9241-5:1998	NOTE Harmonized as EN ISO 9241-5:1999 (not modified).
ISO 9241-6:1999	NOTE Harmonized as EN ISO 9241-6:1999 (not modified).
ISO 9241-7:1998	NOTE Harmonized as EN ISO 9241-7:1998 (not modified).
ISO 9241-8:1997	NOTE Harmonized as EN ISO 9241-8:1997 (not modified).
ISO 9241-9:2000	NOTE Harmonized as EN ISO 9241-9:2000 (not modified).
ISO 9241-11:1998	NOTE Harmonized as EN ISO 9241-11:1998 (not modified).
ISO 9241-12:1998	NOTE Harmonized as EN ISO 9241-12:1998 (not modified).
ISO 9241-13:1998	NOTE Harmonized as EN ISO 9241-13:1998 (not modified).
ISO 9241-15:1997	NOTE Harmonized as EN ISO 9241-15:1997 (not modified).
ISO 9241-16:1999	NOTE Harmonized as EN ISO 9241-16:1999 (not modified).
ISO 9241-17:1998	NOTE Harmonized as EN ISO 9241-17:1998 (not modified).

ISO 9241-20:2008	NOTE Harmonized as EN ISO 9241-20:2009 (not modified).
ISO 9241-110:2006	NOTE Harmonized as EN ISO 9241-110:2006 (not modified).
ISO 9241-151:2008	NOTE Harmonized as EN ISO 9241-151:2008 (not modified).
ISO 9241-171:2008	NOTE Harmonized as EN ISO 9241-171:2008 (not modified).
ISO 9241-210:2010	NOTE Harmonized as EN ISO 9241-210:2010 (not modified).
ISO 9241-300:2008	NOTE Harmonized as EN ISO 9241-300:2008 (not modified).
ISO 9241-302:2008	NOTE Harmonized as EN ISO 9241-302:2008 (not modified).
ISO 9241-303:2008	NOTE Harmonized as EN ISO 9241-303:2008 (not modified).
ISO 9241-304:2008	NOTE Harmonized as EN ISO 9241-304:2008 (not modified).
ISO 9241-305:2008	NOTE Harmonized as EN ISO 9241-305:2008 (not modified).
ISO 9241-306:2008	NOTE Harmonized as EN ISO 9241-306:2008 (not modified).
ISO 9241-307:2008	NOTE Harmonized as EN ISO 9241-307:2008 (not modified).
ISO 9241-400:2007	NOTE Harmonized as EN ISO 9241-400:2007 (not modified).
ISO 9241-410:2008	NOTE Harmonized as EN ISO 9241-410:2008 (not modified).
ISO 11064-1	NOTE Harmonized as EN ISO 11064-1.
ISO 11064-2	NOTE Harmonized as EN ISO 11064-2.
ISO 11064-3	NOTE Harmonized as EN ISO 11064-3.
ISO 11064-4	NOTE Harmonized as EN ISO 11064-4.
ISO 11064-5	NOTE Harmonized as EN ISO 11064-5.
ISO 11064-6	NOTE Harmonized as EN ISO 11064-6.
ISO 11064-7	NOTE Harmonized as EN ISO 11064-7.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

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 60300-1	2003	Dependability management - Part 1: Dependability management systems	EN 60300-1	2003
IEC 60300-2	-	Dependability management - Part 2: Guidelines for dependability management	EN 60300-2	-
IEC 60300-3-15	-	Dependability management - Part 3-15: Application guide - Engineering of system dependability	EN 60300-3-15	-

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

GUIDANCE ON HUMAN ASPECTS OF DEPENDABILITY

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62508 has been prepared by IEC technical committee 56: Dependability.

This first edition cancels and replaces IEC/PAS 62508 published in 2007.

The text of this standard is based on the following documents:

FDIS	Report on voting
56/1365/FDIS	56/1373/RVD

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

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication 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

This International Standard provides guidelines on human aspects of dependability of systems. It fills the need for a standard to address the dependability of human/machine systems.

It gives guidance on how the human aspects of dependability can be considered at all the system life cycle stages, including ergonomic principles during design and human reliability understanding for system applications.

This standard provides an overview of the principles with some examples of the types of methods that can be used.

It is intended that a supporting standard, which describes more detailed methods that include quantification of human reliability will follow the issue of this standard in due course.

This standard contains recommendations, and does not include any requirements. Attention is drawn to the possibility of the existence of regulatory requirements for systems covered by the scope of this standard.