SLOVENSKI STANDARD
SIST EN 60300-1:2004

01-september-2004

Nadomešča:
SIST EN 60300-1:2002

Vodenje zagotovljivosti – 1. del: Sistemi vodenja zagotovljivosti (IEC 60300-1:2003)

Dependability management -- Part 1: Dependability management systems

Zuverlässigkeitsmanagement -- Teil 1: Zuverlässigkeitsmanagementsysteme

Gestion de la sûreté de fonctionnement -- Partie 1: Gestion du programme de sûreté de fonctionnement

Ta slovenski standard je istoveten z: EN 60300-1:2003

ICS:

03.120.01	Kakovost na splošno	Quality in general
21.020	Značilnosti in načrtovanje strojev, aparatov, opreme	Characteristics and design of machines, apparatus, equipment

SIST EN 60300-1:2004 **en**

EUROPEAN STANDARD **EN 60300-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM September 2003

ICS 03.100.40; 03.120.01; 21.020

Supersedes EN 60300-1:1993

English version

Dependability management
Part 1: Dependability management systems
(IEC 60300-1:2003)

Gestion de la sûreté de fonctionnement
Partie 1: Gestion du programme
de sûreté de fonctionnement
(CEI 60300-1:2003)

Zuverlässigkeitsmanagement
Teil 1: Zuverlässigkeits-
managementsysteme
(IEC 60300-1:2003)

This European Standard was approved by CENELEC on 2003-09-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 60300-1:2003 E

Foreword

The text of document 56/856/FDIS, future edition 2 of IEC 60300-1, prepared by IEC TC 56, Dependability, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60300-1 on 2003-09-01.

This European Standard supersedes EN 60300-1:1993.

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)	2004-06-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2006-09-01

The main changes with respect to EN 60300-1:1993 are listed below:
- Dependability management system seen as part of the organization's overall management system.
- Structural and terminological alignment with EN ISO 9000:2000 standards.
- Focus on systems.

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex ZA is normative and annexes A and B are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60300-1:2003 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60300-2	- [1)]	Dependability management Part 2: Guidance for dependability management	EN 60300-2	- [1)]
ISO 9000	2000	Quality management systems Fundamentals and vocabulary	EN ISO 9000	2000
ISO 9001	2000	Quality management systems - Requirements	EN ISO 9001	2000
ISO 9004	2000	Quality management systems Guidelines for performance improvements	EN ISO 9004	2000

[1)] At draft stage.

INTERNATIONAL STANDARD

IEC 60300-1

Second edition
2003-06

Dependability management –

Part 1:
Dependability management systems

Gestion de la sûreté de fonctionnement –

Partie 1:
Gestion du programme de sûreté de fonctionnement

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE Q

For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DEPENDABILITY MANAGEMENT –

Part 1: Dependability management systems

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60300-1 has been prepared by IEC technical committee 56: Dependability.

This second edition cancels and replaces the first edition, published in 1993, and constitutes a technical revision.

The main changes with respect to the previous edition are listed below.

– Dependability management system seen as part of the organization's overall management system.
– Structural and terminological alignment with ISO 9000:2000 standards.
– Focus on systems.

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

FDIS	Report on voting
56/856/FDIS	56/861/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 publication will remain unchanged until 2010. At this date, the publication will be

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

INTRODUCTION

Dependability is a key decision factor in today's global business environment. Dependability affects product costs and processes. It is an inherent product design property influencing product performance. A dependable product is achieved through the implementation of dependability disciplines in the early concept and design phases of the product life cycle to provide cost-effective product operations. Like other technical and engineering disciplines, dependability needs to be managed in order to deliver high-value products to customers. In the broadest sense, dependability reflects user confidence in fitness for use by attaining satisfaction in product performance capability, delivering service availability upon demand, and minimizing the costs associated with the acquisition and ownership throughout the life cycle.

Dependability is the collective term describing the availability performance of any simple to complex product. The factors influencing the availability performance of a product are the reliability and maintainability design characteristics and the maintenance support performance. Annex A provides the dependability relationships. In many products, reliability, maintainability, and availability rank amongst the dominant performance characteristics of importance to the customers seeking cost-effective operation. Reliability and maintainability are performance characteristics inherent in the product design. Maintenance support is external to the product, and will affect its dependability. Maintenance support performance reflects the ability of the maintenance organization to provide the necessary resources to sustain a level of maintenance support effort to achieve system availability performance objectives.

This part of IEC 60300 provides general guidelines in establishing a dependability management system to meet most organization or project needs. The structure of the referenced dependability standards follows a "tool-box" concept. The recommendations are non-prescriptive to facilitate tailoring and effective implementation of dependability disciplines in management. The top-level dependability management standard IEC 60300-1 is supported by IEC 60300-2 providing references to application guidelines and methods. This "tool-box" concept helps standards users locate specific dependability application guidelines and relevant methods to accomplish their respective project objectives.

This standard encourages innovation and flexibility in management and design for product optimization with known constraints and technology limitations. It is aligned with ISO 9001:2000 and ISO 9004:2000 Quality Management Systems (QMS) structure to facilitate incorporation of dependability activities in the overall management system. Dependability activities complement QMS processes to achieve the desired levels of reliability, maintainability, and maintenance support performance of products. The alignment of IEC 60300-1 to ISO 9001:2000 and ISO 9004:2000 is necessary to link specific dependability recommendations to relevant QMS processes. The major clauses in IEC 60300-1 are cross-referencing ISO 9001:2000 and ISO 9004:2000 although some clause headings may not be exactly the same. They address similar quality topics from a dependability perspective.