SLOVENSKI STANDARD
SIST EN 61069-3:1998

01-november-1998

Industrial-process measurement and control - Evaluation of system properties for the purpose of system assessment - Part 3: Assessment of system functionality (IEC 61069-3:1996)

Industrial-process measurement and control - Evaluation of system properties for the purpose of system assessment -- Part 3: Assessment of system functionality

Leittechnik für industrielle Prozesse - Ermittlung der Systemeigenschaften zum Zweck der Eignungsbeurteilung eines Systems -- Teil 3: Eignungsbeurteilung der Systemfunktionalität

Mesure et commande dans les processus industriels - Appréciation des propriétés d'un système en vue de son évaluation -- Partie 3: Evaluation de la fonctionnalité d'un système

Ta slovenski standard je istoveten z: **EN 61069-3:1996**

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.240.50	Uporabniške rešitve IT v industriji	IT applications in industry

SIST EN 61069-3:1998 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61069-3

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Descriptors: Industrial-process, measurement, control, evaluation of system properties, system assessment, functionality assessment

English version

Industrial-process measurement and control Evaluation of system properties for the purpose of system assessment Part 3: Assessment of system functionality (IEC 1069-3:1996)

Mesure et commande dans les processus industriels
Appréciation des propriétés d'un système en vue de son évaluation
Partie 3: Evaluation de la fonctionnalité d'un système
(CEI 1069-3:1996)

Leittechnik für industrielle Prozesse
Ermittlung der Systemeigenschaften zum Zweck der Eignungsbeurteilung eines Systems
Teil 3: Eignungsbeurteilung der Systemfunktionalität
(IEC 1069-3:1996)

This European Standard was approved by CENELEC on 1996-07-02. 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.

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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 61069-3:1996 E

Foreword

The text of document 65A/188/FDIS, future edition 1 of IEC 1069-3, prepared by SC 65A, System aspects, of IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61069-3 on 1996-07-02.

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) 1997-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-04-01

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, B and C are informative.
Annex ZA has been added by CENELEC.

The relation of this part to the other parts of EN 61069 and the relative place of this part within the standard is shown in figure 1.

Part 1 provides the overall guidance and as such is intended as a stand-alone publication.

Part 2 details the assessment methodology.

Part 3 to 8 provide guidance on the assessment of specific groups of properties.

The division of properties in parts 3 to 8 have been chosen so as to group together related properties.

Endorsement notice

The text of the International Standard IEC 1069-3:1996 was approved by CENELEC as a European Standard without any modification.

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

IEC 1069-5	NOTE: Harmonized as EN 61069-5:1995 (not modified).
IEC 1297	NOTE: Harmonized as EN 61297:1995 (not modified).

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 1069-1	1991	Industrial-process measurement and control Evaluation of system properties for the purpose of system assessment Part 1: General considerations and methodology	EN 61069-1 + corr. November	1993 1993
IEC 1069-2	1993	Part 2: Assessment methodology	EN 61069-2	1994

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INTERNATIONAL STANDARD

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Mesure et commande dans les processus industriels – Appréciation des propriétés d'un système en vue de son évaluation –

Partie 3:
Evaluation de la fonctionnalité d'un système

Industrial-process measurement and control – Evaluation of system properties for the purpose of system assessment –

Part 3:
Assessment of system functionality

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL – EVALUATION OF SYSTEM PROPERTIES FOR THE PURPOSE OF SYSTEM ASSESSMENT –

Part 3: Assessment of system functionality

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 reports or guides and they are accepted by the National Committees in that sense.

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6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 1069-3 has been prepared by subcommittee 65A: System aspects, of IEC technical committee 65: Industrial-process measurement and control.

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

FDIS	Report on voting
65A/188/FDIS	65A/208/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.

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Part 2 details the assessment methodology.

Parts 3 to 8 provide guidance on the assessment of specific groups of properties.

The division of properties in parts 3 to 8 have been chosen so as to group together related properties.

IEC 1069 consists of the following parts, under the general title: *Industrial-process measurement and control – Evaluation of system properties for the purpose of system assessment:*

Part 1: General considerations and methodology
Part 2: Assessment methodology
Part 3: Assessment of system functionality *(under consideration)*
Part 4: Assessment of system performance *(under consideration)*
Part 5: Assessment of system dependability
Part 6: Assessment of system operability *(under consideration)*
Part 7: Assessment of system safety *(under consideration)*
Part 8: Assessment of non-task-related system properties *(under consideration)*

Annexes A, B and C are for information only.

INTRODUCTION

This part of IEC 1069 deals with the method which should be used to assess the functionality of industrial-process measurement and control systems. Assessment of a system is the judgement, based on evidence, of a system's suitability for a specific mission or class of missions.

To obtain total evidence would require a complete (i.e. under all influencing conditions) evaluation of all system properties relevant to the specific mission or class of missions.

Since this is rarely practical, the rationale on which an assessment of a system should be based is:

- to identify the criticality of each of the relevant system properties;
- to plan for evaluation of the relevant system properties with a cost-effective dedication of effort to the various properties.

In conducting an assessment of a system it is crucial to bear in mind the need to gain a maximum increase in confidence in the suitability of a system within practical cost and time constraints.

An assessment can only be carried out if a mission has been stated (or given) or if any mission can be hypothesized. In the absence of a mission, no assessment can be made; however, evaluations (as defined in IEC 1069-1) can still be specified and be carried out for use in assessments performed by others.

In such cases, the standard can be used as a guide for planning an evaluation and it provides procedures for performing evaluations, since evaluations are an integral part of assessment.

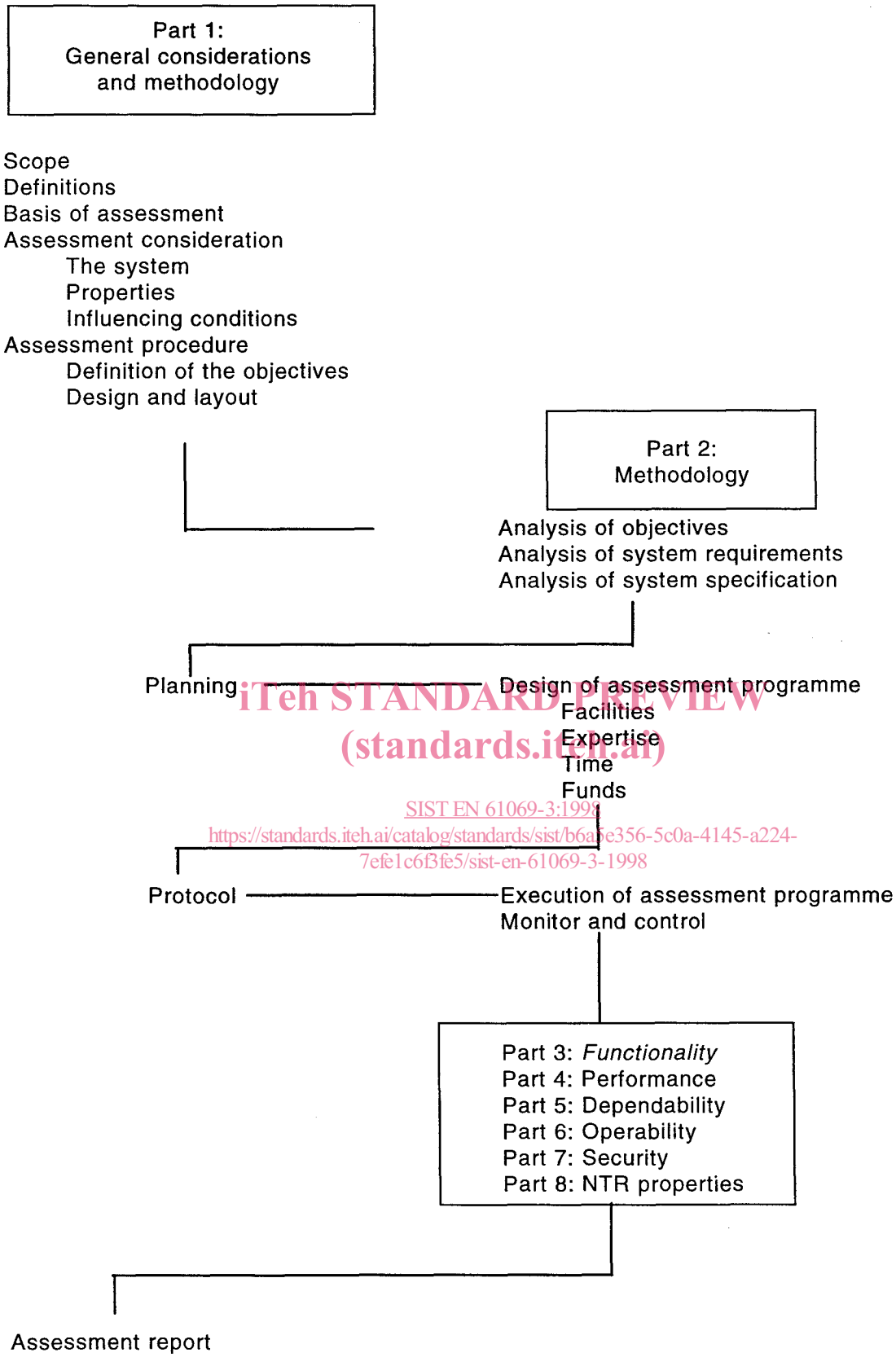

Figure 1 – General layout of IEC 1069