



SLOVENSKI STANDARD

SIST EN 61069-8:2001

01-april-2001

Industrial-process measurement and control - Evaluation of system properties for the purpose of system assessment - Part 8: Assessment of non-task-related system properties

Industrial-process measurement and control - Evaluation of system properties for the purpose of system assessment -- Part 8: Assessment of non-task-related system properties

Leittechnik für industrielle Prozesse - Ermittlung der Systemeigenschaften zum Zweck der Eignungsbeurteilung eines Systems -- Teil 8: Eignungsbeurteilung von Systemeigenschaften, die nicht aufgabengebunden sind

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Mesure et commande dans les processus industriels - Appréciation des propriétés d'un système en vue de son évaluation -- Partie 8: Evaluation des propriétés non liées à la tâche d'un système

Ta slovenski standard je istoveten z: EN 61069-8:1999

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
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EUROPEAN STANDARD
 NORME EUROPÉENNE
 EUROPÄISCHE NORM

EN 61069-8

August 1999

ICS 25.040.40

English version

**Industrial-process measurement and control - Evaluation of
 system properties for the purpose of system assessment
 Part 8: Assessment of non-task-related system properties
 (IEC 61069-8:1999)**

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

Partie 8: Evaluation des propriétés non
 liées à la tâche d'un système
 (CEI 61069-8:1999)

Leittechnik für industrielle Prozesse
 Ermittlung der Systemeigenschaften
 zum Zweck der Eignungsbeurteilung
 eines Systems

Teil 8: Eignungsbeurteilung von
 Systemeigenschaften, die nicht
 aufgabengebunden sind

(IEC 61069-8:1999)

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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 members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

Foreword

The text of document 65A/278/FDIS, future edition 1 of IEC 61069-8, 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 61069-8 on 1999-08-01.

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) 2000-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2002-08-01

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

Endorsement notice

The text of the International Standard IEC 61069-8:1999 was approved by CENELEC as a European Standard without any modification.

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

- IEC 60300-2 NOTE: Harmonized as EN 60300-2:1996 (not modified).
- IEC 61346-1 NOTE: Harmonized as EN 61346-1:1996 (not modified).
- IEC 61069-3 NOTE: Harmonized as EN 61069-3:1996 (not modified).
- IEC 61069-4 NOTE: Harmonized as EN 61069-4:1997 (not modified).
- IEC 61082-1 NOTE: Harmonized as EN 61082-1:1993 (not modified).
- IEC 61082-2 NOTE: Harmonized as EN 61082-2:1994 (not modified).
- IEC 61082-3 NOTE: Harmonized as EN 61082-3:1994 (not modified).
- IEC 61082-4 NOTE: Harmonized as EN 61082-4:1996 (not modified).
- IEC 61187 NOTE: Harmonized as EN 61187:1994 (modified).
- IEC 61355 NOTE: Harmonized as EN 61355:1997 (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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61069-1	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 61069-2	1993	Part 2: Assessment methodology	EN 61069-2	1994
IEC 61069-6	1998	Part 6: Assessment of system operability	EN 61069-6	1998
IEC 61069-7	1999	Part 7: Assessment of system safety	EN 61069-7	1999
IEC 61506	1997	Industrial-process measurement and control Documentation of application softwear	-	-
ISO/IEC 9126	1991	Information technology - Software product evaluation - Quality characteristics and guidelines for their use	-	-
ISO/IEC 12207	1995	Information technology - Software life cycle processes	-	-
ISO 9000	series	Quality management and quality assurance standards	EN ISO 9000	series
ISO 9001	1994	Quality systems - Model for quality assurance in design/ development, production, installation and servicing	EN ISO 9001	1994

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**NORME
INTERNATIONALE
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STANDARD**

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61069-8

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

**Partie 8:
Evaluation des propriétés non liées
à la tâche d'un système**

SIST EN 61069-8:2001

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

**Part 8:
Assessment of non-task-related
system properties**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 8: Assessment of non-task-related system properties

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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International Standard IEC 61069-8 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/278/FDIS	65A/282/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.

The relation of this part to the other parts of IEC 61069 and the relative place of this part within this 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.

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

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

IEC 61069 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

Part 4: Assessment of system performance

Part 5: Assessment of system dependability

Part 6: Assessment of system operability

Part 7: Assessment of system safety ¹⁾

Part 8: Assessment of non-task-related system properties

Annexes A, B, C and D are for information only.

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¹⁾ To be published.

INTRODUCTION

This part of IEC 61069 deals with the method which should be used to assess the non-task-related properties of industrial process measurement and control systems.

Assessment of a system is the judgement, based on evidence, of the suitability of the system for a specific mission or class of missions.

To obtain total evidence would require 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 61069-1) 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.

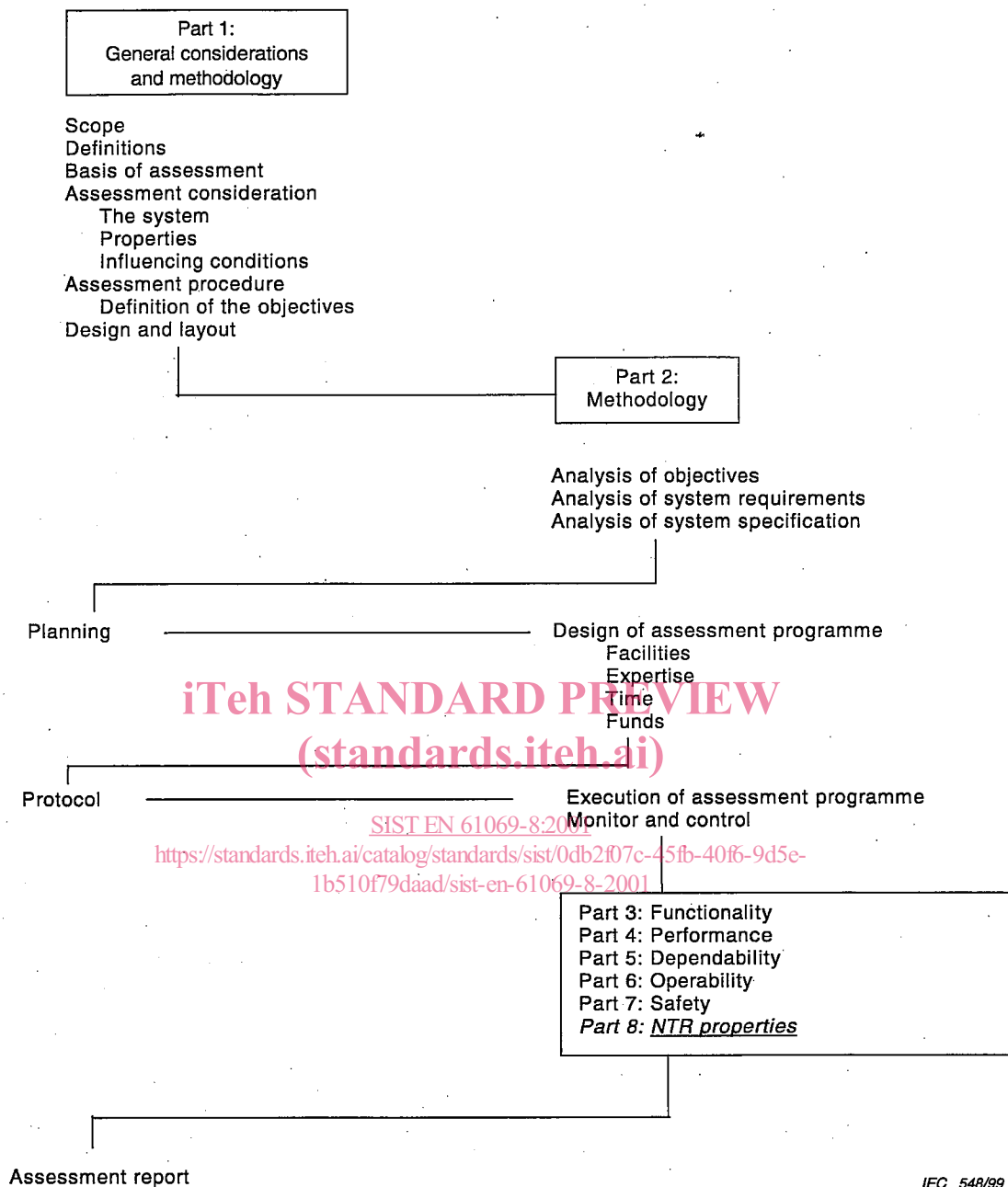


Figure 1 – General layout of IEC 61069