

SLOVENSKI STANDARD SIST EN 61970-405:2008

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Aplikacijski programski vmesnik za sistem upravljanja z energijo (EMS-API) - 405. del: Specifikacija vmesnika komponent (CIS) - Splošno sporočanje in naročanje (IEC 61970-405:2007)

Energy management system application program interface (EMS-API) -- Part 405: Generic Eventing and Subscription (GES)

Schnittstelle für Anwendungsprogramme für Energiemanagementsysteme (EMS-API) --Teil 405: Übermitteln von Ereignismeldungen (GES) (standards.iteh.ai)

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) -- Partie 405: Evénements génériques et souscriptions (GES)_{79-41fc-95a7-} 2c16641c7da5/sist-en-61970-405-2008

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Energy management system application program interface (EMS-API) -Part 405: Generic Eventing and Subscription (GES) (IEC 61970-405:2007)

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) -Partie 405: Evénements génériques et souscriptions (GES) (CEI 61970-405:2007) Schnittstelle für Anwendungsprogramme für Energiemanagementsysteme (EMS-API) -Teil 405: Übermitteln von Ereignismeldungen (GES) (IEC 61970-405:2007)

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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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Foreword

The text of document 57/888/FDIS, future edition 1 of IEC 61970-405, prepared by IEC TC 57, Power systems management and associated information exchange, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61970-405 on 2007-09-01.

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)	2008-06-01
_	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2010-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61970-405:2007 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:

	1 en	STANDARD PREVIEW
IEC 61850-7-2	NOTE	Harmonized as EN 61850-7-2:2003 (not modified).
IEC 61968-1	NOTE	(standards.iteh.ai)
	NOTE	
IEC 61968-3	NOTE ps://standar	Harmonized as EN 61966-3:2008 ds.iteh.ai/catalog/standards/sist/3071f484-b979-41fc-95a7-
		2c16641c7da5/sist-en-61970-405-2008

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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	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61970-1	2005	Energy management system application program interface (EMS-API) - Part 1: Guidelines and general requirements	EN 61970-1	2006
IEC/TS 61970-2	_ 1)	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	2005 ²⁾
IEC 61970-301	2003 iTe	Energy management system application program interface (EMS-API) - Part 301: Common Information Model (CIM) Base	EN 61970-301	2004
IEC/TS 61970-401	_ 1) ttps://stanc	Energy management system application program interface (EMS-API) - Part 401: Component interface specification (CIS) framework 2c16641c7da5/sist-en-61970-405-2008	 fc-95a7-	-
IEC 61970-402	_ 3)	Energy management system application program interface (EMS-API) - Part 402: Component Interface Specification (CIS) - Common services	-	-
OMG DAIS A&E	2005	Data Acquisition from Industrial Systems section Alarms and Events (DAIS A&E)	-	-
OMG DAF	2005	Utility Management System (UMS) Data Access Facility (DAF)	-	-
OPC A&E	2002	OPC Alarms and Events Specification	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

³⁾ At draft stage.

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Edition 1.0 2007-08

INTERNATIONAL STANDARD

Energy management system application program interface (EMS-API) – Part 405: Generic Eventing and Subscription (GES)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ENERGY MANAGEMENT SYSTEM APPLICATION PROGRAM INTERFACE (EMS-API) –

Part 405: Generic Eventing and Subscription (GES)

FOREWORD

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International Standard IEC 61970-405 has been prepared by IEC Technical Committee 57: Power systems management and associated information exchange.

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

FDIS	Report on voting
57/888/FDIS	57/907/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.

A list of all parts of the IEC 61970 series, under the general title *Energy Management System Application Program Interface (EMS-API)*, can be found on the IEC website.

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The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

This part of IEC 61970 is part of the IEC 61970 series that defines Application Program Interfaces (APIs) for an Energy Management System (EMS). The IEC 61970-4XX and IEC 61970-5XX series documents comprise Component Interface Specifications (CISs). The IEC 61970-4XX series CIS are specified as Platform Independent Models (PIMs), which means they are independent of the underlying technology used to implement them. PIM specifications are also referred to as Level 1 specifications. The IEC 61970-5XX series CIS, on the other hand, are specified as Platform Specific Models (PSMs). PSM specifications are also referred to as Level 2 specifications.

IEC 61970-4XX CISs specify the functional requirements for interfaces that a component (or application) should implement to exchange information with other components (or applications) and/or to access publicly available data in a standard way. The component interfaces describe the specific event types and message contents that can be used by applications for this purpose.

IEC 61970-405 specifies an interface for the efficient transfer of event messages and alarm acknowledge messages in a distributed environment. Small numbers of messages are transferred with short delay but also large amounts are transferred in short time but with possibly longer delay. This is a typical requirement for a SCADA system that acts as a real time data provider to other sub-systems. Other systems than SCADA may also benefit from the characteristics of Generic Eventing and Subscription (GES) interface. When short delay times as well as bulk message transfer is required, GES is a good fit.

The component interface specifications refer to entity objects for the power system domain that is defined in the IEC 61970-3XX series, including IEC 61970-301.