SLOVENSKI STANDARD
SIST EN 61970-407:2008

01-januar-2008

Aplikacijski programski vmesnik za sistem upravljanja z energijo (EMS-API) - 407. del: Specifikacija vmesnika komponent (CIS) - Dostop do časovno razporejenih podatkov (IEC 61970-407:2007)

Energy management system application program interface (EMS-API) -- Part 407: Time Series Data Access (TSDA)

Schnittstelle für Anwendungsprogramme für Energiemanagementsysteme (EMS-API) -- Teil 407: Zugriff auf Daten, die auf Zeitfolgen beruhen (TSDA)

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) -- Partie 407: Accès aux données en série chronologique (TSDA)

Ta slovenski standard je istoveten z: **EN 61970-407:2007**

ICS:

29.240.30	Krmilna oprema za elektroenergetske sisteme	Control equipment for electric power systems
35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

SIST EN 61970-407:2008 **en,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61970-407

September 2007

ICS 33.200

English version

Energy management system application program interface (EMS-API) - Part 407: Time Series Data Access (TSDA)

(IEC 61970-407:2007)

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) - Partie 407: Accès aux données en série chronologique (TSDA) (CEI 61970-407:2007)

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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 61970-407:2007 E

Foreword

The text of document 57/889/FDIS, future edition 1 of IEC 61970-407, 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 61970-407 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– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2010-09-01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.

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Endorsement notice

The text of the International Standard IEC 61970-407:2007 was approved by CENELEC as a European Standard without any modification.

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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	Year	Title	EN/HD	Year
IEC 61970-1	– [1)]	Energy management system application program interface (EMS-API) - Part 1: Guidelines and general requirements	EN 61970-1	2006 [2)]
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	Energy management system application program interface (EMS-API) - Part 301: Common Information Model (CIM) Base	EN 61970-301	2004
IEC/TS 61970-401	– [1)]	Energy management system application program interface (EMS-API) - Part 401: Component interface specification (CIS) framework	–	–
IEC 61970-402	– [3)]	Energy management system application program interface (EMS-API) - Part 402: Component Interface Specification (CIS) - Common services	–	–
OMG HDAIS	2003	Historical Data Access from Industrial Systems (HDAIS)	–	–
OMG DAF	2002	Utility Management System (UMS) Data Access Facility (DAF)	–	–
OMG DAIS	2002	Data Acquisition from Industrial Systems (DAIS)	–	–
OPC HDA	2003	OPC Historical Data Access Custom Interface Specification	–	–

[1)] Undated reference.

[2)] Valid edition at date of issue.

[3)] At draft stage.

IEC 61970-407

Edition 1.0 2007-08

INTERNATIONAL STANDARD

Energy management system application program interface (EMS-API) – Part 407: Time Series Data Access (TSDA)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 407: Time Series Data Access (TSDA)

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 61970-407 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
57/889/FDIS	57/908/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.

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.

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 61970-407 specifies an interface for the efficient transfer of time series data in a distributed environment. Small amounts of data are transferred with short delay but also large amounts of data are transferred in short time but with possibly longer delay. Replay of time series data is also supported. 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 TSDA. When short delay times as well as bulk data transfer is required TSDA is a good fit.

These 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.