SLOVENSKI STANDARD
SIST EN IEC 61970-401:2022

01-oktober-2022

Aplikacijski programski vmesnik za sistem upravljanja z energijo (EMS-API) - 401. del: Ogrodje profila

Energy management system application program interface (EMS-API) - Part 401: Profile framework

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) - Partie 401: Spécification d'interface de composants (CIS) - Cadre général

Ta slovenski standard je istoveten z: **EN IEC 61970-401:2022**

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 IEC 61970-401:2022 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61970-401

July 2022

ICS 33.200

English Version

Energy management system application program interface (EMS-API) - Part 401: Profile framework (IEC 61970-401:2022)

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) - Partie 401: Cadre de profils (IEC 61970-401:2022)

Schnittstelle für Anwendungsprogramme für Netzführungssysteme (EMS-API) - Teil 401: Rahmenwerk für Profile (IEC 61970-401:2022)

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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CENELEC

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 57/2482/FDIS, future edition 1 of IEC 61970-401, prepared by IEC/TC 57 "Power systems management and associated information exchange" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61970-401:2022.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop) 2023-04-04
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2025-07-04

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61970-401:2022 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61968-11	-	Application integration at electric utilities - System interfaces for distribution management - Part 11: Common information model (CIM) extensions for distribution	EN 61968-11	-
IEC/TS 61970-2	-	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	-
IEC 61970-300	series	Energy management system application program interface (EMS-API)	-	-
IEC 61970-501	2006	Energy management system application program interface (EMS-API) - Part 501: Common Information Model Resource Description Framework (CIM RDF) schema	EN 61970-501	2006
IEC 61970-552	-	Energy management system application program interface (EMS-API) - Part 552: CIMXML Model exchange format	EN 61970-552	-
OMG Unified-Modeling Language®		OMG document number: formal/2015-03-01, available at http://www.omg.org/spec/UML/2.5		-
World Wide Web-Consortium (W3C)		RDF 1.1 Primer from 24 June 2014, available at https://www.w3.org/TR/rdf11-primer/	-	-
World Wide Web-Consortium (W3C)		RDF 1.1 Concepts and Abstract Syntax from 25 February 2014, available at https://www.w3.org/TR/rdf11-concepts/	-	-
World Wide Web-Consortium (W3C)		RDF 1.1 XML Syntax from 25 February 2014, available at https://www.w3.org/TR/rdf-syntax-grammar/	-	-
World Wide Web-Consortium (W3C)		RDF Schema 1.1 from 25 February 2014, available at https://www.w3.org/TR/rdf-schema/	-	-

World Wide Web-Consortium (W3C)	OWL 2 Web Ontology Language Primer (Second Edition), W3C Recommendation 11 December 2012, available at https://www.w3.org/TR/owl2-primer/	-	-
World Wide Web-Consortium (W3C)	OWL 2 Web Ontology Language Structural Specification and Functional-Style Syntax (Second Edition), W3C Recommendation 11 December 2012, available at https://www.w3.org/TR/owl2-syntax/	-	-

IEC 61970-401

Edition 1.0 2022-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Energy management system application program interface (EMS-API) – Part 401: Profile framework

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) – Partie 401: Cadre de profils

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 401: Profile framework

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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IEC 61970-401 has been prepared by IEC technical committee 57: Power systems management and associated information exchange. It is an International Standard.

This first edition cancels and replaces IEC TS IEC 61970-401 published in 2005. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) The previous edition of IEC TS 61970-401:2005 provided an overview of the Component Interface Specifications (CIS) IEC 61970-402, IEC 61970-403, IEC 61970-404, IEC 61970-405, and IEC 61970-407. IEC 61970-402 to IEC 61970-407 are duplicates of existing OPC interfaces from OPC Foundation and the DAIS/HDA interfaces from OMG. Hence IEC 61970-402 to IEC 61970-407 have been withdrawn and IEC TS 61970-401:2005 no longer serves a purpose.

b) IEC 61970-401 (this document) does not contain an overview of Component Interface Specifications (CIS) but instead a description of how to create profile specifications that describes dataset contents (or message contents). Hence it has been renamed "Profile framework". The profile specifications IEC 61970-450 (all parts) and IEC 61970-600 (all parts) describe dataset contents. The purpose of this document is to define the rules to be followed in the process of creating profile specifications.

The text of this International Standard is based on the following documents:

Draft	Report on voting
57/2482/FDIS	57/2494/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 61970 series, published 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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

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