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Aplikacijski programski vmesnik za sistem upravljanja z energijo (EMS-API) - 301. del: Osnova skupnega informacijskega modela (CIM)

Energy management system application program interface (EMS-API) - Part 301: Common information model (CIM) base

Schnittstelle für Anwendungsprogramme für Netzführungssysteme (EMS-API) - Teil 301: Allgemeines Informationsmodell (CIM), Basismodell

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Interface de programmation d'application pour système de gestion d'énergie (EMS-API) - Part 301: Base de modèle d'information commun (CIM)

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2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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Energy management system application program interface (EMS-API) - Part 301: Common information model (CIM) base

(IEC 61970-301:2011)

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) -
Part 301: Base de modèle d'information commun (CIM)
(CEI 61970-301:2011)

Schnittstelle für Anwendungsprogramme für Netzführungssysteme (EMS-API) -
Teil 301: Allgemeines Informationsmodell (CIM), Basismodell
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European Committee for Electrotechnical Standardization
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Foreword

The text of document 57/1136/FDIS, future edition 3 of IEC 61970-301, 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 61970-301:2011.

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)	2012-06-30
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-09-30

This document supersedes EN 61970-301:2004.

EN 61970-301:2011 includes the following significant technical changes with respect to EN 61970-301:2004:

— regulation control models were added with a new RegulatingControl class which provides the capability to model multiple equipments participating in a regulation scheme;

— new “OperationalLimits” package for equipment ratings;

— partial ownership specification added;

— LoadResponseCharacteristic class was enhanced to better model the characteristic response of the load demand due to changes in system conditions such as voltage and frequency;

— new ControlArea package added with load forecast and area interchange specifications;

— EPRI CIM for Planning project proposals to support the exchange of planning models were incorporated;

— branch group “interface” monitoring specification was added;

— composite switch model was changed to better model distribution use cases;

— extensions were added to support powerflow “case input” so that profiles are not required to use time based schedules and detailed connectivity (via new bus-branch model);

— new Equivalents package added to model equivalent networks;

— new Contingency package added to handle contingencies;

— various editorial changes to cleanup UML model;

— non-SI units have been changed to SI units.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of the International Standard IEC 61970-301:2011 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:

IEC 61850-7-3	NOTE	Harmonized as EN 61850-7-3.
IEC 61968-11:2010	NOTE	Harmonized as EN 61968-11:2010 (not modified).
IEC 61970-501	NOTE	Harmonized as EN 61970-501.

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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 61850	Series	Communication networks and systems in substations	EN 61850	Series
IEC 61850-7-4	2010	Communication networks and systems for power utility automation - Part 7-4: Basic communication structure - Compatible logical node classes and data object classes	EN 61850-7-4	2010
IEC 61968	Series	Application integration at electric utilities - System interfaces for distribution management	EN 61968	Series
IEC/TS 61970-2	-	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	-
ISO 8601	2004	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-

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