
**Aplikacijski programski vmesnik za sistem upravljanja z energijo (EMS-API) - 301.
del: Osnova skupnega informacijskega modela (CIM) - Dopolnilo A1**

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

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

Ta slovenski standard je istoveten z: EN IEC 61970-301:2020/A1:2022

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 61970-301:2020/A1:2022 en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61970-301:2020/A1

April 2022

ICS 33.200

English Version

**Energy management system application program interface
(EMS-API) - Part 301: Common information model (CIM) base
(IEC 61970-301:2020/AMD1:2022)**

Interface de programmation d'application pour système de
gestion d'énergie (EMS-API) - Partie 301: Base de modèle
d'information commun (CIM)
(IEC 61970-301:2020/AMD1:2022)

Schnittstelle für Anwendungsprogramme für
Netzführungssysteme (EMS-API) - Teil 301: Allgemeines
Informationsmodell (CIM), Basismodell
(IEC 61970-301:2020/AMD1:2022)

This amendment A1 modifies the European Standard EN IEC 61970-301:2020; it was approved by CENELEC on 2022-03-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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SIST EN IEC 61970-301:2020/A1:2022

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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

EN IEC 61970-301:2020/A1:2022 (E)**European foreword**

The text of document 57/2439/FDIS, future IEC 61970-301/AMD1, 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 61970-301:2020/A1:2022.

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) 2022-12-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-03-29

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Endorsement notice

The text of the International Standard IEC 61970-301:2020/AMD1:2022 was approved by CENELEC as a European Standard without any modification.



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



AMENDMENT 1
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Part 301: Common information model (CIM) base**

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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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ICS 33.200

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ENERGY MANAGEMENT SYSTEM APPLICATION
PROGRAM INTERFACE (EMS-API) –****Part 301: Common information model (CIM) base****AMENDMENT 1****FOREWORD**

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Amendment 1 to IEC 61970-301:2020 has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

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

Draft	Report on voting
57/2439/FDIS	57/2450/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 Amendment 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/.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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- replaced by a revised edition, or
- amended.

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4 CIM specification

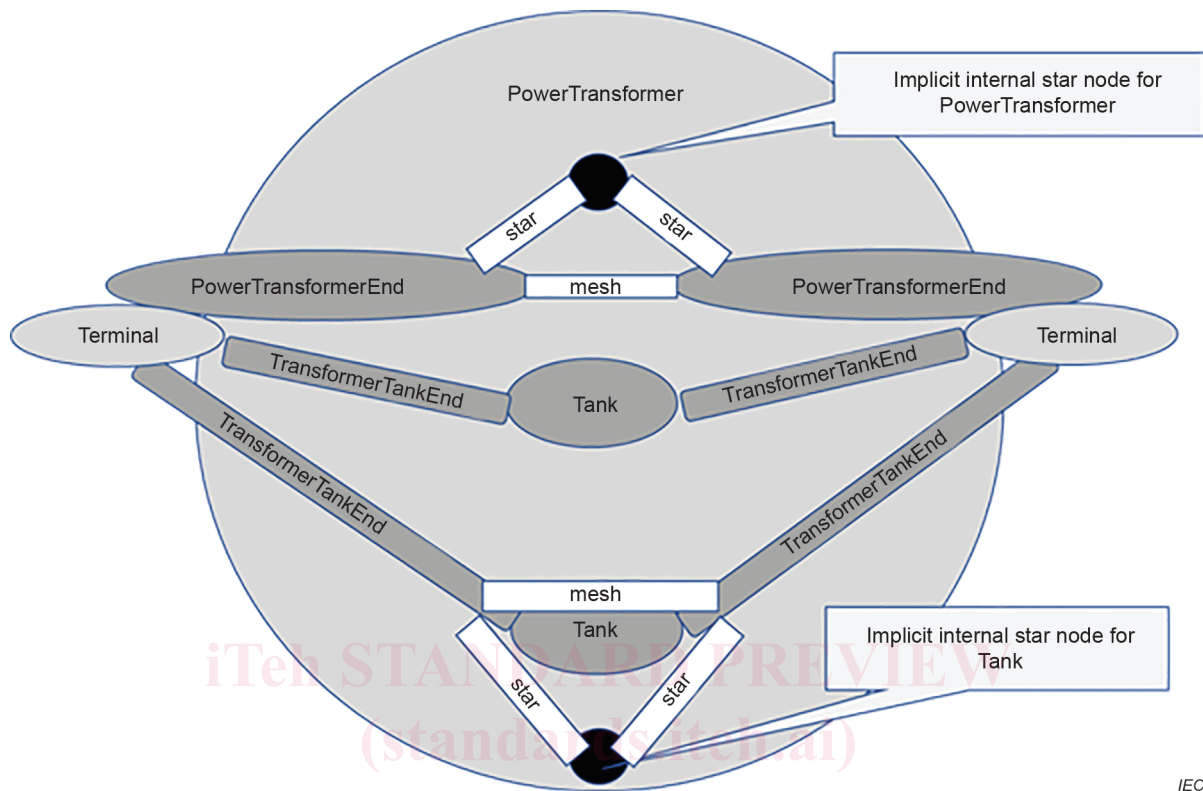
4.1 Overview

Replace the existing text of the third bullet point in Subclause 4.1 by the following new text:

- iec61970cim17v40_iec61968cim13v13a_iec62325cim03v17a.eap

Figure 12 – Transformer and Tank model

Replace the existing Figure 12 with the following new figure:



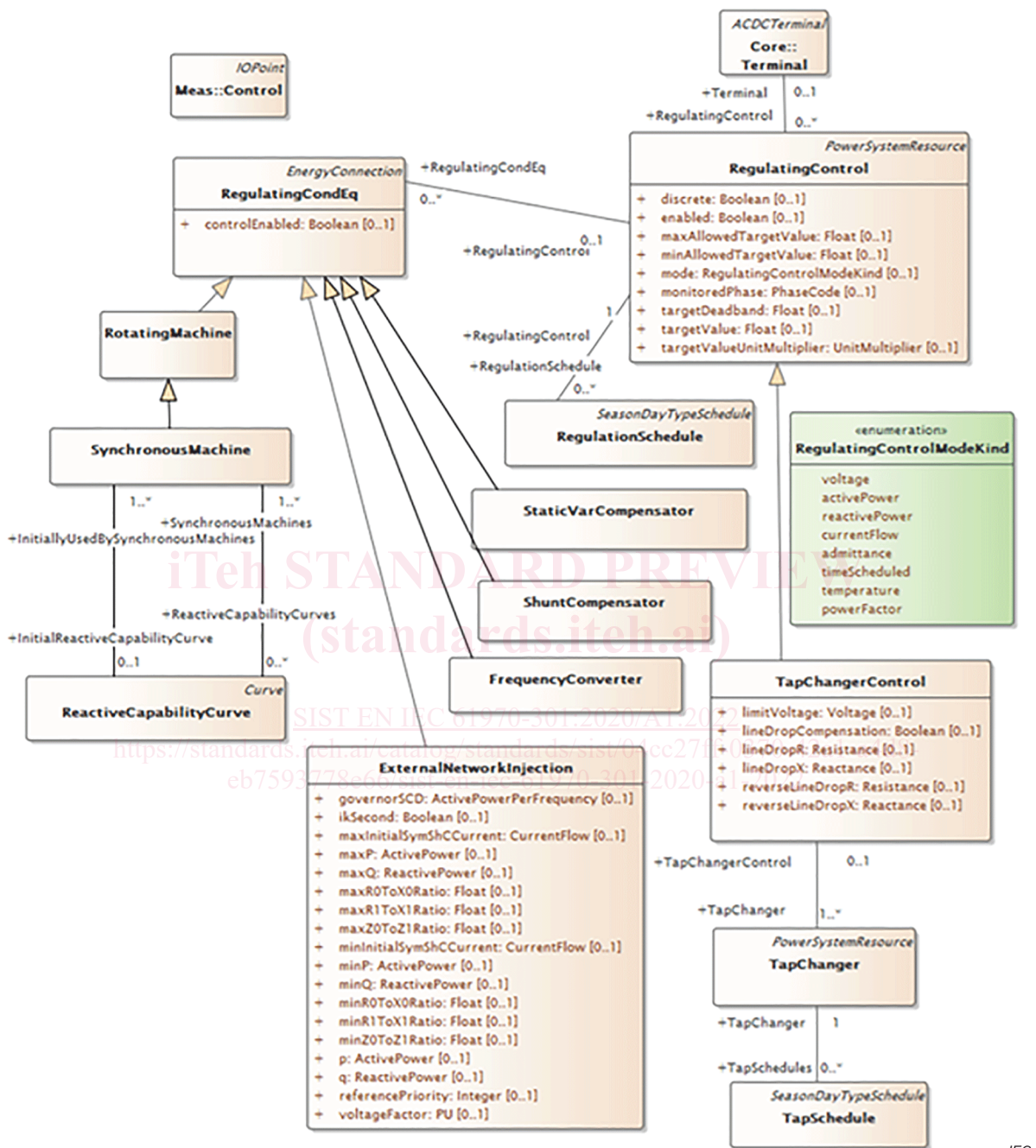
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<https://standards.iteh.ai/catalog/standards/sist/04cc27ff-0370-42a1-a4d8-eb7593778e66/sist-en-iec-61970-301-2020-a1-2022>

Figure 36 – Regulating control models

Replace the existing Figure 36 with the following new figure:



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4.5.16 Feeder model

Replace, in the second sentence of the first paragraph of Subclause 4.5.16, "ConductingEquipment" by "ConnectivityNodeContainer".

4.6.6 CIM profiles

Replace, in footnote 1, "http://www.CIMTool.org" with "https://cimug-org.github.io/CIMTool/".

Table 141 – Attributes of Core::Terminal

Remove, in the first "description" row " GroundSwitch".

Table 151 – Association ends of Wires::AsynchronousMachine with other classes

Replace, in the first column of the fourth row of Table 151 (RegulatingControl), "1" with "0".

Table 186 – Association ends of Wires::ExternalNetworkInjection with other classes

Replace, in the first column of the first row of Table 186 (RegulatingControl), "1" with "0".

Table 188 – Association ends of Wires::FrequencyConverter with other classes

Replace, in the first column of the first row of Table 188, "1" with "0".

Table 204 – Association ends of Wires::LinearShuntCompensator with other classes

Replace, in the first column of the third row of Table 204 (RegulatingControl), "1" with "0".

Table 212 – Association ends of Wires::NonlinearShuntCompensator with other classes

Replace, in the first column of the fourth row of Table 212 (RegulatingControl), "1" with "0".

Table 252 – Association ends of Wires::PowerElectronicsConnection with other classes

Replace, in the first column of the fourth row of Table 252 (RegulatingControl), "1" with "0".

Table 272 – Association ends of Wires::RegulatingCondEq with other classes

Replace, in the first column of the first row of Table 272 (RegulatingControl), "1" with "0".

Table 274 – Association ends of Wires::RegulatingControl with other classes

Replace, in the third column of the second row of Table 274 (RegulatingCondEq), "1" with "0".

Table 279 – Association ends of Wires::RotatingMachine with other classes

Replace, in the first column of the third row of Table 279 (RegulatingControl), "1" with "0".

6.4.75 ShuntCompensator

Replace, in the second sentence of the first paragraph of Subclause 6.4.75, "reactivePerSection" with "bPerSection".

Table 286 – Association ends of Wires::ShuntCompensator with other classes

Replace, in the first column of the third row of Table 286 (RegulatingControl), "1" with "0".

Table 291 – Association ends of Wires::StaticVarCompensator with other classes

Replace, in the first column of the second row of Table 291 (RegulatingControl), "1" with "0".

Table 300 – Association ends of Wires::SynchronousMachine with other classes

Replace, in the first column of the seventh row of Table 300 (RegulatingControl), "1" with "0".