

Energy Management System Application Program
Interface (EMS-API) - Part 552: CIMXML Model Exchange
Format

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English Version

Energy management system application program interface (EMS-API) - Part 552: CIMXML Model exchange format (IEC 61970-552:2016)

Interface de programmation d'application pour système de
gestion d'énergie (EMS-API) -
Partie 552: Format d'échange de modèle CIMXML
(IEC 61970-552:2016)

Schnittstelle für Anwendungsprogramme für
Netzführungssysteme (EMS-API) -
Teil 552: CIM-XML-Modell Austauschformat
(IEC 61970-552:2016)

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 57/1752/FDIS, future edition 2 of IEC 61970-552, 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 61970-552:2016.

The following dates are fixed:

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-11-01

This document supersedes EN 61970-552:2014.

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Endorsement notice

The text of the International Standard IEC 61970-552:2016 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 61968-11	NOTE	Harmonized as EN 61968-11.
IEC 61970-1	NOTE	Harmonized as EN 61970-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050	Series	International Electrotechnical Vocabulary	-	-
IEC/TS 61970-2	-	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	-
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
W3C	-	RDF/XML Syntax Specification	-	-
W3C	-	XSL Transformations (XSLT)	-	-
W3C	-	Document Object Model (DOM)	-	-

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INTRODUCTION

This part of IEC 61970 is part of the series of standards that define an Application Program Interface (API) for an Energy Management System (EMS).

IEC 61970-301 specifies a Common Information Model (CIM): a logical view of the physical aspects of an electric utility operations. The CIM is described using the Unified Modelling Language (UML), a language used to specify, visualize, and document systems in an object-oriented manner. UML is an analysis and design language; it is not a programming language. In order for software programs to use the CIM, it must be transformed into a schema form that supports a programmable interface.

IEC 61970-501 describes the translation of the CIM in UML form into a machine readable format as expressed in the Extensible Markup Language (XML) representation of that schema using the Resource Description Framework (RDF) Schema specification language.

This part of IEC 61970 specifies how the CIM RDF schema specified in IEC 61970-501 is used to exchange power system models using XML (referred to as CIMXML) defined in the 61970-45x series of profile standards, such as the CIM Transmission Network Model Exchange Profile described in IEC 61970-452.

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