

**Framework for energy market communications - Part
301: Common Information Model (CIM) extensions for
markets**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 62325-301:2014 sisaldab Euroopa standardi EN 62325-301:2014 ingliskeelset teksti.	This Estonian standard EVS-EN 62325-301:2014 consists of the English text of the European standard EN 62325-301:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 33.200

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English Version

**Framework for energy market communications - Part 301:
Common information model (CIM) extensions for markets
(IEC 62325-301:2014)**

Cadre pour les communications pour le marché de l'énergie
- Partie 301: Extensions du modèle d'information commun
(CIM) pour les marchés
(CEI 62325-301:2014)

Kommunikation im Energiemarkt - Teil 301: CIM-Profil-
Erweiterung für Märkte
(IEC 62325-301:2014)

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Foreword

The text of document 57/1438/FDIS, future edition 1 of IEC 62325-301, 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 62325-301:2014.

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) 2015-03-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-06-12

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Endorsement notice

The text of the International Standard IEC 62325-301:2014 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/TS 61970-2	NOTE	Harmonised as CLC/TS 61970-2.
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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 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 61970-301	-	Energy management system application program interface (EMS-API) -- Part 301: Common information model (CIM) base	EN 61970-301	-
IEC 62325-450	-	Framework for energy market communications -- Part 450: Profile and context modelling rules	EN 62325-450	-

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INTRODUCTION

This International Standard is part of the IEC 62325 series for deregulated energy market data exchanges. This standard was originally based upon the work of the European transmission system operators TF 14 EDI (Electronic data interchange) and the EPRI TR 1009455 and TR 1011431 (CIM extensions to support market operations, phase 1 and phase 2).

The principal objective of the IEC 62325 series of standards is to produce standards which facilitate the integration of market application software developed independently by different vendors into a market management system, between market management systems and market participant systems. This is accomplished by defining message exchanges to enable these applications or systems access to public data and exchange information independent of how such information is represented internally.

The common information model (CIM) specifies the basis for the semantics for this message exchange. The profile specifications, which are contained in other parts of the IEC 62325 standards, specify the content of the messages exchanged. Profile specifications in other parts of the IEC 62325 standard support both European style markets based on the European regulations and the Third Party Access and zonal market concepts and US style markets characterized by day ahead unit commitment by a market operator, intraday and real time balancing through central dispatch, and settlement based on locational marginal prices. These markets are used in the US and in other parts of the world and are not exclusively limited to North America.

The CIM is an abstract model that represents all the major objects in an electric utility enterprise typically needed to model the operational aspects of a utility. This model includes public classes and attributes for these objects, as well as the relationships between them.

The objects represented in the CIM are abstract in nature and may be used in a wide variety of applications. The use of the CIM goes far beyond its application in a market management system. This standard should be understood as a tool to enable integration in any domain where a market system model is needed to facilitate interoperability and plug compatibility between applications and systems independent of any particular implementation.

The IEC 62325 standards are part of a series of standards. IEC 61970 standards define the EMS application programming interfaces and the IEC 61968 standards define System interfaces for distribution management. IEC 62325-301 corresponds to the IEC 61970-301 and the IEC 61968-11 standards that describe parts of the common information model relevant to modeling interfaces for EMS, DMS and MMS systems. While there are multiple IEC standards dealing with different parts of the CIM, there is a single, unified information model comprising the CIM behind all these individual standards documents.