

**Framework for energy market communications - Part  
451-2: Scheduling business process and contextual  
model for CIM European market**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 25.07.2014.	Date of Availability of the European standard is 25.07.2014.
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ICS 33.200

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**Framework for energy market communications - Part 451-2:  
Scheduling business process and contextual model for CIM  
European market  
(IEC 62325-451-2:2014)**

Cadre pour les communications pour le marché de l'énergie  
- Partie 451-2: Processus métier de programmation et  
modèle contextuel pour le marché européen CIM  
(CEI 62325-451-2:2014)

Kommunikation im Energiemarkt - Teil 451-2: Planungs-  
Geschäftsprozess und kontextbezogene CIM-Modelle für  
den europäischen Markt  
(IEC 62325-451-2:2014)

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 57/1355/CDV, future edition 1 of IEC 62325-451-2, 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 62325-451-2:2014.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-06-12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 62325-451-2:2014 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 61968-11	NOTE	Harmonised as EN 61968-11.
IEC 61970-301	NOTE	Harmonised as EN 61970-301.

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## INTRODUCTION

This International Standard is one of the IEC 62325-451-x series for deregulated energy market data exchanges based on the European style market profile. This standard defines the document contextual models, the message assembly models as well as the XML schemas to be used for the time based scheduling process.

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), i.e. IEC 62325-301, IEC 61970-301 and IEC 61968-11 standards, specifies the basis for the semantics for message exchange.

This European style market profile is based on different parts of the CIM IEC standard and specifies the content of the messages exchanged.

This document provides for the European style market profile the time based scheduling process. These market processes are based on the European regulations, and on the concepts of third party access and zonal market. This standard was originally based upon the work of the European Transmission System Operators (ETSO) Task Force EDI (Electronic Data Interchange) and then on the work of the European Network of Transmission System Operators (ENTSO-E) Working Group EDI.

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## FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

### Part 451-2: Scheduling business process and contextual model for CIM European market

#### 1 Scope

This part of IEC 62325 specifies a UML package for the scheduling business process and its associated document contextual models, assembly models and XML schemas for use within the European style electricity markets.

This International Standard is based on the European style market contextual model (IEC 62325-351). The scheduling business process covered by this International Standard is described in Clause 5.

The relevant aggregate core components (ACCs) defined in IEC 62325-351 have been contextualised into aggregated business information entities (ABIEs) to satisfy the requirements of the European style market scheduling business process.

The contextualised ABIEs have been assembled into the schedule document, contextual model, the anomaly report contextual model and the confirmation report contextual model.

Related assembly models and XML schema for the exchange of scheduling information between market participants is automatically generated from the assembled document contextual models.

#### 2 Normative references

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.

IEC TS 61970-2, *Energy management system application program interface (EMS-API) – Part 2: Glossary*

IEC 62325-301, *Framework for energy market communications – Part 301: Common information model (CIM) – Extensions for markets*

IEC 62325-351, *Framework for energy market communications – Part 351: CIM European market model exchange profile*

IEC 62325-450, *Framework for energy market communications – Part 450: Profile and context modelling rules*

IEC 62325-451-1, *Framework for energy market communications – Part 451-1: Acknowledgement business process and contextual model for CIM European market*

IEC 62361-100, *Power systems management and associated information exchange – Interoperability in the long term – Part 100: CIM profiles to XML schema mapping*<sup>1</sup>

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC TS 61970-2, as well as the following apply.

NOTE General glossary definitions can be found in IEC 60050, *International Electrotechnical Vocabulary*.

#### 3.1

##### **aggregate business information entity**

##### **ABIE**

a re-use of an aggregate core component (ACC) in a specified business

#### 3.2

##### **aggregate core component**

##### **ACC**

collection of related pieces of business information that together convey a distinct business meaning, independent of any specific business context

Note 1 to entry: Expressed in modelling terms, this is the representation of an object class, independent of any specific business context.

[SOURCE: ISO/TS 15000-5:2005, Clause 9, modified (second sentence has been transformed into Note 1 to entry)]

#### 3.3

##### **application program interface**

##### **API**

set of public functions provided by an executable application component for use by other executable application components

#### 3.4

##### **assembly model**

assembly model is a model that prepares information in a business context for assembly into electronic documents for data interchange

#### 3.5

##### **based on**

##### **IsBasedOn**

use of an artefact that has been restricted according to the requirements of a specific business context

[SOURCE: IEC 62325-450:2013, 3.4]

#### 3.6

##### **business context**

formal description of a specific business circumstance as identified by the values of a set of context categories, allowing different business circumstances to be uniquely distinguished

[SOURCE: UN/Cefact, Unified Context Methodology Technical Specification]

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<sup>1</sup> To be published.