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Standards

Irish Standard
I.S. EN 62325-451-1:2017

Framework for energy market
communications - Part 451-1:
Acknowledgement business process and
contextual model for CIM European market

I.S. EN 62325-451-1:2017

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National Foreword

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EUROPEAN STANDARD

EN 62325-451-1

NORME EUROPÉENNE

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Supersedes EN 62325-451-1:2013

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Framework for energy market communications -
Part 451-1: Acknowledgement business process and contextual
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(IEC 62325-451-1:2017)

Cadre pour les communications pour le marché de l'énergie -
Partie 451-1: Processus métier d'accusé de réception et
modèle contextuel pour le marché européen CIM
(IEC 62325-451-1:2017)

Kommunikation im Energiemarkt -
Teil 451-1: Geschäftsprozessnachweis und
kontextbezogenes CIM-Modell für den europäischen Markt
(IEC 62325-451-1:2017)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

EN 62325-451-1:2017

European foreword

The text of document 57/1789/FDIS, future edition 2 of IEC 62325-451-1, 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 62325-451-1:2017.

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) 2017-12-06
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-03-06

This document supersedes EN 62325-451-1:2013

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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 61970-301	NOTE	Harmonized as EN 61970-301.
IEC 62325-301	NOTE	Harmonized as EN 62325-301.

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/TS 61970-2	-	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	-
IEC 62325-351	-	Framework for energy market communications - Part 351: CIM European market model exchange profile	EN 62325-351	-
IEC 62325-450	-	Framework for energy market communications - Part 450: Profile and context modelling rules	EN 62325-450	-
IEC 62361-100	-	Power systems management and associated information exchange - Interoperability in the long term - Part 100: CIM profiles to XML schema mapping	EN 62361-100	-

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**Cadre pour les communications pour le marché de l'énergie –
Partie 451-1: Processus métier d'accusé de réception et modèle contextuel
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INTERNATIONAL STANDARD

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

**Cadre pour les communications pour le marché de l'énergie –
Partie 451-1: Processus métier d'accusé de réception et modèle contextuel
pour le marché européen CIM**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 451-1: Acknowledgement business process and contextual model for CIM European market

FOREWORD

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International Standard IEC 62325-451-1 has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Addition of an optional attribute `ProcessType` to the acknowledgement document to ease routing of incoming acknowledgement document instances to the appropriate application.
- b) Clarification of the activity diagram for the acknowledgement process.
- c) Addition of the list of constraints on datatypes.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
57/1789/FDIS	57/1819/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62325 series, published under the general title *Framework for energy market communications*, can be found on the IEC website.

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

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- amended.

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INTRODUCTION

This document is one part of the IEC 62325 series for deregulated energy market communications.

The principal objective of the IEC 62325 series 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 allow 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, 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 generic technical and application acknowledgement document that can be used in all European style market processes. These market processes are based on the European regulations, and on the concepts of third party access and zonal markets.

This document was originally based upon the work of the European Transmission System Operators (ETSO) and then on the work of the European Network of Transmission System Operators (ENTSO-E) on electronic data interchange.

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 451-1: Acknowledgement business process and contextual model for CIM European market

1 Scope

Based on the European style market contextual model (IEC 62325-351), this part of IEC 62325 specifies a UML package for the acknowledgment business process and its associated document contextual model, assembly model and XML schema for use within the European style electricity markets.

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

The contextualized ABIEs have been assembled into the acknowledgment document contextual model.

A related assembly model and an XML schema for the exchange of acknowledgement information between market participants is automatically generated from the assembled document contextual model.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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

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

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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