

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**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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## CONTENTS

FOREWORD .....	5
INTRODUCTION .....	7
1 Scope .....	8
2 Normative references .....	8
3 Terms and definitions .....	8
4 Document contextual model and message assembly model basic concepts .....	10
4.1 Overview .....	10
4.2 European style market package structure .....	11
4.3 From the European style market profile to the document contextual model .....	12
4.4 From the document contextual model to the message assembly model .....	13
4.5 From the assembly model to the XML schema .....	14
5 The acknowledgment business process .....	14
5.1 Business process definition .....	14
5.1.1 General .....	14
5.1.2 Technical acknowledgment .....	15
5.1.3 Application acknowledgment .....	15
5.2 Business rules for the acknowledgment document .....	16
5.2.1 General .....	16
5.2.2 Time .....	16
5.2.3 Reason .....	16
6 Contextual and assembly models .....	17
6.1 Acknowledgement contextual model .....	17
6.1.1 Overview of the model .....	17
6.1.2 IsBasedOn relationships from the European style market profile .....	18
6.1.3 Detailed Acknowledgement contextual model .....	19
6.2 Acknowledgement assembly model .....	24
6.2.1 Overview of the model .....	24
6.2.2 IsBasedOn relationships from the European style market profile .....	25
6.2.3 Detailed Acknowledgement assembly model .....	25
6.2.4 Datatypes .....	30
6.2.5 Enumerations .....	33
7 XML schema .....	33
7.1 XML schema URN Namespace rules .....	33
7.2 Code list URN namespace rules .....	34
7.3 URI rules for model documentation .....	34
7.3.1 Datatype .....	34
7.3.2 Class .....	34
7.3.3 Attribute .....	34
7.3.4 Association end role name .....	35
7.4 Acknowledgement_MarketDocument schema .....	35
7.4.1 Schema Structure .....	35
7.4.2 Schema description .....	37
Bibliography .....	40

Figure 1 – IEC 62325-450 modelling framework .....	11
Figure 2 – Overview of European style market profile dependency.....	12
Figure 3 – Message assembly criteria .....	13
Figure 4 – Acknowledgement process .....	15
Figure 5 – Acknowledgement contextual model.....	18
Figure 6 – Acknowledgement assembly model .....	24
Figure 7 – Acknowledgement_MarketDocument XML schema structure – 1/2 .....	36
Figure 8 – Acknowledgement_MarketDocument XML schema structure – 2/2 .....	37
Table 1 – Codes used at the document header level .....	17
Table 2 – Codes used at the TimeSeries level when there is a Reason code of A03 at the document header level.....	17
Table 3 – Codes used at the Period level when there is a Reason code A03 at the document header level and a code A21 at the TimeSeries level .....	17
Table 4 – IsBasedOn dependency.....	19
Table 5 – Attributes of Acknowledgement contextual model::Acknowledgement_MarketDocument .....	19
Table 6 – Association ends of Acknowledgement contextual model::Acknowledgement_MarketDocument with other classes .....	20
Table 7 – Attributes of Acknowledgement contextual model::MarketParticipant .....	21
Table 8 – Association ends of Acknowledgement contextual model:: MarketParticipant with other classes .....	21
Table 9 – Attributes of Acknowledgement contextual model::MarketRole .....	21
Table 10 – Attributes of Acknowledgement contextual model::Reason .....	21
Table 11 – Attributes of Acknowledgement contextual model::Received_MarketDocument .....	22
Table 12 – Attributes of Acknowledgement contextual model::Receiver_MarketParticipant.....	22
Table 13 – Association ends of Acknowledgement contextual model::Receiver_MarketParticipant with other classes .....	22
Table 14 – Attributes of Acknowledgement contextual model::Time_Period.....	23
Table 15 – Association ends of Acknowledgement contextual model:: Time_Period with other classes .....	23
Table 16 – Attributes of Acknowledgement contextual model::TimeSeries.....	23
Table 17 – Association ends of Acknowledgement contextual model:: TimeSeries with other classes .....	24
Table 18 – IsBasedOn dependency.....	25
Table 19 – Attributes of Acknowledgement assembly model::Acknowledgement_MarketDocument .....	26
Table 20 – Association ends of Acknowledgement assembly model::Acknowledgement_MarketDocument with other classes .....	28
Table 21 – Attributes of Acknowledgement assembly model::Reason.....	28
Table 22 – Attributes of Acknowledgement assembly model::Time_Period .....	29
Table 23 – Association ends of Acknowledgement assembly model:: Time_Period with other classes .....	29
Table 24 – Attributes of Acknowledgement assembly model::TimeSeries .....	29

Table 25 – Association ends of Acknowledgement assembly model:: TimeSeries with other classes .....	30
Table 26 – Attributes of ESMPDataTypes::ESMP_DateTimeInterval .....	30
Table 27 – Attributes of ESMPDataTypes::ESMP_DateTime .....	30
Table 28 – Attributes of ESMPDataTypes::ESMPVersion_String .....	31
Table 29 – Attributes of ESMPDataTypes::ID_String .....	31
Table 30 – Attributes of ESMPDataTypes::MarketRoleKind_String .....	31
Table 31 – Attributes of ESMPDataTypes::MessageKind_String .....	31
Table 32 – Attributes of ESMPDataTypes::PartyID_String .....	32
Table 33 – Attributes of ESMPDataTypes::PayloadId_String .....	32
Table 34 – Attributes of ESMPDataTypes::ReasonCode_String .....	32
Table 35 – Attributes of ESMPDataTypes::ReasonText_String .....	32
Table 36 – Attributes of ESMPDataTypes::YMDHM_DateTime .....	33

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FDIS	Report on voting
57/1381/FDIS	57/1396/RVD

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

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

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

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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, IEC 62325-451-1, defines the document contextual model, the message assembly model as well as the XML schema to be used for the acknowledgement 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) described in IEC 62325-301<sup>1</sup>, 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 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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<sup>1</sup> To be published.

## FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

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

#### 1 Scope

This International Standard is one of the IEC 62325-451-x series for deregulated energy market data exchanges and is applicable to European style electricity markets.

Based on the European style market contextual model (IEC 62325-351), this particular International Standard 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 contextualised into aggregated business information entities (ABIEs) to satisfy the requirements of the European style market acknowledgment business process.

The contextualised 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, 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 61970-2:2004, *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 62325-450:2013, *Framework for energy market communications – Part 450: Profile and context modeling rules*

IEC 62361-100, *Power systems management and associated information exchange – Interoperability in the long term – Part 100: CIM profiles to XML schema mapping<sup>2</sup>*

#### 3 Terms and definitions

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

<sup>2</sup> To be published.