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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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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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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..... | 12 |
| 4.5 From the assembly model to the XML schema | 12 |
| 5 The acknowledgment business process | 12 |
| 5.1 Business process definition..... | 12 |
| 5.1.1 General | 12 |
| 5.1.2 Technical acknowledgment..... | 13 |
| 5.1.3 Application acknowledgment..... | 13 |
| 5.2 Business rules for the acknowledgment document | 14 |
| 5.2.1 General | 14 |
| 5.2.2 Time | 14 |
| 5.2.3 Reason..... | 14 |
| 6 Contextual and assembly models..... | 15 |
| 6.1 Acknowledgement contextual model | 15 |
| 6.1.1 Overview of the model | 15 |
| 6.1.2 IsBasedOn relationships from the European style market profile..... | 16 |
| 6.1.3 Detailed Acknowledgement contextual model | 17 |
| 6.2 Acknowledgement assembly model..... | 23 |
| 6.2.1 Overview of the model | 23 |
| 6.2.2 IsBasedOn relationships from the European style market profile..... | 23 |
| 6.2.3 Detailed Acknowledgement assembly model..... | 24 |
| 6.2.4 Primitives | 28 |
| 6.2.5 Datatypes | 28 |
| 6.2.6 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..... | 41 |
| Figure 1 – IEC 62325-450 modelling framework..... | 10 |

| | |
|--|----|
| Figure 2 – Overview of European style market profile dependency..... | 11 |
| Figure 3 – Acknowledgement process | 13 |
| Figure 4 – Acknowledgement contextual model..... | 16 |
| Figure 5 – Acknowledgement assembly model..... | 23 |
| Figure 6 – Acknowledgement_MarketDocument general XML schema structure..... | 36 |
| Figure 7 – Acknowledgement_MarketDocument TimeSeries XML schema structure..... | 37 |
| | |
| Table 1 – Codes used at the document header level | 14 |
| Table 2 – Codes used at the TimeSeries level when there is a Reason code of A03 at the document header level..... | 15 |
| 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 | 15 |
| Table 4 – IsBasedOn dependency..... | 17 |
| Table 5 – Attributes of Acknowledgement contextual model::Acknowledgement_MarketDocument | 17 |
| Table 6 – Association ends of Acknowledgement contextual model::Acknowledgement_MarketDocument with other classes | 18 |
| Table 7 – Attributes of Acknowledgement contextual model::MarketParticipant | 19 |
| Table 8 – Association ends of Acknowledgement contextual model:: MarketParticipant with other classes | 19 |
| Table 9 – Attributes of Acknowledgement contextual model::MarketRole | 19 |
| Table 10 – Attributes of Acknowledgement contextual model::Process..... | 19 |
| Table 11 – Attributes of Acknowledgement contextual model::Reason | 20 |
| Table 12 – Attributes of Acknowledgement contextual model::Received_MarketDocument | 20 |
| Table 13 – Association ends of Acknowledgement contextual model::Received_MarketDocument with other classes | 20 |
| Table 14 – Attributes of Acknowledgement contextual model::Receiver_MarketParticipant..... | 21 |
| Table 15 – Association ends of Acknowledgement contextual model::Receiver_MarketParticipant with other classes | 21 |
| Table 16 – Attributes of Acknowledgement contextual model::Time_Period..... | 21 |
| Table 17 – Association ends of Acknowledgement contextual model:: Time_Period with other classes | 22 |
| Table 18 – Attributes of Acknowledgement contextual model::TimeSeries..... | 22 |
| Table 19 – Association ends of Acknowledgement contextual model:: TimeSeries with other classes | 22 |
| Table 20 – IsBasedOn dependency..... | 24 |
| Table 21 – Attributes of Acknowledgement assembly model::Acknowledgement_MarketDocument | 24 |
| Table 22 – Association ends of Acknowledgement assembly model::Acknowledgement_MarketDocument with other classes | 26 |
| Table 23 – Attributes of Acknowledgement assembly model::Reason..... | 26 |
| Table 24 – Attributes of Acknowledgement assembly model::Time_Period..... | 26 |
| Table 25 – Association ends of Acknowledgement assembly model:: Time_Period with other classes | 27 |
| Table 26 – Attributes of Acknowledgement assembly model::TimeSeries | 27 |

Table 27 – Association ends of Acknowledgement assembly model:: TimeSeries with other classes 27

Table 28 – Attributes of ESMPDataTypes::ESMP_DateTimeInterval 28

Table 29 – Attributes of ESMPDataTypes::ESMP_DateTime 28

Table 30 – Restrictions of attributes for ESMPDataTypes::ESMP_DateTime 29

Table 31 – Attributes of ESMPDataTypes::ESMPVersion_String 29

Table 32 – Restrictions of attributes for ESMPDataTypes::ESMPVersion_String 29

Table 33 – Attributes of ESMPDataTypes::ID_String 30

Table 34 – Restrictions of attributes for ESMPDataTypes::ID_String 30

Table 35 – Attributes of ESMPDataTypes::MarketRoleKind_String 30

Table 36 – Attributes of ESMPDataTypes::MessageKind_String 30

Table 37 – Attributes of ESMPDataTypes::PartyID_String 31

Table 38 – Restrictions of attributes for ESMPDataTypes::PartyID_String 31

Table 39 – Attributes of ESMPDataTypes::PayloadId_String 31

Table 40 – Restrictions of attributes for ESMPDataTypes::PayloadId_String 31

Table 41 – Attributes of ESMPDataTypes::ProcessKind_String 31

Table 42 – Attributes of ESMPDataTypes::ReasonCode_String 32

Table 43 – Attributes of ESMPDataTypes::ReasonText_String 32

Table 44 – Restrictions of attributes for ESMPDataTypes::ReasonText_String 32

Table 45 – Attributes of ESMPDataTypes::YMDHM_DateTime 32

Table 46 – Restrictions of attributes for ESMPDataTypes::YMDHM_DateTime 33

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FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –**Part 451-1: Acknowledgement business process
and contextual model for CIM European market**

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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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- 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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