IEC 62325-451-6

Edition 2.0 2018-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Framework for energy market communications – Part 451-6: Publication of information on market, contextual and assembly models for European-style markets

Cadre pour les communications pour le marché de l'énergie – Partie 451-6: Publication d'informations de marché, modèles contextuels et modèles d'assemblage pour les marchés de style européen

IEC 62325-451-6:2018(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 451-6: Publication of information on market, contextual and assembly models for European-style markets

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62325-451-6 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 2016. This edition constitutes a technical revision.

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

a) Addition of a new document contextual and assembly model to publish information about the transmission capacity allocation participants.
b) Updating of the TransmissionNetwork_MarketDocument to publish information about implicit transmission allocations on third countries borders.
c) Updating of the Unavailability_MarketDocument to publish outage related to consumption units.

d) Updating of the Balancing_MarketDocument model to publish information for resource object that can either consume or generate.

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

FDIS	Report on voting
57/1955/FDIS	57/1978/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 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 part of the IEC 62325 series for deregulated energy market data exchanges based on the European-style market profile. This part of IEC 62325 defines the document contextual models, the message assembly models as well as the XML schemas to be used for the market information publication process, also called the transparency process.

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 standards and specifies the content of the messages exchanged.

This document provides, for the European-style market profile, the publication (or transparency) information exchanges to submit either to a data aggregator or to an electronic publication platform the necessary information to be published about the electricity market. These market processes are based on the European regulations (No. 1227/2011 and No. 543/2013), and on the concepts of third party access and zonal markets. This part of IEC 62325 was originally based upon the work of the European Network of Transmission System Operators (ENTSO-E) Working Group EDI.

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 451-6: Publication of information on market, contextual and assembly models for European-style markets

1 Scope

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

This part of IEC 62325 is based on the European-style market contextual model (IEC 62325-351). The business process covered by this part of IEC 62325 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 publication business process.

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

IEC 62325-351:2016, *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 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 62325-451-3, *Framework for energy market communications – Part 451-3: Transmission capacity allocation business process (explicit or implicit auction) and contextual models for European market*

IEC 62325-451-5, *Framework for energy market communications – Part 451-5: Problem statement and status request business processes, contextual and assembly models for 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*