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**Framework for energy market communications –
Part 503: Market data exchanges guidelines for the IEC 62325-351 profile**

**Cadre pour les communications pour le marché de l'énergie –
Partie 503: Lignes directrices concernant les échanges de données du marché
pour le profil défini dans l'IEC 62325-351**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 503: Market data exchanges guidelines for the IEC 62325-351 profile

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International Standard IEC 62325-503 has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

This edition cancels and replaces IEC TS 62325-503 published in 2014.

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

- a) Use of ISO/IEC 19464:2014, Advanced Message Queuing Protocol (AMQP) v1.0 specification;
- b) Splitting of the node described in the IEC TS 62325-503:2014 into a broker that implements the messaging function and a directory;
- c) Increase of operability and resilience of the communication system with the ability for an endpoint to send and receive messages through several brokers;
- d) Benefits of standardisation, performance and scalability of the AMQP protocol for transferring messages.

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

| | |
|-------------|------------------|
| CDV | Report on voting |
| 57/1936/CDV | 57/1983/RVC |

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.

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INTRODUCTION

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

The principal objective of the IEC 62325 series is to produce documents 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) specifies the basis for the semantics for the message exchange. The European style market profile specifications that support the European style design electricity markets are defined in IEC 62325-351. These electricity markets are based on the European regulations, and on the concepts of third party access and zonal markets. The IEC 62325-451-n International documents specify the content of the messages exchanged.

The purpose of this document is to provide the guidelines to exchange the above-mentioned messages. A European market participant (trader, distribution utilities, etc.) could benefit from a single, common, harmonised, secure platform for message exchange with the European Transmission System Operators (TSOs); thus reducing the cost of building different IT platforms to interface with all the parties involved.

This document represents an important step in facilitating parties entering into electricity markets other than their national ones; they could use the same or similar information exchange system to participate in more than one market all over Europe.

This document was originally based upon the work of the European Network of Transmission System Operators (ENTSO-E) Working Group EDI.