TECHNICAL SPECIFICATION **IEC TS 62325-502**

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Framework for energy market communications –

Part 502:
Profile of ebXML

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International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch

Commission Electrotechnique Internationale
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 502: Profile of ebXML

FOREWORD

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- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards. [1]

IEC 62325-502, which is a technical specification, has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

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[1] This would also include the specification of some options/parameters not yet specified in the profile, Annex A.

The IEC 62325 series cancels and replaces IEC 62195 (2000) and its amendment (2002). It constitutes a technical revision.

IEC 62195 (2000) dealt with deregulated energy market communications at an early stage. Its amendment 1 (2002) points out important technological advancements which make it possible to use modern internet technologies based on XML for e-business in energy markets as an alternative to traditional EDI with EDIFACT and X12. The new IEC 62325 framework series for energy market communications currently consisting of IEC 62325-101, IEC 62325-102, IEC 62325-501, and IEC 62325-502 follows this direction and replaces IEC 62195 together with its amendment.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
57/707/DTS	57/724/RVC

Full information on the voting for the approval of this technical specification 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.

IEC 62325 consists of the following parts, under the general title *Framework for energy market communications*:

Part 101: General guidelines

Part 102: Energy market model example

Part 201: Glossary [2]

Part 3XX: (Titles are still to be determined) [3]

Part 401: Abstract service model [4]

Part 501: General guidelines for use of ebXML

Part 502: Profile of ebXML

Part 503: Abstract service mapping to ebXML [4]

Part 601: General guidelines for use of web services [4]

Part 602: Profile of Web Services [4]

Part 603: Abstract service mapping to web services [4]

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2 Under consideration. Because the technologies have an inherent own glossary within their standard definitions, this glossary is a placeholder for a glossary for future parts indicated with [2)] including energy market specific terms and definitions.

3 Under consideration. These parts for business content are mentioned for completeness only with a number space as placeholder. They extend the original scope and require an agreed new work item proposal for further work based on an overall strategy how to proceed.

4 Under consideration. These technical parts are mentioned for completeness with provisional title. They extend the original scope and require an agreed new work item proposal for further work.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual edition of this document may be issued at a later date.

INTRODUCTION

With the transition of monopoly energy supply structures to deregulated energy markets, the function of the markets depends heavily on seamless e-business communication between market participants. Compared with global e-business, e-business in the energy market is only a small niche. Today EDIFACT or X12 messages, or propriety HTML and XML solutions based on Internet technologies are being used.

The ‘electronic business Extensible Markup Language’ (ebXML) specification and architecture stems from UN/CEFACT and OASIS and these are now partly standards within the ISO 15000 series being complemented in future to cover all aspects of ebXML. ebXML is a complete set of specifications and standards to enable secure electronic business using proven, open standards such as TCP/IP, HTTP, SOAP, XML, and SOAP signature and encryptation. ebXML is also evolutionary in nature, built on 25 years of EDI experience, designed to work with existing EDI solutions, or be used to develop an emerging class of internet based electronic business applications based on XML. This means that with ebXML existing EDI messages (EDIFACT, X.12) as well as XML messages can be exchanged.

Profiles of ebXML allow the re-use of proven core components and communication platforms across markets, thus saving cost and implementation time.

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FRAMEWORK FOR ENERGY MARKET COMMUNICATIONS –

Part 502: Profile of ebXML

1 Scope

This part of IEC 62325 specifies an energy market specific messaging profile based on the ISO 15000 series. The profile is intended to provide the basis for system configuration.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO/TS 15000-1:2004, *Electronic business eXtensible Markup Language (ebXML) – Part 1: Collaboration-protocol profile and agreement specification (ebCPP)*

ISO/TS 15000-2:2004, *Electronic business eXtensible Markup Language (ebXML) – Part 2: Message service specification (ebMS)*

UN/CEFACT, *ebXML Business Process Specification Schema*, v1.10 or higher

UN/CEFACT, *ebXML Technical Architecture Specification*, v1.04 or higher

In this part of IEC 62325, RFCs (Request for comments) from the Internet Engineering Task Force (IETF) and recommendations from other Organisations such as the Word Wide Web Consortium (W3C) and the Organization for the Advancement of Structured Information Standards (OASIS) are mentioned which are not included here because these documents are referenced in the references above.