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Irish Standard
I.S. EN 62361-100:2016

Power systems management and associated information exchange - Interoperability in the long term - Part 100: CIM profiles to XML schema mapping

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EN 62361-100

September 2016

ICS 33.200

English Version

Power systems management and associated information exchange - Interoperability in the long term - Part 100: CIM profiles to XML schema mapping (IEC 62361-100:2016)

Gestion des systèmes de puissance et échanges d'informations associés - Interopérabilité à long terme - Partie 100: Mapping des profils CIM avec le schéma XML (IEC 62361-100:2016)

Management von Systemen der Energietechnik und zugehöriger Datenaustausch - Langfristige Interoperabilität - Teil 100: Abbilden von CIM Profilen auf XML Schemen (IEC 62361-100:2016)

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The text of document 57/1704/FDIS, future edition 1 of IEC 62361-100, prepared by IEC/TC 57 "Power systems management and associated information exchange" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62361-100:2016.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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Publication	Year	Title	EN/HD	Year
IEC 61968-11	-	Application integration at electric utilities - System interfaces for distribution management - Part 11: Common information model (CIM) extensions for distribution	EN 61968-11	-
IEC/TS 61970-2	-	Energy management system application program interface (EMS-API) - Part 2: Glossary	CLC/TS 61970-2	-
IEC 61970-301	-	Energy management system application program interface (EMS-API) - Part 301: Common information model (CIM) base	EN 61970-301	-
IEC 62325-301	-	Framework for energy market communications - Part 301: Common information model (CIM) extensions for markets	EN 62325-301	-
IEC 62325-450	2013	Framework for energy market communications - Part 450: Profile and context modelling rules	EN 62325-450	2013
W3C XML Schema Part 1	2004	XML Schema - Part 1: Structures	-	-
IETF RFC 3986	2005	Uniform Resource Identifier (URI): Generic Syntax	-	-

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Power systems management and associated information exchange – Interoperability in the long term – Part 100: CIM profiles to XML schema mapping

Gestion des systèmes de puissance et échanges d'informations associés – Interopérabilité à long terme – Partie 100: Mapping des profils CIM avec le schéma XML

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IEC 62361-100

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Gestion des systèmes de puissance et échanges d'informations associés – Interopérabilité à long terme – Partie 100: Mapping des profils CIM avec le schéma XML

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POWER SYSTEMS MANAGEMENT AND ASSOCIATED INFORMATION EXCHANGE – INTEROPERABILITY IN THE LONG TERM –

Part 100: CIM profiles to XML schema mapping

FOREWORD

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This is the first edition of the standard.

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

FDIS	Report on voting
57/1704/FDIS	57/1735/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.

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A list of all parts of the IEC 62361 series, under the general title: *Power systems management and associated information exchange – Interoperability in the long term*, can be found on the IEC website.

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INTRODUCTION

The IEC 62361 series defines standards which address areas of interest that impact multiple standards and provide consistency for implementations.

This part of the IEC 62361 series describes a mapping from CIM profiles to W3C XML Schemas and defines the rules that CIM XML message payloads shall adhere to.

The principle objective of this part of IEC 62361 is to facilitate the exchange of information in the form of XML documents whose semantics are defined by the IEC CIM and whose syntax is defined by a W3C XML schema. This will facilitate the integration of all applications that use the XML Schema message payloads developed by the WGs and implemented independently by different vendors into their systems.

The common information model (CIM) specifies the basis for the semantics for message payload exchanges defined by the IEC. The profile specifications, which are contained in other parts of the IEC 62361 series, specify the content of the message payloads exchanged. The format/syntax of those payloads is specified in this part of IEC 62361.

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POWER SYSTEMS MANAGEMENT AND ASSOCIATED INFORMATION EXCHANGE – INTEROPERABILITY IN THE LONG TERM –

Part 100: CIM profiles to XML schema mapping

1 Scope

This part of IEC 62361 describes a mapping from CIM profiles to W3C XML Schemas.

The purpose of this mapping is to facilitate the exchange of information in the form of XML documents whose semantics are defined by the IEC CIM and whose syntax is defined by a W3C XML schema.

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 61968-11, *Application integration at electric utilities – System interfaces for distribution management – Part 11: Common information model (CIM) extensions for distribution*

IEC TS 61970-2, *Energy management system application program interface (EMS-API) – Part 2: Glossary*

IEC 61970-301, *Energy management system application program interface (EMS-API) – Part 301: Common information model (CIM) base*

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

IEC 62325-450:2013*, Framework for energy market communications – Part 450: Profile and context modelling rules*

XML Schema Part 1: Structures Second Edition W3C Recommendation 28 October 2004

IETF RFC 3986 Uniform Resource Identifier (URI): Generic Syntax January 2005

Semantic Annotations for WSDL and XML Schema W3C Recommendation 28 August 2007

3 Terms and definitions

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

NOTE Refer to the International Electrotechnical Vocabulary, IEC 60050, for general glossary definitions.

3.1
artefact
element of a model that represents objects of a given domain and their characteristics

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