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Energy management system application program interface (EMS-API) –

Part 2: Glossary



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PROGRAM INTERFACE (EMS-API) –****Part 2: Glossary****FOREWORD**

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

IEC 61970-2, which is a technical specification, has been prepared by IEC Technical Committee 57: Power systems management and associated information exchange.

The specific standards documents for which this glossary applies are listed in IEC 61970-11.

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

Enquiry draft	Report on voting
57/666/CDV	57/725/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 61970 consists of the following parts, under the general title *Energy Management System Application Program Interface (EMS-API)*:

- Part 1: Guidelines and general requirements¹
- Part 2: Glossary
- Part 301: Common Information Model (CIM) Base
- Part 302: Common information model (CIM) financial, energy scheduling and reservations¹
- Part 401: Component Interface Specification (CIS) framework
- Part 402: Component Interface Specification (CIS) – Common services¹
- Part 403: Component Interface Specification (CIS) – Generic data access¹
- Part 404: Component Interface Specification (CIS) – High speed data access²
- Part 405: Component Interface Specification (CIS) – Generic eventing and subscription²
- Part 407: Component Interface Specification (CIS) – Time series data access²
- Part 453: Exchange of graphics schematics definitions (common graphics exchange)²
- Part 501: Common Information Model (CIM) XML codification for programmable reference and model data exchange²

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- withdrawn,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 version of this Technical Specification may be issued at a later date.

¹ Under consideration.

² Under consideration.

INTRODUCTION

This Technical specification is part of the IEC 61970 series, which defines an Application Program Interface (API) for an Energy Management System (EMS). This standard is based upon the work of the EPRI Control Center API (CCAPI) research project (RP-3654-1). The principle objectives of the EPRI CCAPI project are to:

- reduce the cost and time needed to add new applications to an EMS;
- protect the investment in existing applications that are working effectively in an EMS.

The principal task of the CCAPI project is to develop a set of guidelines, or specifications, to enable the creation of “plug-in” applications³ in the control center environment.

This part of the IEC 61970 series provides a glossary of terms and abbreviations that are specific to the IEC 61970 series or may require interpretation as to how they were used in it.

³ A plug-in application is defined to be a piece of software that may be installed on a system with minimal effort and no modification of source code; i. e., the way software packages are installed on a desktop computer. The CCAPI Project goal is to at least approach that ideal by reducing the often significant efforts currently required to install third-party applications in an EMS.

ENERGY MANAGEMENT SYSTEM APPLICATION PROGRAM INTERFACE (EMS-API) –

Part 2: Glossary

1 Scope

This Technical specification provides a glossary for the volume of work produced as part of the IEC 61970 series of documents. Terms and abbreviations that are either specific to the series, or that require explanation because of the way that they are used in it, are supplied.

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.

IEC 61970-1, *Energy Management System Application Program Interface (EMS-API) – Part 1: Guidelines and general requirements*

3 Terms and definitions

For the purposes of this Technical specification, the terms and definitions given below apply.

3.1

aggregation

special case of association

3.2

application

piece of software that comprises one or more components that perform some business function in a given domain. The important aspect is the functionality performed and not the packaging of the software. An example would be a word processor. It has a fairly well understood functionality but the components that are actually installed can look very different depending on the vendor.

3.3

application context

collection of applications working together as an organizational unit to accomplish some high-level objective

3.4

Application Program Interface API

set of public functions provided by an executable application component for use by other executable application components

3.5

association

connection between classes that can be assigned a role