



MALAYSIAN STANDARD

MS IEC 61970-1:2011

**Energy management system application
program interface (EMS-API) - Part 1:
Guidelines and general requirements
(IEC 61970-1:2005, IDT)**

ICS: 33.200

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Preview Only

Committee representation

The Industry Standards Committee on Generation, Transmission and Distribution of Energy (ISC E) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Department of Standards Malaysia
Federation of Malaysian Manufacturers
Jabatan Kerja Raya Malaysia
Malaysian Association of Standards Users
Malaysian Cable Manufacturers Association
Malaysian Electrical Appliances and Distributors Association
Malaysian Green Technology Corporation
Ministry of Domestic Trade, Co-operatives and Consumerism
Ministry of International Trade and Industry
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Suruhanjaya Tenaga
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Teknologi Malaysia

The Technical Committee on High Voltage Power Transmission which supervised the adoption of the IEC Standard as Malaysian Standard consists of representatives from the following organisations:

Federation of Malaysian Manufacturers
Malaysian National Committee of CIGRE
SIRIM Berhad (Secretariat)
Suruhanjaya Tenaga
Syarikat SESCO Berhad
Tenaga Nasional Berhad (Bahagian Penghantaran)
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Teknologi Malaysia

The Working Group on Power System Management and Associated Information Exchange which recommended the adoption of the IEC Standard as Malaysian Standard consists of representatives from the following organisations:

ABB Malaysia Sdn Bhd
Petroleum Nasional Berhad
Prestigious Discovery Sdn Bhd
PSI InControl Sdn Bhd
SIRIM Berhad (Secretariat)
Suruhanjaya Tenaga
Tenaga Nasional Berhad (Bahagian Penghantaran)
The Institution of Engineers, Malaysia
TNB Research Sdn Bhd
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NATIONAL FOREWORD

The adoption of the IEC Standard as a Malaysian Standard was recommended by the Working Group on Power System Management and Associated Information Exchange under the authority of the Industry Standards Committee on Generation, Transmission and Distribution of Energy.

This Malaysian Standard is identical with IEC 61970-1:2005, *Energy management system application program interface (EMS-API) - Part 1: Guidelines and general requirements*, published by the International Electrotechnical Commission (IEC). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, "this International Standard" should read "this Malaysian Standard";
- b) the comma which is used as a decimal sign (if any), to read as a point;
- c) the basis IEC 61970-1 is printed in English and French version. However, only the English version is retained for this Malaysian Standard; and
- d) reference to International Standards should be replaced by corresponding Malaysian Standards as follows:

Referenced International Standards

Corresponding Malaysian Standards

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

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

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NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, and wording (or is an identical translation) of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and structure although it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21-1.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: Guidelines and general requirements

FOREWORD

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International Standard IEC 61970-1 has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

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

| | |
|-------------|------------------|
| FDIS | Report on voting |
| 57/777/FDIS | 57/795/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.

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 requirements
- 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 access¹
- Part 405: Component Interface Specification (CIS) – Generic eventing and subscription¹
- Part 407: Component Interface Specification (CIS) – Time series data access¹
- Part 453: Exchange of Graphics Schematics Definitions (Common Graphics Exchange)¹
- Part 501: Common Information Model (CIM) XML Codification for Programmable Reference and Model Data Exchange

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

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

¹ Under consideration.