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NORME INTERNATIONALE

Energy management system application program interface (EMS-API) – Part 302: Common information model (CIM) dynamics

Interface de programmation d'application pour système de gestion d'énergie (EMS-API) – Partie 302: Régimes dynamiques de modèle d'information commun (CIM)

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

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FOREWORD

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

FDIS	Report on voting
57/1954/FDIS	57/1977/RVD

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.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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

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- amended.

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INTRODUCTION

This International Standard is one of the IEC 61970 series which defines an application program interface (API) for an energy management system (EMS).

The principal objective of the IEC 61970 series is to produce standards that facilitate the integration of EMS applications developed independently by different vendors, between entire EMSs developed independently, or between an EMS and other systems concerned with different aspects of power system operations, such as generation or distribution management systems (DMS). This is accomplished by defining application program interfaces 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 semantics for this API. The component interface specifications (CIS), which are contained in other parts of the IEC 61970 standards, specify the content of the messages exchanged.

The CIM is an abstract model that represents all the major objects in an electric utility enterprise typically needed to model the operational aspects of a utility. This model includes public classes and attributes for these objects, as well as the relationships between them.

IEC 61970-301 defines the CIM Base set of packages which provide a logical view of the functional aspects of an energy management system.

This part of the standard, IEC 61970-302, builds on IEC 61970-301 and provides the specifications for the exchange models representing dynamic behaviour of the majority of power system components in common use today by utilities to perform system simulation studies for system dynamic assessment and for planning purposes.