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Integrering av tillämpningar för elförsörjning – Systemgränssnitt för distributionssystemstyrning – Del 1: Gränssnittsarkitektur och allmänna fordringar

*Application integration at electric utilities –
System interfaces for distribution management –
Part 1: Interface architecture and general requirements*

Som svensk standard gäller europastandarden EN 61968-1:2004. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61968-1:2004.

Nationellt förord

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- **IEC 61968-1, First edition, 2003 - Application integration at electric utilities - System interfaces for distribution management - Part 1: Interface architecture and general requirements**

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ICS 33.200

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EUROPEAN STANDARD

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English version

**Application integration at electric utilities –
System interfaces for distribution management
Part 1: Interface architecture and general requirements
(IEC 61968-1:2003)**

Intégration d'applications pour les services
électriques –
Systèmes d'interface pour la gestion
de la distribution
Partie 1 : Architecture des interfaces
et spécifications générales
(CEI 61968-1:2003)

Integration von Anwendungen in Anlagen
der Elektrizitätsversorgung -
Systemschnittstellen für Netzführung
Teil 1: Schnittstellenarchitektur
und allgemeine Anforderungen
(IEC 61968-1:2003)

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CENELEC

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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SEK Svensk Elstandard

Foreword

The text of document 57/650/FDIS, future edition 1 of IEC 61968-1, prepared by IEC TC 57, Power system control and associated communications, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61968-1 on 2003-12-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
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national standard or by endorsement (dop) 2004-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2006-12-01

Endorsement notice

The text of the International Standard IEC 61968-1:2003 was approved by CENELEC as a European Standard without any modification.

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INTRODUCTION

The IEC 61968 series is intended to facilitate inter-application integration, as opposed to intra-application integration, of the various distributed software application systems supporting the management of utility electrical distribution networks. Intra-application integration is aimed at programs in the same application system, usually communicating with each other using middleware that is embedded in their underlying runtime environment, and tends to be optimized for close, real-time, synchronous connections and interactive request/reply or conversation communication models. IEC 61968, by contrast, is intended to support the inter-application integration of a utility enterprise that needs to connect disparate applications that are already built or new (legacy or purchased applications), each supported by dissimilar runtime environments. Therefore, IEC 61968 is relevant to loosely coupled applications with more heterogeneity in languages, operating systems, protocols and management tools. IEC 61968 is intended to support applications that need to exchange data on an event driven basis. IEC 61968 is intended to be implemented with middleware services that broker messages among applications, and will complement, but not replace utility data warehouses, database gateways, and operational stores.

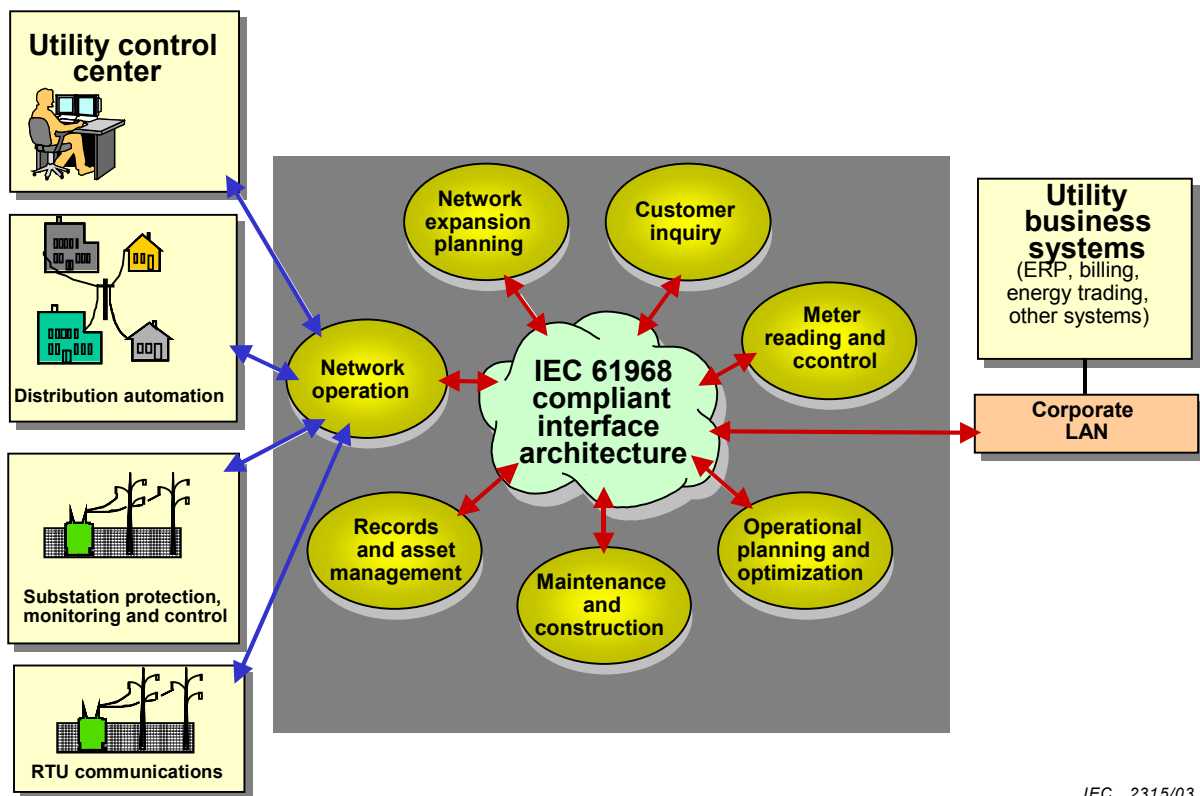


Figure 1 – Distribution management system with IEC 61968 compliant interface architecture

Figure 1 clarifies the scope of IEC 61968-1 graphically in terms of business functions and shows a Distribution Management System with IEC 61968 compliant interface architecture.

APPLICATION INTEGRATION AT ELECTRIC UTILITIES – SYSTEM INTERFACES FOR DISTRIBUTION MANAGEMENT –

Part 1: Interface architecture and general requirements

1 Scope

This part of IEC 61968 is the first in a series that, taken as a whole, defines interfaces for the major elements of an interface architecture for Distribution Management Systems (DMS). This part of IEC 61968 identifies and establishes requirements for standard interfaces based on an Interface Reference Model (IRM). Subsequent parts of this standard are based on each interface identified in the IRM. This set of standards is limited to the definition of interfaces and is implementation independent. They provide for interoperability among different computer systems, platforms, and languages. Methods and technologies used to implement functionality conforming to these interfaces are considered outside of the scope of these standards; only the interface itself is specified in the IEC 61968 series.

As used in the IEC 61968 series, a DMS consists of various distributed application components for the utility to manage electrical distribution networks. These capabilities include monitoring and control of equipment for power delivery, management processes to ensure system reliability, voltage management, demand-side management, outage management, work management, automated mapping and facilities management. The IRM is specified in Clause 4.

