SLOVENSKI STANDARD
SIST EN 62056-61:2007

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Nadomešča:
SIST EN 62056-61:2004

Merjenje električne energije – Izmenjevanje podatkov za odbiranja stanja števcev, tarife in obremenitve – 61. del: Sistem za prepoznavanje objektov (IEC 62056-61:2006)

Electricity metering - Data exchange for meter reading, tariff and load control -- Part 61: Object identification system (OBIS)

Messung der elektrischen Energie - Zählerstandsübertragung, Tarif- und Laststeuerung - - Teil 61: Object Identification System (OBIS)

Equipements de mesure de l'énergie électrique - Echange des données pour la lecture des compteurs, le contrôle des tarifs et de la charge -- Partie 61: Système d'Identification d'Objet (SIOB)

Ta slovenski standard je istoveten z: EN 62056-61:2007

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities
35.040	Nabori znakov in kodiranje informacij	Character sets and information coding
91.140.50	Sistemi za oskrbo z elektriko	Electricity supply systems

SIST EN 62056-61:2007 en

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62056-61

February 2007

ICS 91.140.50; 35.100

Supersedes EN 62056-61:2002

English version

Electricity metering - Data exchange for meter reading, tariff and load control - Part 61: Object identification system (OBIS)

(IEC 62056-61:2006)

Equipements de mesure de l'énergie électrique - Echange des données pour la lecture des compteurs, le contrôle des tarifs et de la charge - Partie 61: Système d'Identification d'Objet (SIOB)
(CEI 62056-61:2006)

Messung der elektrischen Energie - Zählerstandsübertragung, Tarif- und Laststeuerung - Teil 61: Object Identification System (OBIS)
(IEC 62056-61:2006)

This European Standard was approved by CENELEC on 2006-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 62056-61:2007 E

Foreword

The text of document 13/1388/FDIS, future edition 2 of IEC 62056-61, prepared by IEC TC 13, Equipment for electrical energy measurement and load control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62056-61 on 2006-12-01.

This European Standard supersedes EN 62056-61:2002.

It includes the following significant technical changes with respect to EN 62056-61:2002:

– some parts of the “Manufacturer specific” ranges have been changed to “Reserved” to open code space for future standard code purposes;

– “Utility specific” ranges have been allocated;

– “Consortia specific” codes similar to “Country specific” codes have been introduced;

– a table explaining the rules for “Manufacturer specific”, “Country specific” and “Consortia specific” codes has been added;

– new time integral types of quantities have been added, some definitions have been clarified;

– new OBIS codes to identify transformer and line loss quantities, voltage dips, power failures, statuses, etc. have been added;

– some list objects and profiles may be now abstract or electricity related;

– a second billing period counter mechanism has been added and the description of handling value group F has been amended.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2007-09-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-12-01

The International Electrotechnical Commission (IEC) and CENELEC draw attention to the fact that it is claimed that compliance with this International Standard / European Standard may involve the use of a maintenance service concerning the stack of protocols on which the present standard IEC 62056-61 / EN 62056-61 is based.

The IEC and CENELEC take no position concerning the evidence, validity and scope of this maintenance service.

The provider of the maintenance service has assured the IEC that he is willing to provide services under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the provider of the maintenance service is registered with the IEC. Information (see also 5.1) may be obtained from:

DLMS [1] User Association
Geneva / Switzerland
www.dlms.ch

Annex ZA has been added by CENELEC.

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[1] Device Language Message Specification

Endorsement notice

The text of the International Standard IEC 62056-61:2006 was approved by CENELEC as a European Standard without any modification.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60050-300	2001	International Electrotechnical Vocabulary - Electrical and electronic measurements and measuring instruments - Part 311: General terms relating to measurements - Part 312: General terms relating to electrical measurements - Part 313: Types of electrical measuring instruments - Part 314: Specific terms according to the type of instrument	-	-
IEC/TR 61000-2-8	2002	Electromagnetic compatibility (EMC) - Part 2-8: Environment - Voltage dips and short interruptions on public electric power supply systems with statistical measurement results	-	-
IEC/TR 62051	1999	Electricity metering - Glossary of terms	-	-
IEC/TR 62051-1	2004	Electricity metering - Data exchange for meter reading, tariff and load control - Glossary of terms - Part 1: Terms related to data exchange with metering using DLMS/COSEM	-	-
IEC 62053-23	2003	Electricity metering equipment (a.c.) - Particular requirements - Part 23: Static meters for reactive energy (classes 2 and 3)	EN 62053-23	2003
IEC 62056-21	2002	Electricity metering - Data exchange for meter reading, tariff and load control - Part 21: Direct local data exchange	EN 62056-21	2002
IEC 62056-62	2006	Electricity metering - Data exchange for meter reading, tariff and load control - Part 62: Interface classes	EN 62056-62	2007

INTERNATIONAL STANDARD

IEC 62056-61

Second edition
2006-11

Electricity metering – Data exchange for meter reading, tariff and load control –

Part 61: Object identification system (OBIS)

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE W

For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICITY METERING – DATA EXCHANGE FOR METER READING, TARIFF AND LOAD CONTROL –

Part 61: Object identification system (OBIS)

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this International Standard may involve the use of a maintenance service concerning the stack of protocols on which the present standard IEC 62056-61 is based.

The IEC takes no position concerning the evidence, validity and scope of this maintenance service.

The provider of the maintenance service has assured the IEC that he is willing to provide services under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the provider of the maintenance service is registered with the IEC. Information – see also 5.1 – may be obtained from:

DLMS[1] User Association

Geneva / Switzerland

www.dlms.ch

International Standard IEC 62056-61 has been prepared by IEC technical committee 13: Equipment for electrical energy measurement and load control.

[1] Device Language Message Specification

This second edition cancels and replaces the first edition published in 2002 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- some parts of the “Manufacturer specific” ranges have been changed to “Reserved” to open code space for future standard code purposes;
- “Utility specific” ranges have been allocated;
- “Consortia specific” codes similar to “Country specific” codes have been introduced;
- a table explaining the rules for “Manufacturer specific”, “Country specific” and “Consortia specific” codes has been added;
- new time integral types of quantities have been added, some definitions have been clarified;
- new OBIS codes to identify transformer and line loss quantities, voltage dips, power failures, statuses, etc. have been added;
- some list objects and profiles may be now abstract or electricity related;
- a second billing period counter mechanism has been added and the description of handling value group F has been amended.

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

FDIS	Report on voting
13/1388/FDIS	13/1399/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.

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.

A bilingual version of the publication may be issued at a later date.

INTRODUCTION

The competitive electricity market requires an ever-increasing amount of timely information concerning the usage of electrical energy. Recent technology developments enable to build intelligent static metering equipment, which is capable of capturing, processing and communicating this information to all parties involved.

For further analysis of this information, for the purposes of billing, load, customer and contract management, it is necessary to uniquely identify all data in a manufacturer independent way, collected manually or automatically, via local or remote data exchange.

The definition of identification codes is based on DIN 43863-3:1997.

ELECTRICITY METERING – DATA EXCHANGE FOR METER READING, TARIFF AND LOAD CONTROL –

Part 61: Object identification system (OBIS)

1 Scope

The OBject Identification System (OBIS) defines the identification codes (ID-codes) for commonly used data items in electricity metering equipment. This part of IEC 62056 specifies the overall structure of the identification system and the mapping of all data items to their identification codes.

OBIS provides a unique identifier for all data within the metering equipment, including not only measurement values, but also abstract values used for configuration or obtaining information about the behaviour of the metering equipment. The ID codes defined in this standard are used for the identification of

- logical names of the various instances of the interface classes, or objects, as defined in IEC 62056-62;
- data transmitted through communication lines, see Clause A.1;
- data displayed on the metering equipment, see Clause A.2.

This standard applies to all types of electricity metering equipment, such as fully integrated meters, modular meters, tariff attachments, data concentrators, etc.

To cover metering equipment measuring energy types other than electricity, combined metering equipment measuring more than one type of energy or metering equipment with several physical measurement channels, the concepts of medium and channels are introduced. This allows meter data originating from different sources to be identified. While this standard fully defines the structure of the identification system for other media, the mapping of non-electrical energy related data items to ID codes needs to be completed separately.

NOTE EN 13757-1 defines identifiers for metering equipment other than electricity: heat cost allocators, cooling, heating, gas, cold water and hot water.

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 60050-300:2001, *International Electrotechnical Vocabulary (IEV) – Electrical and electronic measurements and measuring instruments – Part 311: General terms relating to measurements – Part 312: General terms relating to electrical measurements – Part 313: Types of electrical measuring instrument – Part 314: Specific terms according to the type of instrument*

IEC 61000-2-8:2002: *Electromagnetic compatibility (EMC) – Part 2-8: Environment – Voltage dips and short interruptions on public electric power supply systems with statistical measurement results*

IEC 62051:1999, *Electricity metering – Glossary of terms*