Electricity metering data exchange - The DLMS/COSEM suite -- Part 8-3: Communication profile for PLC S-FSK neighbourhood networks

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NATIONAL FOREWORD

See Eesti standard EVS-EN 62056-8-3:2013 sisaldab Euroopa standardi EN 62056-8-3:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 62056-8-3:2013 consists of the English text of the European standard EN 62056-8-3:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 23.08.2013.	Date of Availability of the European standard is 23.08.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 17.220, 35.110, 91.140.50

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62056-8-3

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English version

Electricity metering data exchange - The DLMS/COSEM suite - Part 8-3: Communication profile for PLC S-FSK neighbourhood networks

(IEC 62056-8-3:2013)

Echange des données de comptage de l'électricité - La suite DLMS/COSEM - Partie 8-3: Profil de communication pour réseaux de voisinage CPL S-FSK (CEI 62056-8-3:2013)

Datenkommunikation der elektrischen Energiemessung - DLMS/COSEM - Teil 8-3: PLC S-FSK Spezifikation für Areal-Netze (IEC 62056-8-3:2013)

This European Standard was approved by CENELEC on 2013-06-20. 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.

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Foreword

The text of document 13/1526/FDIS, future edition 1 of IEC 62056-8-3, prepared by IEC/TC 13 "Electrical energy measurement, tariff- and load control" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62056-8-3:2013.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-03-20
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-06-20

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62056-8-3:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61334-4-512:2001 NOTE Harmonized as EN 61334-4-512:2002 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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	Series	International Electrotechnical Vocabulary (IEV)	-	-
IEC 61334-4-1	1996	Distribution automation using distribution line carrier systems - Part 4: Data communication protocols - Section 1: Reference model of the communication system	EN 61334-4-1	1996
IEC 61334-4-32	1996	Distribution automation using distribution line carrier systems - Part 4: Data communication protocols - Section 32: Data link layer - Logical link control (LLC)	EN 61334-4-32	1996
IEC 61334-4-511	2000	Distribution automation using distribution line carrier systems - Part 4-511: Data communication protocols - Systems management - CIASE protocol	EN 61334-4-511	2000
IEC 61334-5-1	2001	Distribution automation using distribution line carrier systems - Part 5-1: Lower layer profiles - The spread frequency shift keying (S-FSK) profile	EN 61334-5-1	2001
IEC/TR 62051	1999	Electricity metering - Glossary of terms	-	-
IEC/TR 62051-1 + corr. June	2004 2005	Electricity metering - Data exchange for meter reading, tariff and load control - Glossary of terms - Part 1: Terms related to data exchange with metering equipment using DLMS/COSEM	-	-
IEC 62056-5-3	2013	Electricity metering data exchange - The DLMS/COSEM suite - Part 5-3: DLMS/COSEM application layer	EN 62056-5-3	2013
IEC 62056-6-2	2013	Electricity metering data exchange - The DLMS/COSEM suite - Part 6-2: COSEM interface classes	EN 62056-6-2	2013
IEC 62056-46 + A1	2002 2006	Electricity metering - Data exchange for meter reading, tariff and load control - Part 46: Data link layer using HDLC protocol	EN 62056-46 + A1	2002 2007
ISO/IEC 8802-2 + corr. October	1998 2000	Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 2: Logical link control	-	-

CONTENTS

ELECTRICITY METERING DATA EXCHANGE – THE DLMS/COSEM SUITE –

Part 8-3: Communication profile for PLC S-FSK neighbourhood networks

1 Scope

This part of IEC 62056 specifies the DLMS/COSEM PLC S-SFK communication profile for neighbourhood networks.

It uses standards established by IEC TC 57 in the IEC 61334 series, *Distribution automation using distribution line carrier systems* and it specifies extensions to some of those standards.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts), *International Electrotechnical Vocabulary* (available at http://www.electropedia.org)

IEC 61334-4-1:1996, *Distribution automation using distribution line carrier systems – Part 4: Data communication protocols – Section 1: Reference model of the communication system*

IEC 61334-4-32:1996, *Distribution automation using distribution line carrier systems – Part 4: Data communication protocols – Section 32: Data link layer – Logical link control (LLC)*

IEC 61334-4-511:2000, *Distribution automation using distribution line carrier systems – Part 4-511: Data communication protocols – Systems management – CIASE protocol*

IEC 61334-5-1:2001, *Distribution automation using distribution line carrier systems – Part 5-1: Lower layer profiles – The spread frequency shift keying (S-FSK) profile*

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 equipment using DLMS/COSEM*

IEC 62056-46:2002, *Electricity metering – Data exchange for meter reading, tariff and load control – Part 46: Data link layer using HDLC protocol*
Amendment 1:2006

IEC 62056-5-3:—, *Electricity metering data exchange – The DLMS/COSEM suite – Part 5-3: DLMS/COSEM application layer*[2]

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2 To be published simultaneously with this part of IEC 62056.

IEC 62056-6-2:—, *Electricity metering data exchange – The DLMS/COSEM suite – Part 6-2: COSEM interface classes*[3]

ISO/IEC 8802-2:1998, *Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements – Part 2: Logical link control*

NOTE See also the Bibliography.

3 Terms, definitions and abbreviations

For the purposes of this document, the terms and definitions given in IEC 60050-300, IEC/TR 62051 and IEC/TR 62051-1 and the following apply.

Where there is a difference between the definitions in the glossary and those contained in product standards produced by TC 13, then the latter shall take precedence in applications of the relevant standard.

3.1 Terms and definitions

3.1.1
initiator
user-element of a client System Management Application Entity (SMAE). It uses the CIASE and xDLMS ASE and it is identified by its system title

[SOURCE: IEC 61334-4-511:2000, 3.8.1, modified]

3.1.2
active initiator
initiator, which issues or has last issued a CIASE Register request when the server is in the unconfigured state

[SOURCE: IEC 61334-4-511:2000, 3.9.1]

3.1.3
new system
server system, which is in the unconfigured state: its MAC address equals "NEW-address"

[SOURCE: IEC 61334-4-511:2000, 3.9.3]

3.1.4
new system title
system-title of a new system

Note 1 to entry: This is the system title of a system, which is in the new state.

[SOURCE: IEC 61334-4-511:2000, 3.9.4, modified]

3.1.5
registered system
server system, which has an individual, valid MAC address

Note 1 to entry: Therefore, this MAC address is different from "NEW Address", see IEC 61334-5-1: Medium Access Control.

[SOURCE: IEC 61334-4-511:2000, 3.9.5, modified]

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3 To be published simultaneously with this part of IEC 62056.