

Electricity metering data exchange - The DLMS/COSEM suite -- Part 7-6: The 3-layer, connection-oriented HDLC based communication profile

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 62056-7-6:2013 sisaldab Euroopa standardi EN 62056-7-6:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 62056-7-6:2013 consists of the English text of the European standard EN 62056-7-6:2013.
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English version

**Electricity metering data exchange -
The DLMS/COSEM suite -
Part 7-6: The 3-layer, connection-oriented HDLC based communication
profile
(IEC 62056-7-6:2013)**

Echange des données de comptage de
l'électricité -
La suite DLMS/COSEM -
Partie 7-6: Profil de communication à 3
couches, orienté connexion et basé sur
HDLC
(CEI 62056-7-6:2013)

Datenkommunikation der elektrischen
Energiesmessung -
DLMS/COSEM -
Teil 7-6: HDLC basiertes 3-Schichten
Kommunikations-Protokoll
(IEC 62056-7-6:2013)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

Foreword

The text of document 13/1527/FDIS, future edition 1 of IEC 62056-7-6, 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 62056-7-6:2013.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-06-20

EN 62056-7-6:2013 supersedes partially EN 62056-53:2007.

It is based on EN 62056-53:2007, *Electricity metering – Data exchange for meter reading, tariff and load control – Part 53: COSEM application layer*, Annex B.2 *The 3-layer, connection-oriented, HDLC based communication profile* and introduces the following significant technical changes:

NOTE EN 62056-53:2007 contains the specification of the DMS/COSEM communication profiles whereas the new edition, EN 62056-5-3:2013, which replaces it, does not.

- The title of the standard has been aligned with the title of other parts of the revised EN 62056 series;
- A Figure showing the protocol stack has been added to Clause 5.

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 62056-7-6:2013 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 62056-21	2002	Electricity metering - Data exchange for meter reading, tariff and load control - Part 21: Direct local data exchange	EN 62056-21	2002
IEC 62056-42	2002	Electricity metering - Data exchange for meter reading, tariff and load control - Part 42: Physical layer services and procedures for connection-oriented asynchronous data exchange	EN 62056-42	2002
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

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ELECTRICITY METERING DATA EXCHANGE – THE DLMS/COSEM SUITE –

Part 7-6: The 3-layer, connection-oriented HDLC based communication profile

1 Scope

This part of IEC 62056 specifies the DLMS/COSEM 3-layer, connection-oriented HDLC based communication profile.

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 62056-21:2002, *Electricity metering – Data exchange for meter reading, tariff and load control – Part 21: Direct local data exchange*

IEC 62056-42:2002, *Electricity metering – Data exchange for meter reading, tariff and load control – Part 42: Physical layer services and procedures for connection-oriented asynchronous data exchange*

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*

NOTE See also the Bibliography.

3 Terms, definitions and abbreviations

AA	Application Association
AARQ	A-Associate Request – an APDU of the ACSE
ACSE	Association Control Service Element
AL	Application Layer
APDU	Application Layer Protocol Data Unit
ASO	Application Service Object
Client	A station, asking for services. In the case of the 3-layer, CO HDLC based profile it is the master station
.cnf	confirm service primitive
CO	Connection-oriented
COSEM	Companion Specification for Energy Metering
DLMS	Device Language Message Specification
DLMS UA	DLMS User Association