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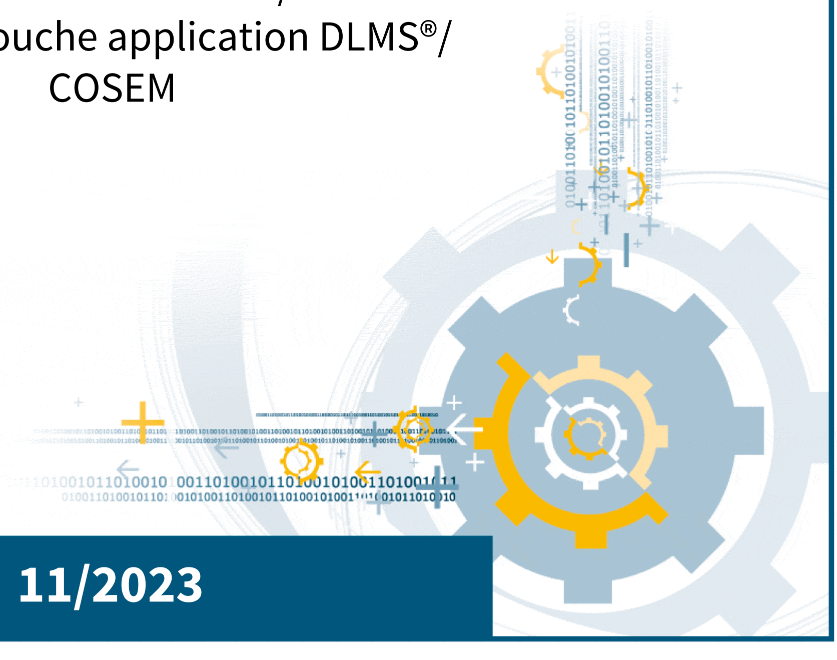
ILNAS-EN IEC 62056-5-3:2023

Electricity metering data exchange - The DLMS®/COSEM suite - Part 5-3: DLMS®/COSEM application layer

Datenkommunikation der elektrischen Energiemessung - DLMS®/COSEM - Teil 5-3: DLMS/COSEM-Anwendungsschicht

Échange des données de comptage de l'électricité - La suite DLMS®/COSEM - Partie 5-3: Couche application DLMS®/ COSEM



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National Foreword

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Electricity metering data exchange - The DLMS®/COSEM suite - Part 5-3: DLMS®/COSEM application layer (IEC 62056-5-3:2023)

Échange des données de comptage de l'électricité - La suite DLMS®/COSEM - Partie 5-3: Couche application DLMS®/COSEM
(IEC 62056-5-3:2023)

Datenkommunikation der elektrischen Energiemessung - DLMS®/COSEM - Teil 5-3: DLMS®/COSEM-Anwendungsschicht
(IEC 62056-5-3:2023)

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European foreword

The text of document 13/1890/FDIS, future edition 4 of IEC 62056-5-3, prepared by IEC/TC 13 "Electrical energy measurement and control" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62056-5-3:2023.

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) 2024-08-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-11-02

This document supersedes EN 62056-5-3:2017 and all of its amendments and corrigenda (if any).

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This document has been prepared under a Standardization Request addressed to CENELEC by the European Commission.

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Endorsement notice

The text of the International Standard IEC 62056-5-3:2023 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:

ISO 3166 (series) NOTE Approved as EN ISO 3166 (series)

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61334-4-41	1996	Distribution automation using distribution line carrier systems - Part 4: Data communication protocols - Section 41: Application protocol - Distribution line message specification	EN 61334-4-41	1996
IEC 61334-6	2000	Distribution automation using distribution line carrier systems - Part 6: A-XDR encoding rule	EN 61334-6	2000
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 62056-6-2	2023	Electricity metering data exchange - The DLMS®/COSEM suite - Part 6-2: COSEM interface classes	EN IEC 62056-6-2	2023
IEC 62056-7-3	2017	Electricity metering data exchange - The DLMS®/COSEM suite - Part 7-3: Wired and wireless M-Bus communication profiles for local and neighbourhood networks	EN 62056-7-3	2017
IEC 62056-7-6	2013	Electricity metering data exchange - The DLMS®/COSEM suite - Part 7-6: The 3-layer, connection-oriented HDLC based communication profile	EN 62056-7-6	2013
IEC 62056-8-3	2013	Electricity metering data exchange - The DLMS®/COSEM suite - Part 8-3: Communication profile for PLC S-FSK neighbourhood networks	EN 62056-8-3	2013

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IEC 62056-8-11	—[1]	Electricity metering data exchange - The DLMS®/COSEM suite - Part 8-11: Communication profile for Wi-SUN field area mesh networks	EN IEC 62056-8-11	—[2]
IEC 62056-8-12	2023	Electricity metering data exchange - The DLMS®/COSEM suite - Part 8-12: Communication profile for Low-Power Wide Area Networks (LPWANs)	EN IEC 62056-8-12	2023
IEC 62056-9-7	2013	Electricity metering data exchange - The DLMS/COSEM suite - Part 9-7: Communication profile for TCP-UDP/IP networks	EN 62056-9-7	2013
ISO/IEC 8824-1	2008	Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation	-	-
ISO/IEC 8825-1	2008	Information technology - ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)	-	-
ISO/IEC 15953	1999	Information technology - Open systems interconnection - Service definition for the Application service object association control service element	-	-
ISO/IEC 15954	1999	Information technology - Open systems interconnection - Connection-mode protocol for the application service object association control service element	-	-
ISO/IEC 7498-1	1994	Information technology - Open Systems Interconnection - Basic reference model: The basic model	-	-
ITU-T X.509	2008	Information technology - Open systems interconnection - The Directory: Public-key and attribute certificate frameworks	-	-
ITU-T X.693	2008	Information technology - ASN.1 encoding rules: XML Encoding rules (XER)	-	-
ITU-T X.693 Corrigendum 1	2011	Information technology - ASN.1 encoding rules: XML Encoding Rules (XER) Technical Corrigendum 1	-	-
ITU-T X.694	2008	Information technology - ASN.1 encoding rules: Mapping W3C XML schema definitions into ASN.1	-	-
ITU-T X.694 Corrigendum	2011	Information technology - ASN.1 encoding rules: Mapping W3C XML schema definitions into ASN.1 Technical corrigendum 1	-	-
FIPS PUB 180-4	2012	Secure Hash Standard (SHS)	-	-
FIPS PUB 186-4	2013	Digital Signature Standard (DSS)	-	-

[1] Under preparation. Stage at the time of publication: IEC CDV.

[2] Under preparation. Stage at the time of publication: prEN IEC 62056-8-11:2023.

NIST SP 800-21	2005	Guideline for Implementing Cryptography in the Federal Government	-	-
NIST SP 800-32	2001	Introduction to Public Key Technology and the Federal PKI Infrastructure	-	-
NIST SP 800-56A rev2	2013	Recommendation for Pair-Wise Key Establishment Schemes Using Discrete Logarithm Cryptography	-	-
NIST SP 800-57	2012	Recommendation for Key Management, Part 1: General (Revision 3)	-	-
NSA2	-	Suite B Implementer's guide to NIST SP800-56A, 28th July 2009	-	-
NSA3	-	NSA Suite B Base Certificate and CRL Profile, 27th May 2008	-	-
SEC1	2009	Standards for Efficient Cryptography: Elliptic Curve Cryptography. SECG. Version 2.0	-	-
RFC 3394	2002	Internet Engineering Task Force (IETF). Advanced Encryption Standard (AES) Key Wrap Algorithm. Edited by J. Schaad (Soaring Hawk Consulting) and R. Housley (RSA Laboratories)	-	-
RFC 4106	-	The Use of Galois/Counter Mode (GCM) in IPsec Encapsulating Security Payload (ESP)	-	-
RFC 4108	2005	Using Cryptographic Message Syntax (CMS) to Protect Firmware Packages	-	-
RFC 5280	2008	Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile	-	-

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