

<b>STN</b>	<b>Výmena údajov pri meraní elektrickej energie. Súbor DLMS/COSEM. Časť 9-7: Komunikačný profil pre siete TCP-UDP/IP.</b>	<b>STN EN 62056-9-7</b>
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Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 62056-9-7**

October 2013

ICS 17.220; 35.110; 91.140.50

Supersedes EN 62056-53:2007 (partially)

English version

**Electricity metering data exchange -  
The DLMS/COSEM suite -  
Part 9-7: Communication profile for TCP-UDP/IP networks  
(IEC 62056-9-7:2013)**

Échange des données de comptage de  
l'électricité -  
La suite DLMS/COSEM -  
Partie 9-7: Profil de communication pour  
réseaux TCP-UDP/IP  
(CEI 62056-9-7:2013)

Datenkommunikation der elektrischen  
Energiemessung - DLMS/COSEM -  
Teil 9-7: Festlegungen zur Nutzung von  
TCP-UDP/IP-Netzen  
(IEC 62056-9-7:2013)

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## Foreword

The text of document 13/1520/FDIS, future edition 1 of IEC 62056-9-7, 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 62056-9-7:2013.

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) 2014-04-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-05-28

This document supersedes EN 62056-53:2007 (PART).

EN 62056-9-7:2013 includes the following significant technical changes with respect to EN 62056-53:2007:

Note: Whereas IEC 62056-53 Ed. 2.0 contains the specification of the DLMS/COSEM communication profiles, IEC 62056-5-3 Ed.1.0 replacing the earlier edition does not.

- The title of the standard has been aligned with the title of other parts of the revised IEC 62056 series;
- Clause 4, Targeted communication environments has been extended, a functional reference architecture figure has been added;
- Clause 5, The structure of the profile(s) has been extended, the Figure has been generalized and simplified;
- In clause 6, Identification and addressing scheme, the port number assigned by the IANA for DLMS/COSEM has been added;
- In subclause 9.1, Two paragraphs specifying how confirmed and unconfirmed COSEM-OPEN and xDLMS service invocations have been added;
- Subclause 9.6, Transporting long messages, has been amended. It specifies now that for transporting long messages, application layer block transfer can be used (also available now with SN referencing);
- The clause on Multi-drop configurations has been removed.

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62056-6-1	NOTE	Harmonised as EN 62056-6-1 <sup>1)</sup> (not modified).
IEC 62056-6-2	NOTE	Harmonised as EN 62056-6-2 <sup>1)</sup> (not modified).

<sup>1)</sup> at draft stage.

**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 <sup>2)</sup>	-	Electricity metering data exchange - The DLMS/COSEM suite - Part 5-3: DLMS/COSEM application layer	EN 62056-5-3 <sup>2)</sup>	-
IEC 62056-47	2006	Electricity metering - Data exchange for meter reading, tariff and load control - Part 47: COSEM transport layers for IPv4 networks	EN 62056-47	2007

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<sup>2)</sup> At draft stage.



# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Electricity metering data exchange – The DLMS/COSEM suite –  
Part 9-7: Communication profile for TCP-UDP/IP networks**

**Échange des données de comptage de l'électricité – La suite DLMS/COSEM –  
Partie 9-7: Profil de communication pour réseaux TCP-UDP/IP**





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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Electricity metering data exchange – The DLMS/COSEM suite –  
Part 9-7: Communication profile for TCP-UDP/IP networks**

**Échange des données de comptage de l'électricité – La suite DLMS/COSEM –  
Partie 9-7: Profil de communication pour réseaux TCP-UDP/IP**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICITY METERING DATA EXCHANGE –  
THE DLMS/COSEM SUITE –****Part 9-7: Communication profile for TCP-UDP/IP networks****FOREWORD**

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DLMS<sup>1</sup> User Association  
Zug/Switzerland  
[www.dlms.ch](http://www.dlms.ch)

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<sup>1</sup> Device Language Message Specification.

International Standard IEC 62056-9-7 has been prepared by IEC technical committee 13: Electrical energy measurement, tariff- and load control.

It is based on IEC 62056-53 Ed.2:2006, *Electricity metering – Data exchange for meter reading, tariff and load control – Part 53: COSEM application layer*, Annex B.3, *The TCP-UDP/IP based communication profiles (COSEM\_on\_IP)* and introduces the following significant technical changes:

NOTE Whereas IEC 62056-53 Ed. 2.0 contains the specification of the DLMS/COSEM communication profiles, IEC 62056-5-3 Ed.1.0 replacing the earlier edition does not.

- The title of the standard has been aligned with the title of other parts of the revised IEC 62056 series;
- Clause 4, *Targeted communication environments* has been extended, a functional reference architecture figure has been added;
- Clause 5, *The structure of the profile(s)* has been extended, the Figure has been generalized and simplified;
- In clause 6, *Identification and addressing scheme*, the port number assigned by the IANA for DLMS/COSEM has been added;
- In subclause 9.1, two paragraphs specifying how confirmed and unconfirmed COSEM-OPEN and xDLMS service invocations have been added;
- Subclause 9.6, *Transporting long messages*, has been amended. It specifies now that for transporting long messages, application layer block transfer can be used (also available now with SN referencing);
- The clause on Multi-drop configurations has been removed.

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

FDIS	Report on voting
13/1520/FDIS	13/1537/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.

A list of all parts of IEC 62056, under the general title *Electricity metering data exchange – The DLMS/COSEM suite*, can be found on the IEC website.

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## ELECTRICITY METERING DATA EXCHANGE – THE DLMS/COSEM SUITE –

### Part 9-7: Communication profile for TCP-UDP/IP networks

#### 1 Scope

This part of IEC 62056 specifies the DLMS/COSEM communication profile for TCP-UDP/IP networks.

#### 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 62056-47:2006, *Electricity metering – Data exchange for meter reading, tariff and load control – Part 47: COSEM transport layer for IPv4 networks*

IEC 62056-5-3:2013, *Electricity metering data exchange – The DLMS/COSEM suite – Part 5-3: DLMS/COSEM application layer*

NOTE See also the Bibliography.

koniec náhľadu – text d'alej pokračuje v platenej verzii STN