



TECHNICAL SPECIFICATION



**Electricity metering data exchange – The DLMS/COSEM suite –
Part 9-1: Communication profile using web-services to access a DLMS/COSEM
server via a COSEM Access Service (CAS)**

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references.....	6
3 Terms, definitions and abbreviations	7
4 Relation to the IEC 62056 smart metering architecture	8
4.1 Overview.....	8
4.2 Example: Using the S-FSK profile according to IEC 62056-8-3	8
5 Use cases	8
5.1 General.....	8
5.2 Use case: Device Access	9
5.2.1 Overview	9
5.2.2 On-demand Device Access	9
5.2.3 Scheduled Device Access	11
5.2.4 Device Access with Data-Notification.....	14
5.3 Use case: Device groups.....	15
6 Web services interface model	15
7 Message organisation for the WS interface.....	15
7.1 Overview.....	15
7.2 IEC 62056 messages	15
7.2.1 Overview	15
7.2.2 General	15
7.2.3 Verbs.....	16
7.2.4 Nouns.....	17
7.2.5 Payloads.....	17
7.2.6 Payload for noun Device Access	17
7.3 Common Message Envelope	23
7.3.1 Overview	23
7.3.2 General	23
7.3.3 Message header structure	23
7.3.4 Request message structure	25
7.3.5 Response message structure	27
7.3.6 Event message structure.....	30
7.3.7 Fault message structure	31
8 Interface specification.....	32
8.1 Overview.....	32
8.2 Interface using SOAP	32
8.2.1 General	32
8.2.2 WSDL structure.....	33
8.2.3 SOAP envelope	33
Annex A (informative) XML schema for the COSEM XML representation	35
A.1 COSEMpdu.....	35
A.2 XML schema for the payload definitions.....	56
A.2.1 DeviceAccess	56
A.2.2 DeviceGroup.....	57
A.3 XML Schema for common message envelope	57

A.4 WSDL for interface using SOAP	58
Bibliography	59

Figure 1 – Reference model for the COSEM Access Client to DLMS/COSEM server connection via a COSEM Access Service	6
Figure 2 – The smart metering architecture of IEC 62056.....	8
Figure 3 – Use case: On-demand Device Access.....	10
Figure 4 – Use case: Scheduled Device Access	12
Figure 5 – Use case: Scheduled Device Access with Events	13
Figure 6 – Use case: Device Access with Data-Notification	14
Figure 7 – IEC 62056 messages between CAS Client and COSEM Access Service (CAS).....	16
Figure 8 – DeviceAccess overview structure.....	17
Figure 9 – DeviceGroups structure	18
Figure 10 – CosemAccessDescriptor sub-structure	19
Figure 11 – ACSEDescriptor sub-structure	19
Figure 12 – XDLMSDescriptor substructure	20
Figure 13 – cosemAccessResult substructure.....	21
Figure 14 – errorResult substructure	21
Figure 15 – ACSEResult substructure	21
Figure 16 – XDLMSResult substructure	22
Figure 17 – Common Message Envelope.....	23
Figure 18 – Common Message header structure	24
Figure 19 – RequestMessage structure	26
Figure 20 – XML for RequestMessage to create DeviceAccess	27
Figure 21 – ResponseMessage structure.....	28
Figure 22 – XML for ResponseMessage on create DeviceAccess.....	29
Figure 23 – EventMessage structure	30
Figure 24 – XML for EventMessage on change of DeviceAccess.....	31
Figure 25 – FaultMessage structure	32
Figure 26 – XML for FaultMessage on create of DeviceAccess	32
Figure 27 – SOAP message with RequestMessage.....	34

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICITY METERING DATA EXCHANGE – THE DLMS/COSEM SUITE –

Part 9-1: Communication profile using web-services to access a DLMS/COSEM server via a COSEM Access Service (CAS)

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC TS 62056-9-1, which is a technical specification, has been prepared by IEC technical committee 13: Electrical energy measurement and control.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
13/1641/DTS	13/1662/RVC

Full information on the voting for the approval of this technical specification 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.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

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ELECTRICITY METERING DATA EXCHANGE – THE DLMS/COSEM SUITE –

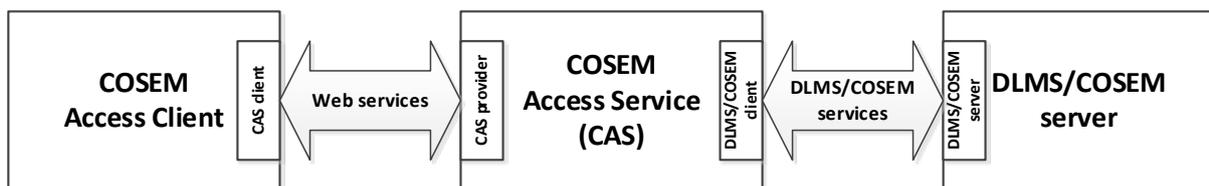
Part 9-1: Communication profile using web-services to access a DLMS/COSEM server via a COSEM Access Service (CAS)

1 Scope

This part of IEC 62056, which is a Technical Specification, defines how DLMS/COSEM servers can be accessed from a COSEM Access Client via an intermediate COSEM Access Service (CAS) providing Web services. The DLMS/COSEM server contains an application server supporting the data model of IEC 62056-6-1 / IEC 62056-6-2 and the application layer of IEC 62056-5-3. The underlying communication layers between the CAS and the DLMS/COSEM server are not covered by this specification. However, it is assumed that a profile standard exists describing how the underlying communication technology is used in conjunction with IEC 62056-6-1/ IEC 62056-6-2 and IEC 62056-5-3.

The Web services defined in this Technical Specification concern the G2 interface according to the architecture defined in IEC 62056-1-0.

The contents of this document define the Web services between the COSEM Access Client and the COSEM Access Service (CAS) as shown in Figure 1.



IEC

Figure 1 – Reference model for the COSEM Access Client to DLMS/COSEM server connection via a COSEM Access Service

The COSEM Access Client identifies the DLMS/COSEM server by its system title (see IEC 62056-5-3).

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 61968-1:2012, *Application integration at electric utilities – System interfaces for distribution management – Part 1: Interface architecture and general recommendations*

IEC 61968-100:2013, *Application integration at electric utilities – System interfaces for distribution management – Part 100: Implementation profiles*

IEC 62056-1-0, *Electricity metering data exchange – Part 1-0: Smart metering standardization framework*

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

IEC 62056-6-1, *Electricity metering data exchange – The DLMS/COSEM suite – Part 6-1: Object Identification System (OBIS)*

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

IEC 62056-8-3, *Electricity metering data exchange – The DLMS/COSEM suite – Part 8-3: Communication profile for PLC S-FSK neighbourhood networks*