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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17215.661-2018

Replacing GB/T 19882.31-2007

**Electricity metering data exchange -- The DLMS/COSEM suite --
Part 61: Object identification system (OBIS)**

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3.1 Terms and definitions

Foreword

GB/T 17215 "AC measuring equipment" is divided into several parts, GB/T 17215.6 "DLMS/COSEM component electrical measurement data

Exchange is divided into the following sections.

- Part 10. Intelligent Measurement Standardization Framework;
- Part 11. DLMS/COSEM communication configuration standard template;
- Part 31. Local area network use based on twisted pair carrier signals;
- Part 46. Data link layer using HDLC protocol;
- Part 47. DLMS/COSEM transmission layer based on IP network;
- Part 53. DLMS/COSEM application layer;
- Part 61. Object Identification System (OBIS);
- Part 62. COSEM interface class;
- Part 73. Wired and wireless M-Bus communication configurations for local and community networks;
- Part 76. HDLC-based connection-oriented three-layer communication configuration;
- Part 91. Communication configuration using the WEB service to access the COSEM server via CAS;
- Part 97. Communication configuration based on TCP-UDP/IP network.

This part is part 61 of GB/T 17215.6.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 19882.31-2007 "Automatic Meter Reading System Part 3-1.

Application Layer Data Exchange Protocol Object Identification

System, see the Appendix NA for major technical changes compared to GB/T 19882.31-2007.

This section uses the translation method equivalent to IEC 62056-6-1..2017 "Electrical Measurement Data Exchange DLMS/COSEM Components Part 6-1

Points. Object Identification System (OBIS).

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

---GB/T 17215.662-2018 Electrical measurement data exchange DLMS/COSEM components - Part 62. COSEM

Mouth class (IEC 62056-6-2.2017, IDT).

--- GB/T 19897.1-2005 Automatic meter reading system low-level communication protocol - Part 1. Direct local data exchange

(IEC 62056-21.2002, MOD).

This section has made the following editorial changes.

--- The standard name was changed from part 6-1 to part 61;

--- Added informational appendix NA description and major technical changes in each version.

Introduction

The third edition of IEC 62056-6-1 consists of the IEC TC13WG14 working group and the D-type federation of the DLMS User Association prepared by.

This version is in line with DLMSUA's Blue Book 12.2. This edition specifies new OBIS codes related to new applications.

Includes some editorial improvements.

Data identification

The demand for timely information related to the use of electricity in the power market in competition is increasing, and recent technological developments have enabled us to

Manufacture smart stationary measurement devices that capture, process, and communicate with all related devices.

In order to further analyze this information and achieve the purposes of billing, load

management, user management and contract management, it is necessary to

Data items that are manually or automatically acquired over local or remote data exchanges are uniquely identified in a manufacturer-independent manner. Identification code

The definition is based on DIN 43863-3:1997, electrical instrumentation part 3. the rate measuring device as the electrical metering device

According to the identification system.

The definition of IEC 62056-61, Object Identification System (OBIS) was first published in 2002, and GB/T 19882.31-2007 is equivalent.

IEC 62056-61:2002. The second edition was released in 2006.

In 2013, it was reorganized as IEC 62056-6-1:2013.

In 2015, it was revised to IEC 62056-6-1:2015.

In 2017, it was revised to IEC 62056-6-1:2017.

The rapid development of smart meters requires more frequent revisions to the instrument data exchange standards.

GB/T 17215.661 should be read in conjunction with GB/T 17215.653 and GB/T 17215.662.

The IEC 62056-XY series of standards corresponds to the national standard GB/T 17215.6XY series.

Electrical measurement data exchange DLMS/COSEM component

Part 61. Object Identification System (OBIS)

1 Scope

This part of GB/T 17215.6 specifies the overall structure of the Object Identification System (OBIS) and will measure all commonly used data in the equipment.

The item is mapped to its identification code.

OBIS provides a unique identifier for all data in the measuring device, including not only the measured values, but also the instrumentation equipment.

Set or obtain abstract data that measures the operating state of the device. The ID code defined in this section is used as an identifier in.

--- The logical names of various instances or objects of the interface class, as defined in GB/T 17215.662;

---Data transmitted over the communication line;

---Measure the data displayed by the device (see A.2 in Appendix A).

This section applies to all types of measuring equipment, such as. fully integrated electric meters, modular meters, rate accessories, data concentrators and so on.

In order to cover other non-electrical measuring devices, the combined measuring device measures multiple energy types or has multiple physical measuring channels.

To this end, the concept of media and channels is introduced.

Note. Some non-electrical data identifiers are defined for measuring equipment in EN13757-1:2014. heat distribution meters, heat meters, gas meters, cold water meters and hot water meters.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 17215.101-2010 Data exchange terms for metering, rate and load control - Part 1 .

DLMS/COSEM measurement equipment exchange data related terms (IEC TR62051-1:2004, IDT)

GB/T 17215.323-2008 Particular requirements for measuring equipment - Part 23. Static s. Level 3) (IEC 62053-23:2003, IDT)

GB /Z 18039.7-2011 Electromagnetic compatibility environment, voltage sag, short-term interruption and its statistical analysis

Fruit (IEC TR61000-2-8:2002, IDT)

IEC TR62051:1999 Electrical measurement terms (Electricity metering-Glossary of terms)

IEC 62056-6-2:2017 Electrical measurement data exchange DLMS/COSEM components Part 62. COSEM interface class (Elec-

tricity metering data exchange-The DLMS/COSEM suite-Part 6-2.COSEM interface classes)

IEC 62056-21:2002 Data exchange for metering, rate and load control - Part 21. Direct local Data exchange (Electricity metering data exchange for meter reading, tariff and load control-Part 21.Direct

Local data exchange)

3.1 Terms and definitions

The terms and definitions defined in GB/T 17215.101-2010 and IEC TR62051:1999 apply