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**NATIONAL STANDARD OF THE
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**Electricity metering data exchange - The DLMS/COSEM suite -
Part 86: High speed PLC ISO/IEC 12139-1 profile for
neighbourhood networks**

电测量数据交换 DLMS/COSEM组件 第86部分：社区网络高速PLC ISO/IEC 12139-1配置

(English Translation)

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Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 86 of GB/T (Z) 17215.6 "DLMS/COSEM components for electrical measurement data exchange".

The following parts have been published.

- Part 10: Standardized framework for intelligent measurement;
- Part 11: Template for DLMS/COSEM communication configuration standard;
- Part 31: Use of local area networks based on twisted pair carrier signals;
- Part 46: Data link layer using HDLC protocol;

- Part 47: DLMS/COSEM transport layer based on IP network;
- Part 51: Application layer protocol;
- Part 52: Communication protocol management distribution line message specification (DLMS) server;
- Part 53: DLMS/COSEM application layer;
- Part 61: Object Identification System (OBIS);
- Part 62: COSEM interface class;
- Part 69: Common Information Model Message Set (IEC 61968-9) and DLMS/COSEM (IEC 62056) data model and coordination Mapping between proposals;
- Part 73: Wired and wireless M-Bus communication configurations for local and community networks;
- Part 75: Local data transmission configuration for local network (LN);
- Part 76: Connection-oriented layer 3 communication configuration based on HDLC;
- Part 82: Community Network Mesh Communication Configuration;
- Part 86: Community network high-speed PLC ISO/IEC 12139-1 configuration;
- Part 91: Communication using Web services to access DLMS/COSEM servers via COSEM Access Service (CAS) Configuration;
- Part 97: Communication configuration based on TCP-UDP/IP network.

This document is equivalent to IEC 62056-8-6:2017 "Electrical measurement data exchange DLMS/COSEM components Part 8-6.Community Network High Speed PLC ISO/IEC 12139-1 Configuration.

The following minimal editorial changes were made to this document.

- In order to coordinate with the existing standards, the name of the standard is changed from "Electrical Measurement Data Exchange DLMS/COSEM Components Part 8-6.Social the "High-speed PLC ISO/IEC 12139-1 Configuration for Area Networks" was changed to "DLMS/COSEM Components for Electrical Measurement Data Exchange Part 86: Community network high-speed PLC ISO/IEC 12139-1 configuration.

Introduction

At present, energy conservation, emission reduction, low carbon, environmental protection and the establishment of a sustainable society have become a global consensus. Countries are actively building regional energy management system to promote efficient and scientific use of energy. On this basis, IEC/TC57 (Power System Management and Related

Information Exchange Technology) the EN/TC294 (Technical Committee for Instrument Communication Systems) and TC13 (Technical Committee for Power Measurement and Control) jointly established DLMS/COSEM energy measurement system transmission protocol, the electrical energy part is completed by IEC 62056 (all parts), and the non-electrical part is completed by EN13757 (all parts) is completed. In order to establish a global unified and open interoperability, countries around the world have successively adopted IEC 62056 (all parts) Transformed into national standards. my country transformed IEC 62056-XY into GB/T 17215.6XY.

GB/T 17215.6 "Electrical Measurement Data Exchange DLMS/COSEM Components" is intended to consist of the following 27 parts.

--- Part 10: Intelligent measurement standardization framework. The purpose is to understand the architecture, interoperability, and information security of GB/T 17215.6 and other relevant information.

--- Part 11: Template for DLMS/COSEM communication configuration standard. The purpose is to establish the communication configuration standard to follow template.

--- Part 31: Local area network based on twisted pair carrier signal. The purpose is to use twisted pair carrier signal local area network to comply with specifications.

--- Part 41: Data exchange using wide area networks. Public switched telephone network (PSTN) with LINK protocol.

Specifications followed by the Public Switched Telephone Network with the LINK protocol.

--- Part 42: Physical layer service procedures for connection-oriented asynchronous data exchange. The purpose is to establish the physical layer service procedures for asynchronous data exchange.

The layer connection process should follow the specifications

--- Part 46: Data link layer using HDLC protocol. The purpose is to use the HDLC asynchronous communication protocol suite to follow the data Link layer specifications.

--- Part 47: DLMS/COSEM transport layer based on IP network.

The COSEM transport layer follows the specification.

--- Part 51: Application layer protocol. The purpose is to provide the transport layer and metering equipment communication architecture described in DL/T 790.441 ization application layer.

--- Part 52: Communication protocol management distribution line message specification (DLMS) server. The purpose is to provide IEC 62056-31, IEC the protocol management DLMS server of IEC 62056-41 and IEC 62056-51 is consistent with and different from DL/T 790.441.