TECHNICAL REPORT

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Electricity metering – Glossary of terms

Lecture des compteurs électriques – Glossaire de termes

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICITY METERING – GLOSSARY OF TERMS

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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Technical reports do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

IEC 62051, which is a technical report, has been prepared by IEC technical committee 13: Equipment for electrical energy measurement and load control.

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

Enquiry draft	Report on voting
13/1151/CDV	13/1178/RVC

Full information on the voting for the approval of this technical report 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 3.

This document, which is purely informative, is not to be regarded as an International Standard.

The definitions in this glossary are intended to assist in understanding the work of technical committee 13.

The preparation of this report is based on the

• Australian Standard AS 4140.

In addition, the following standard organizations have contributed to the preparation of this technical report:

- CEN technical committee 294, working group 2;
- USA and Canada AMRA/AMSI/IC/IEEE joint working group.

ELECTRICITY METERING – GLOSSARY OF TERMS

1 Scope

This technical report provides definitions of specific terms which may be used for drafting standards for electrical energy measurement, tariff and load control, and customer/utility information exchange systems.

Standards and technical reports which deal with Distribution Automation Systems (DAS) using Distribution Line Carrier (DLC) systems use a number of terms with specific meaning, which are not defined in IEC 60050(371). The present technical report includes these terms and their definitions, as well as those terms that are already defined in IEC 60050(371). It presents a comprehensive means of referring to terms used in standard documents on customer/utility information exchange (CUIE) systems prepared or being prepared by IEC TC 13.

This report also incorporates specific terms used in present and future standards on electricity pre-payment systems, and specific terms concerning the dependability of electricity metering equipment.

2 Sources of terms

The following documents were used to establish this glossary of terms.

General terms given in the IEC 60050 series are repeated with reference to the appropriate IEV term. Other sources are identified by a figure in brackets which refers to the following list:

- (1) American National Standards Institute: IEEE Standard Dictionary of Electrical and Electronics Terms (1984)
- (2) IEC 60050(351): International Electrotechnical Vocabulary (IEV) Chapter 351: Automatic control
- (3) IEC 60050(721):1992, International Electrotechnical Vocabulary (IEV) Chapter 721: Telegraphy, facsimile and data communication
- (4) ISO/IEC 2382-9:1995, Information technology Vocabulary Part 9: Data communication
- (5) Australian Standard AS 4140-1995: *Metering and utility information exchange Glossary of terms*
- (6) IEC 60050(191):1990, International Electrotechnical Vocabulary (IEV) Chapter 191: Dependability and quality of service
- (7) IEC/TR3 60870-1-3:1997, Telecontrol equipment and systems Part 1: General considerations Section 3: Glossary
- (8) ISO/IEC 7498-1:1994, Information technology Open Systems Interconnection Basic Reference Model The Basic Model
- (9) ISO/IEC 10731:1994, Information technology Open Systems Interconnection Basic Reference Model – Conventions for the definition of OSI services (source: ITU-T X.210: 1993)
- (10) IEC 60050(161):1990, International Electrotechnical Vocabulary (IEV) Chapter 161: Electromagnetic compatibility

- (11) ISO 8402:1994, Quality management and quality assurance Vocabulary
- (12) South African Specification NRS009-1. *Electricity Sales Systems Part 1: Glossary and System Overview*. (Subsequently published as South African Standard: SABS 1524-0)
- (13) IEC 60050(691):1973, International Electrotechnical Vocabulary (IEV) Chapter 691: Tariffs for electricity
- (14) ISO/IEC 2382-14:1997, Information technology Vocabulary Part 14: Reliability, maintainability and availability
- (15) IEC 61107:1996, Data exchange for meter reading, tariff and load control Direct local data exchange
- (16) IEC 61134-4-41:1996, Distribution automation using distribution line carrier systems Part 4: Data communication protocols – Section 41: Application protocol distribution line message specification
- (17) ISO/IEC 9506-1:1990, Industrial automation systems Manufacturing message specification Part 1: Service definition
- (18) ISO/IEC 9506-2:1990, Industrial automation systems Manufacturing message specification Part 2: Protocol specification
- (19) ISO 8824:1990, Information technology Open Systems Interconnection Specification of Abstract Syntax Notation One (ASN.1) (Provisionally retained edition)
- (20) ISO 8825:1990, Information technology Open Systems Interconnection Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1) (Provisionally retained edition)
- (21) IEC 60050(371):1984, International Electrotechnical Vocabulary (IEV) Chapter 371: Telecontrol
- (22) IEC 60050(702):1992, International Electrotechnical Vocabulary (IEV) Chapter 702: Oscillations, signals and related devices