BS EN 62361-2:2013

BSI Standards Publication

Power systems management and associated information exchange — Interoperability in the long term

Part 2: End to end quality codes for supervisory control and data acquisition (SCADA)

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National foreword

This British Standard is the UK implementation of EN 62361-2:2013. It is identical to IEC 62361-2:2013.

The UK participation in its preparation was entrusted to Technical Committee PEL/57, Power systems management and associated information exchange.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Date	Text affected

EUROPEAN STANDARD

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English version

Power systems management and associated information exchange - Interoperability in the long term - Part 2: End to end quality codes for supervisory control and data acquisition (SCADA)

(IEC 62361-2:2013)

Gestion des systèmes de puissance et échanges d'informations associés - Interopérabilité à long terme - Partie 2: Codes de qualité de bout en bout pour le contrôle de supervision et acquisition de données (SCADA)
(CEI 62361-2:2013)

Angleichung der Codes für die Datenqualität innerhalb des TC 57 - Allgemeine Liste der Codes für die Datenqualität
(IEC 62361-2:2013)

CENELEC

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Foreword

The text of document 57/1374/FDIS, future edition 1 of IEC 62361-2, prepared by IEC/TC 57, "Power systems management and associated information exchange" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62361-2:2013.

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)	2014-07-30
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-10-30

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62361-2:2013 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 60870-5	Series	Telecontrol equipment and systems - Part 5: Transmission protocols	EN 60870-5	Series
IEC 60870-6	Series	Telecontrol equipment and systems	EN 60870-6	Series
IEC 61850	Series	Communication networks and systems in substations	EN 61850	Series
IEC 61850-3	-	Communication networks and systems for power utility automation - Part 3: General requirements	FprEN 61850-3[1)]	-
IEC 61850-7-2	2010	Communication networks and systems for power utility automation - Part 7-2: Basic information and communication structure - Abstract communication service interface (ACSI)	EN 61850-7-2	2010
IEC 61850-7-3	-	Communication networks and systems for power utility automation - Part 7-3: Basic communication structure - Common data classes	EN 61850-7-3	-
IEC 61970	Series	Energy management system application program interface (EMS-API)	EN 61970	Series
IEC 61970-301	-	Energy management system application program interface (EMS-API) - Part 301: Common information model (CIM) base	FprEN 61970-301[1)]	-
ISO 8601	2004	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-

DAIS Data Access formal/05-06-01; www.omg.com

OPC Data Access version 2.03; www.opcfoundation.org.

OPC UA Part 8 -Data Access RC 1.01.10 Specification.doc

[1)] At draft stage.

CONTENTS

INTRODUCTION

The scope of IEC 62361-2 is to create a common list of SCADA quality codes for reference by other standards to avoid embedding quality code lists in other standards.

POWER SYSTEMS MANAGEMENT AND ASSOCIATED INFORMATION EXCHANGE – INTEROPERABILITY IN THE LONG TERM –

Part 2: End to end quality codes for supervisory control and data acquisition (SCADA)

1 Scope

This part of IEC 62361 documents the quality codes used by existing IEC standards related to supervisory control and data acquisition (SCADA) in the field of power systems management. Meter reading quality coding is not considered to be in the scope of this version of the document. It determines and documents mapping between these standards. Eventual loss of quality information that might occur in mapping is documented. A cohesive and common list of quality codes with semantics is defined. The identified standards to be dealt with in this document are: IEC 60870-5, IEC 60870-6 TASE.2, IEC 61850, IEC 61970, DAIS DA, OPC DA and OPC UA.

Data covered by this part of IEC 62361 is measurements provided by the following links, applications or interfaces:

- RTU, 61850 or OPC DA links to SCADA
- Validation added by state estimation
- TASE.2 (ICCP) or TASE.1 (ELCOM) links between control centers
- Servers, e.g. SCADA, that provide OPC or DAIS DA-data.

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 60870-5 (all parts), *Telecontrol equipment and systems – Part 5: Transmission protocols*

IEC 60870-6 (all parts), *Telecontrol equipment and systems – Part 6: Telecontrol protocols compatible with ISO standards and ITU-T recommendations*

IEC 61850 (all parts), *Communication networks and systems for power utility automation*

IEC 61850-3, *Communication networks and systems for power utility automation – Part 3: General requirements*

IEC 61850-7-2:2010, *Communication networks and systems for power utility automation – Part 7-2: Basic information and communication structure – Abstract communication service interface (ACSI)*

IEC 61850-7-3, *Communication networks and systems for power utility automation – Part 7-3: Basic communication structure – Common data classes*

IEC 61970 (all parts), *Energy management system application program interface (EMS-API)*