BS EN 61850-4:2011+A1:2020

BSI Standards Publication

Communication networks and systems for power utility automation

Part 4: System and project management

bsi.

National foreword

This British Standard is the UK implementation of EN 61850-4:2011+A1:2020. It is identical to IEC 61850-4:2011, incorporating amendment 1:2020. It supersedes BS EN 61850-4:2011, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1 A1.

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 committee manager.

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31 December 2020	Implementation of IEC amendment 1:2020 with CENELEC endorsement A1:2020

EUROPEAN STANDARD

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December 2020

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English version

Communication networks and systems for power utility automation - Part 4: System and project management

(IEC 61850-4:2011)

Réseaux et systèmes de communication pour l'automatisation des systèmes électriques -
Partie 4: Gestion du système et gestion de projet
(CEI 61850-4:2011)

Kommunikationsnetze und -systeme in Stationen -
Teil 4: System- und Projektverwaltung
(IEC 61850-4:2011)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 57/1103/FDIS, future edition 2 of IEC 61850-4, prepared by IEC TC 57, Power systems management and associated information exchange, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61850-4 on 2011-05-16.

This European Standard supersedes EN 61850-4:2002.

It constitutes a technical revision to align the document more closely with the other parts of the EN 61850 series, in addition to enlarging the scope from substation automation systems to all utility automation systems.

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– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-05-16

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61850-4:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61850-10	NOTE	Harmonized as EN 61850-10.
ISO 9001:2008	NOTE	Harmonized as EN ISO 9001:2008 (not modified).

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Foreword to amendment A1

The text of document 57/2256/FDIS, future IEC 61850-4/A1, 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 61850-4:2011/A1:2020.

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IEC 61850-4:2011+A1:2020

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION –

Part 4: System and project management

FOREWORD

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International Standard IEC 61850-4 has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

This second edition cancels and replaces the first edition published in 2002. It constitutes a technical revision to align the document more closely with the other parts of the IEC 61850 series, in addition to enlarging the scope from substation automation systems to all utility automation systems.

The text of this standard is based on the following documents:

FDIS	Report on voting
57/1103/FDIS	57/1122/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

IEC 61850-4:2011+A1:2020

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61850 series, under the general title: *Communication networks and systems for power utility automation*, 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 web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IEC 61850-4:2011+A1:2020

COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION –

Part 4: System and project management

1 Scope

〈A1〉 This part of IEC 61850 applies to projects associated with processes near automation systems of power utilities (UAS, utility automation system), such as substation automation systems (SAS). It defines the system and project management for UAS with communication between intelligent electronic devices (IEDs) in the substation respective plant and the related system requirements. 〈A1〉

The specifications of this part pertain to the system and project management with respect to:

– the engineering process and its supporting tools;
– the life cycle of the overall system and its IEDs;
– the quality assurance beginning with the development stage and ending with discontinuation and decommissioning of the UAS and its IEDs.

The requirements of the system and project management process and of special supporting tools for engineering and testing are described.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60848, *GRAFCET specification language for sequential function charts*

IEC 61082 (all parts), *Preparation of documents used in electrotechnology*

IEC 61175, *Industrial systems, installations and equipment and industrial products – Designation of signals*

〈A1〉 IEC 61850-6, *Communication networks and systems for power utility automation – Part 6: Configuration description language for communication in power utility automation systems related to IEDs* 〈A1〉

IEC 61850-7 (all parts), *Communication networks and systems for power utility automation – Part 7: Basic communication structure*

IEC 81346 (all parts), *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations*

〈A1〉 *Text deleted* 〈A1〉

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
supporting tools
those tools that support the user in the engineering, the operation and the management of the UAS and its IEDs

NOTE These tools are usually a part of the UAS.