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## **System och nät för kommunikation i stationer och ställverk – Del 4: Styrning av projekt och system**

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

Som svensk standard gäller europastandarden EN 61850-4:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61850-4:2011.

### **Nationellt förord**

Europastandarden EN 61850-4:2011

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61850-4, Second edition, 2011 - Communication networks and systems for power utility automation - Part 4: System and project management**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61850-4, utgåva 1, 2003, gäller ej fr o m 2014-05-16.

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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**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)

This European Standard was approved by CENELEC on 2011-05-16. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## 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.

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

The following dates were fixed:

- |                                                                                                                                          |       |            |
|------------------------------------------------------------------------------------------------------------------------------------------|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2012-02-16 |
| – 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.

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## 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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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                                                                                                                                                          | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| IEC 60848          | -           | GRAFCET specification language for sequential function charts                                                                                                                         | EN 60848     | -           |
| IEC 61082          | Series      | Preparation of documents used in electrotechnology                                                                                                                                    | EN 61082     | Series      |
| IEC 61175          | -           | Industrial systems, installations and equipment and industrial products - Designation of signals                                                                                      | EN 61175     | -           |
| IEC 61850-6        | -           | Communication networks and systems for power utility automation - Part 6: Configuration description language for communication in electrical substations related to IEDs              | EN 61850-6   | -           |
| IEC 61850-7        | Series      | Communication networks and systems for power utility automation - Part 7: Basic information and communication structure                                                               | EN 61850-7   | Series      |
| IEC 81346          | Series      | Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations                                                           | EN 81346     | Series      |
| IEC 81346-1        | -           | Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1: Basic rules                                     | EN 81346-1   | -           |
| IEC 81346-2        | -           | Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 2: Classification of objects and codes for classes | EN 81346-2   | -           |

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## COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION –

### Part 4: System and project management

#### 1 Scope

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

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*

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

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*

IEC 81346-1, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 1: Basic rules*

IEC 81346-2, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 2: Classification of objects and codes for classes*