



SLOVENSKI STANDARD

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SIST EN 61850-7-4:2004

Komunikacijska omrežja in sistemi za avtomatizacijo porabe (električne) energije - 7-4. del: Osnovna komunikacijska struktura - Združljivi logični vozliščni in podatkovni razredi (IEC 61850-7-4:2010)

Communication networks and systems for power utility automation - Part 7-4: Basic communication structure - Compatible logical node classes and data object classes (IEC 61850-7-4:2010)

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Kommunikationsnetze und -systeme für die Automatisierung in der elektrischen Energieversorgung - Teil 7-4: Grundlegende Kommunikationsstruktur - Kompatible Logikknoten und Datenklassen (IEC 61850-7-4:2010)

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Réseaux et systèmes de communication pour l'automatisation des systèmes électriques - Partie 7-4 : Structure de communication de base - Classes de noeud logique et classes de donnée objet compatibles (CEI 61850-7-4:2010)

Ta slovenski standard je istoveten z: EN 61850-7-4:2010

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29.240.30	Krmilna oprema za elektroenergetske sisteme	Control equipment for electric power systems
33.200	Daljinsko krmiljenje, daljinske meritve (telemetrija)	Telecontrol. Telemetry

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June 2010

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English version

**Communication networks and systems for power utility automation -
Part 7-4: Basic communication structure -
Compatible logical node classes and data object classes
(IEC 61850-7-4:2010)**

Réseaux et systèmes de communication
pour l'automatisation des systèmes
électriques -
Partie 7-4 : Structure de communication
de base -
Classes de nœud logique et classes
de donnée objet compatibles
(CEI 61850-7-4:2010)

Kommunikationsnetze und -systeme
für die Automatisierung in der elektrischen
Energieversorgung -
Teil 7-4: Grundlegende
Kommunikationsstruktur -
Kompatible Logikknoten-
und Datenklassen
(IEC 61850-7-4:2010)

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This European Standard was approved by CENELEC on 2010-06-01. 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.

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CENELEC

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

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Foreword

The text of document 57/1045/FDIS, future edition 2 of IEC 61850-7-4, 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 61850-7-4 on 2010-06-01.

This European Standard supersedes EN 61850-7-4:2003.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The major technical changes with regard to EN 61850-7-4:2003 are as follows:

- corrections and clarifications according to information letter "IEC 61850-technical issues by the IEC TC 57" (see document 57/963/INF, 2008-07-18);
- extensions for new logical nodes for the power quality domain;
- extensions for the model for statistical and historical statistical data;
- extensions regarding IEC 61850-90-1 (substation-substation communication);
- extensions for new logical nodes for monitoring functions according to EN 62271;
- new logical nodes from EN 61850-7-410 and EN 61850-7-420 of general interest.

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) | 2011-03-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2013-06-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61850-7-4:2010 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 60870-5-101	NOTE	Harmonized as EN 60870-5-101.
IEC 60870-5-103	NOTE	Harmonized as EN 60870-5-103.
IEC 61000-4-30	NOTE	Harmonized as EN 61000-4-30.
IEC 61850-6	NOTE	Harmonized as EN 61850-6.
IEC 61850-7-410:2007	NOTE	Harmonized as EN 61850-7-410:2007 (not modified).
IEC 61850-7-420	NOTE	Harmonized as EN 61850-7-420.
IEC 61850-8 series	NOTE	Harmonized in EN 61850-8 series (not modified).

IEC 61850-9 series NOTE Harmonized in EN 61850-9 series (not modified).

IEC 61850-10 NOTE Harmonized as EN 61850-10.

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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 60270	2000	High-voltage test techniques - Partial discharge measurements	EN 60270	2001
IEC 61000-4-7	2002	Electromagnetic compatibility (EMC) - Part 4-7: Testing and measurement techniques - General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto	EN 61000-4-7	2002
IEC 61000-4-15	-	Electromagnetic compatibility (EMC) - Part 4-15: Testing and measurement techniques - Flickermeter - Functional and design specifications	EN 61000-4-15	-
IEC/TS 61850-2	-	Communication networks and systems in substations - Part 2: Glossary	-	-
IEC 61850-5	-	Communication networks and systems in substations - Part 5: Communication requirements for functions and device models	EN 61850-5	-
IEC 61850-7-1	200X ¹⁾	Communication networks and systems for power utility automation - Part 7-1: Basic communication structure - Principles and models	EN 61850-7-1	200X ²⁾
IEC 61850-7-2	200X ¹⁾	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	200X ²⁾
IEC 61850-7-3	200X ¹⁾	Communication networks and systems for power utility automation - Part 7-3: Basic communication structure - Common data classes	EN 61850-7-3	200X ²⁾

¹⁾ To be published.

²⁾ At draft stage.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61850-9-2	-	Communication networks and systems for power utility automation - Part 9-2: Specific Communication Service Mapping (SCSM) - Sampled values over ISO/IEC 8802-3	EN 61850-9-2	-
IEEE C37.111	1999	IEEE Standard for Common Format for Transient Data Exchange (COMTRADE) for Power Systems	-	-
IEEE 519	1992	IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems	-	-
IEEE C37.2	1996	Electrical Power System Device Function Numbers and Contact Designations	-	-
IEEE 1459	2000	IEEE Trial Use Standard Definitions for the Measurement of Electric Power Quantities Under Sinusoidal, Nonsinusoidal, Balanced or Unbalanced Conditions	-	-
IEEE 1588	-	IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems	-	-

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INTERNATIONAL STANDARD



**Communication networks and systems for power utility automation –
Part 7-4: Basic communication structure – Compatible logical node classes and
data object classes**

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