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## System och nät för kommunikation i stationer och ställverk – Del 7-410: Grundläggande kommunikationsstruktur – Vattenkraftstationer – Kommunikation för övervakning och styrning

*Communication networks and systems for power utility automation –  
Part 7-410: Basic communication structure –  
Hydroelectric power plants –  
Communication for monitoring and control*

Som svensk standard gäller europastandarden EN 61850-7-410:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61850-7-410:2013.

### Nationellt förord

Europastandarden EN 61850-7-410:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61850-7-410, Second edition, 2012 - Communication networks and systems for power utility automation - Part 7-410: Basic communication structure - Hydroelectric power plants - Communication for monitoring and control**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61850-7-410, utgåva 1, 2008, gäller ej fr o m 2015-12-04.

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Postadress: SEK, Box 1284, 164 29 KISTA  
Telefon: 08 - 444 14 00. Telefax: 08 - 444 14 30  
E-post: sek@elstandard.se. Internet: www.elstandard.se

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Box 1284  
164 29 Kista  
Tel 08-444 14 00  
[www.elstandard.se](http://www.elstandard.se)

English version

**Communication networks and systems for power utility automation -  
Part 7-410: Basic communication structure -  
Hydroelectric power plants -  
Communication for monitoring and control  
(IEC 61850-7-410:2012)**

Réseaux et systèmes de communication  
pour l'automatisation  
des systèmes électriques -  
Partie 7-410: Structure  
de communication de base -  
Centrales hydroélectriques -  
Communication pour le contrôle-  
commande  
(CEI 61850-7-410:2012)

Kommunikationsnetze und -systeme für  
die Automatisierung in der elektrischen  
Energieversorgung -  
Teil 7-410: Wasserkraftwerke -  
Kommunikation für Überwachung,  
Regelung und Steuerung  
(IEC 61850-7-410:2012)

This European Standard was approved by CENELEC on 2012-12-04. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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**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 57/1274/FDIS, future edition 2 of IEC 61850-7-410, 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 61850-7-410:2013.

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) 2013-09-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-12-04

This document supersedes EN 61850-7-410:2007.

EN 61850-7-410:2013 includes the following significant technical changes with respect to EN 61850-7-410:2007:

- a) The logical nodes in EN 61850-7-410:2007 that were not specific to hydropower plants have been transferred to EN 61850-7-4:2010 and have been removed from this edition of EN 61850-7-410.
- b) The definitions of logical nodes in this edition of EN 61850-7-410 have been updated using the format introduced in EN 61850-7-4:2010.
- c) Most of the modelling examples and background information that was included in EN 61850-7-410:2007 has been transferred to IEC/TR 61850-7-510.
- d) However, this edition of EN 61850-7-410 includes additional general-purpose logical nodes that were not included in EN 61850-7-4:2010, but are required in order to represent the complete control and monitoring system of a hydropower plant.

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 61850-7-410:2012 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 61362	NOTE	Harmonized as EN 61362.
IEC 61850-10	NOTE	Harmonized as EN 61850-10.
IEC 61970-301	NOTE	Harmonized as EN 61970-301.
IEC 62270	NOTE	Harmonized as EN 62270.

## 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TS 61850-2	-	Communication networks and systems in substations - Part 2: Glossary	-	-
IEC 61850-7-1	-	Communication networks and systems for power utility automation - Part 7-1: Basic communication structure - Principles and models	EN 61850-7-1	-
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	2010	Communication networks and systems for power utility automation - Part 7-3: Basic communication structure - Common data classes	EN 61850-7-3	2011
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	EN 61850-7-4	2010

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## COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION –

### Part 7-410: Basic communication structure – Hydroelectric power plants – Communication for monitoring and control

#### 1 Scope

This part of IEC 61850 specifies the additional common data classes, logical nodes and data objects required for the use of IEC 61850 in a hydropower plant.

#### 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/TS 61850-2, *Communication networks and systems in substations – Part 2: Glossary*

IEC 61850-7-1, *Communication networks and systems for power utility automation – Part 7-1: Basic communication structure – Principles and models*

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 61850-7-3:2010, *Communication networks and systems for power utility automation – Part 7-3: Basic communication structure for substations and feeder equipment – Common data classes*

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*