

STN	Komunikačné siete a systémy automatizácie elektrických staníc Časť 6: Jazyk na opis konfigurácie na komunikáciu v staniciach s inteligentnými elektronickými zariadeniami (IED) Zmena A2	STN EN 61850-6/A2 33 4850
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Communication networks and systems for power utility automation - Part 6: Configuration description language for communication in power utility automation systems related to IEDs

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/25

STN EN 61850-6 z júla 2010 sa bez tejto zmeny A2 môže používať do 31. 1. 2028.

Obsahuje: EN 61850-6:2010/A2:2025, IEC 61850-6:2009/AMD2:2024

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61850-6:2010/A2

January 2025

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English Version

Communication networks and systems for power utility
automation - Part 6: Configuration description language for
communication in in power utility automation systems related to
IEDs
(IEC 61850-6:2009/AMD2:2024)

Réseaux et systèmes de communication pour
l'automatisation des systèmes électriques - Partie 6:
Langage de description de configuration pour la
communication dans les systèmes d'automatisation des
systèmes électriques, entre les dispositifs électroniques
intelligents (IED)
(IEC 61850-6:2009/AMD2:2024)

Kommunikationsnetze und -systeme für die
Automatisierung in der elektrischen Energieversorgung -
Teil 6: Sprache für die Beschreibung der Konfiguration für
die Kommunikation in Stationen mit intelligenten
elektronischen Geräten (IED)
(IEC 61850-6:2009/AMD2:2024)

This amendment A2 modifies the European Standard EN 61850-6:2010; it was approved by CENELEC on 2025-01-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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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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

EN 61850-6:2010/A2:2025 (E)**European foreword**

The text of document 57/2711/FDIS, future edition 2 of IEC 61850-6/AMD2, prepared by TC 57 "Power systems management and associated information exchange" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61850-6:2010/A2:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-01-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-01-31 document have to be withdrawn

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This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61850-6:2009/AMD2:2024 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 are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Add the following references:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62351-4	-	Power systems management and associated information exchange - Data and communications security - Part 4: Profiles including MMS and derivatives	EN IEC 62351-4	-
IEC 62351-6	-	Power systems management and associated information exchange - Data and communications security - Part 6: Security for IEC 61850	EN IEC 62351-6	-
IEC 62351-9	-	Power systems management and associated information exchange - Data and communications security - Part 9: Cyber security key management for power system equipment	EN IEC 62351-9	-
ISO/IEC 9834-8	-	Information technology - Procedures for the operation of object identifier registration authorities - Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers	-	-



IEC 61850-6

Edition 2.0 2024-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE



AMENDMENT 2 AMENDEMENT 2

**Communication networks and systems for power utility automation –
Part 6: Configuration description language for communication in power utility
automation systems related to IEDs**

**Réseaux et systèmes de communication pour l'automatisation des systèmes
électriques –
Partie 6: Langage de description de configuration pour la communication dans
les systèmes d'automatisation des systèmes électriques, entre les dispositifs
électroniques intelligents (IED)**

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IEC 61850-6

Edition 2.0 2024-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE



AMENDMENT 2 AMENDEMENT 2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**COMMUNICATION NETWORKS AND SYSTEMS
FOR POWER UTILITY AUTOMATION –****Part 6: Configuration description language for communication
in power utility automation systems related to IEDs****AMENDMENT 2****FOREWORD**

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Amendment 2 to IEC 61850-6:2009 has been prepared by IEC technical committee 57: Power systems management and associated information exchange.

This second amendment constitutes a technical revision.

The main changes with respect to IEC 61850-6:2009+AMD1:2018 are as follows:

- a) functional extensions concerning the engineering process to improve files exchange followup, SCL elements identification and control configuration handling, added;

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- b) provision of clarifications and corrections. Issues that require clarification are published in a database available at <https://iec61850.tissue-db.com/>. Arising incompatibilities are listed in 8.2.3.

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

Draft	Report on voting
57/2711/FDIS	57/2733/RVD

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

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications/.

A list of all the parts in the IEC 61850 series, under the general title *Communication networks and systems for power utility automation*, can be found on the IEC website.

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INTRODUCTION

This amendment and consolidated edition bring two distinct sets of changes:

- 1) Resolved Interop Issues (covered by the table below) which have already followed the technical issues (Tissues) process as described in IEC 61850-1 and have reached the green "status".
- 2) Resolved Editorial Tissues which may have led to interoperability issues.

The resolutions of these issues which led to these changes are described in greater detail in the Tissue database hosted at <https://iec61850.tissue-db.com/>.

The only new features compared to the previous IEC 61850-6:2009+AMD1:2018 are the introduction of the UUID to identify elements and files, the modelling of controls binding from a client perspective, and the definition of translated labels for elements which may be represented in any user interface. Apart from this, this amendment strictly respects the scope of the original edition.

Technical issues summary

N°, Subject, Clause and Paragraph are as they appear on the Tissue database hosted at <https://iec61850.tissue-db.com/> where all technical issues have been stored from the origin of IEC 61850.

"Subject" defines very briefly the topic under focus.

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The Tissues which have been considered are:

N°	Subject	Clause	Paragraph
1590	RCB: Offline changes increment ConfRev by 10000?	9.3.8	Table 23
1647	SDO@count definition inconsistent	9.5.3	Table 44
1648	DA@count definition needs restriction	9.5.4.1	Table 47
1669	Incorrect example of header	9.1	1
1672	Allow connection Server and ServerAt to the same SCL.Subnetwork	9.3.2	Below Table 50
1674	Harmonization with 62351-6	9.3.2	Services Element
1675	SCSM support capability - Harmonization with 62351-6	9.3.2	Services
1683	ICD file for IED functionality spanning for multiple VL and BAY	9.2.1	The name value is also a global identification of
1708	Presence of Sample Mode field not controllable through SmvOpts	9.3.11	Smv Options element
1729	Incorrect SCL example in (informative) Annex	D.2	2
1734	Improved schema validation	A.5	1
1740	Exceptions of enumeration types for IEC 61850-7-4	9.5.6	last in 9.5.6
1745	Definition of type and id in DataTypeTemplates not consistent	9.5.6	Table 49
1768	Server associate-request has no SCL parameters	9.3.2	Table 11
1771	SCL Services ReportControl max vs. Indexed	9.3.8	8
1774	Missing description of KDC	9.3.2	4
1786	Downgrade of SCD Exports not Mandatory	Annex G	Table G.2
1787	There is no clear mapping of all 7-2 ACSI type to SCL basic types	9.5.4.2	1
1808	Please clarify if ix first index is 0 or 1	9.3.6 Data object (DOI) definition	Table 19 and Table 20
1813	Typo "Valkind"	9.5.4.1	Table 46
1816	Add SICS statement for xsi:type usage in P elements	9.4.3 Annex G	7 Table G.1 and G.2
1818	Clarification of ExtRef attributes usage	9.3.13	Table 51
1823	Clarify iedType attribute usage in DataTypeTemplates	9.5.1	2
1831	IdInst reference should concretized	9.3.7	Table 22
1832	SICS I45 not clear enough	Annex G	Table G.1
1833	Service SettingGroups.ConfSG clarification	9.3.2	Table 11
1834	SICS I211 text not inline with Service section	Annex G	Table G.1
1839	Not clear definition of InInst to LN0 type elements	9.3.5	5
1843	SCT handle different OriginalSciXxx and SCL version/revision/release	9.3.2 I.4.3.3	G.1
1854	SupSubscription	9.3.2	Table 11
1885	sAddr length	I.5.3.5	1
1886	Part 6 – Typo in Abbreviation	4	ICT

1 Scope

Replace the existing text of Subclauses 1.2 and 1.3 of IEC 61850-6:2009+AMD1:2018 with the following new Subclauses 1.2, 1.3 and 1.4:

1.2 Published versions of the standard and related namespace names

The table below provides a reference between all published editions, amendments or corrigenda of this document and the full name of the namespace.

Edition	Publication date	Webstore	Namespace
Edition 1.0	2004-03	IEC 61850-6:2004	IEC 61850-6:2003
Edition 2.0	2009-12	IEC 61850-6:2009	IEC 61850-6:2007B
Amendment 1 of Edition 2.0	2018	IEC 61850-6:2009/AMD1:2018	IEC 61850-6:2007B4
Edition 2.1	2018	IEC 61850-6:2009+AMD1:2018 CSV	IEC 61850-6:2007B4
Amendment 2 of Edition 2.0	2024	IEC 61850-6:2009/AMD2:2023	IEC 61850-6:2007C5
Edition 2.2	2024	IEC 61850-6:2009+AMD2:2023 CSV	IEC 61850-6:2007C5

1.3 Identification of the namespace

The namespace associated with this document is an XML schema (XSD) for the System Configuration Language (SCL). The parameters which are identifying the namespace are provided in Table 53:

Table 53 – Attributes of the IEC 61850-6 XML namespace

Attribute	Content
Namespace nameplate	
Namespace Identifier (xmlns)	http://www.iec.ch/61850/2003/SCL
Version	2007
Revision	C
Release	5
XSD version header attribute	2007C5
Code Component Name	IEC_61850-6.SCL.2007C5.Full

1.4 Code Component distribution

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The code component associated to this document is an XML schema file (XSD). It is available as a full version only. It is freely accessible on the IEC website for download at <https://www.iec.ch/tc57/supportdocuments>, but the usage remains under the licensing conditions.

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2 Normative references

Add the following new normative references:

IEC 62351-4, *Power systems management and associated information exchange – Data and communications security – Part 4: Profiles including MMS and derivatives*

IEC 62351-6, *Power systems management and associated information exchange – Data and communications security – Part 6: Security for IEC 61850*

IEC 62351-9, *Power systems management and associated information exchange – Data and communications security – Part 9: Cyber security key management for power system equipment*

ISO/IEC 9834-8, *Information technology – Procedures for the operation of object identifier registration authorities – Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN