SLOVENSKI STANDARD
SIST EN 62541-6:2012

01-februar-2012

Poenotena arhitektura OPC - 6. del: Preslikave (IEC 62541-6:2011)

OPC unified architecture - Part 6: Mappings (IEC 62541-6:2011)

OPC Unified Architecture - Teil 6: Protokollabbildungen (IEC 62541-6:2011)

Architecture unifiée OPC - Partie 6: Correspondances (CEI 62541-6:2011)

Ta slovenski standard je istoveten z: **EN 62541-6:2011**

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25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.240.50	Uporabniške rešitve IT v industriji	IT applications in industry

SIST EN 62541-6:2012 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62541-6

December 2011

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OPC unified architecture - Part 6: Mappings

(IEC 62541-6:2011)

Architecture unifiée OPC - Partie 6: Correspondances (CEI 62541-6:2011)

OPC Unified Architecture - Teil 6: Protokollabbildungen (IEC 62541-6:2011)

This European Standard was approved by CENELEC on 2011-11-22. 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.

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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 65E/193/FDIS, future edition 1 of IEC 62541-6, prepared by SC 65E, "Devices and integration in enterprise systems", of IEC/TC 65, "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62541-6:2011.

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)	2012-08-22
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-11-22

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Endorsement notice

The text of the International Standard IEC 62541-6:2011 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 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.

Publication	Year	Title	EN/HD	Year
IEC/TR 62541-1	-	OPC unified architecture - Part 1: Overview and concepts	CLC/TR 62541-1	-
IEC/TR 62541-2	-	OPC unified architecture - Part 2: Security model	CLC/TR 62541-2	-
IEC 62541-3	-	OPC unified architecture - Part 3: Address space model	EN 62541-3	-
IEC 62541-4	-	OPC unified architecture - Part 4: Services	EN 62541-4	-
IEC 62541-5	-	OPC unified architecture - Part 5: Information Model	EN 62541-5	-
IEC 62541-7	-	OPC Unified Architecture - Part 7: Profiles	EN 62541-7	-
ITU-T X.509	-	Information technology – Open systems interconnection – The Directory: Public-key and attribute certificate frameworks	-	-
ITU-T X.690	-	Information technology - ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)	-	-
ITU-T X.200	-	Information technology - Open Systems Interconnection - Basic Reference Model: The basic model	-	-
RFC 3548	-	The Base16, Base32, and Base64 Data Encodings	-	-
RFC 2104	-	HMAC: Keyed-Hashing for Message Authentication	-	-
RFC 2437	-	PKCS #1: RSA Cryptography Specifications Version 2.0	-	-
RFC 3280	-	Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile	-	-
RFC 2818	-	HTTP Over TLS	-	-
RFC 2616	-	Hypertext Transfer Protocol - HTTP/1.1	-	-
RFC 2246	-	The TLS Protocol	-	-
RFC 4514	-	Lightweight Directory Access Protocol (LDAP): String Representation of Distinguished Names	-	-
RFC 3629	-	UTF-8, User Datagram Protocol	-	-

IEEE 754	-	Binary floating-point arithmetic	-	-
XML Schema Part 1	-	XML Schema Part 1: Structures	-	-
XML Schema Part 2	-	XML Schema Part 2	-	-
SOAP Part 1	-	SOAP Version 1.2 Part 1: Messaging Framework	-	-
SOAP Part 2	-	SOAP Version 1.2 Part 2: Adjuncts	-	-
XML Encryption	-	XML Encryption Syntax and Processing	-	-
XML Signature	-	XML-Signature Syntax and Processing	-	-
WS Security	-	SOAP Message Security 1.1	-	-
WS Addressing	-	Web Services Addressing (WS-Addressing)	-	-
WS Trust	-	WS Trust 1.3	-	-
WS Secure Conversation	-	WS Secure Conversation 1.3	-	-
WS Security Policy	-	WS Security Policy 1.2	-	-
WS-I	-	Basic Profile Version 1.1	-	-
WS-I	-	Basic Security Profile Version 1.1	-	-
PKCS #12	-	PKCS 12 v1.0: Personal Information Exchange Syntax	-	-
FIPS 180-2	-	Secure Hash Standard (SHA)	-	-
FIPS 197	-	Advanced Encyption Standard (AES)	-	-

IEC 62541-6

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NORME INTERNATIONALE

colour inside

OPC unified architecture – Part 6: Mappings

Architecture unifiée OPC – Partie 6: Correspondances

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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OPC UNIFIED ARCHITECTURE –

Part 6: Mappings

FOREWORD

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International Standard IEC 62541-6 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

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

FDIS	Report on voting
65E/193/FDIS	65E/215/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.

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

A list of all parts of the IEC 62541 series, published under the general title *OPC Unified Architecture*, 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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This International Stadard is the specification for developers of OPC UA applications. The specification is a result of an analysis and design process to develop a standard interface to facilitate the development of applications by multiple vendors that will inter-operate seamlessly together.

OPC UNIFIED ARCHITECTURE –

Part 6: Mappings

1 Scope

This part of IEC 62541 specifies the OPC Unified Architecture (OPC UA) mapping between the security model described in IEC 62541-2, the abstract service definitions, described in IEC 62541-4, the data structures defined in IEC 62541-5 and the physical network protocols that can be used to implement the OPC UA specification.

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/TR 62541-1, *OPC Unfied architecture: Part 1 – Overview and Concepts*

IEC 62541-2, *OPC Unified architecture: Part 2 – Security Model*

IEC 62541-3, *OPC Unified architecture: Part 3 – Address Space Model*

IEC 62541-4[1]:----, *OPC Unified architecture: Part 4 – Services*

IEC 62541-5[2], *OPC Unified architecture: Part 5 – Information Model*

IEC 62541-7[3], *OPC Unified architecture: Part 7 – Profiles*

ITU-T X.690: *Information technology – ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)*

available at <http://www.itu.int/ITU-T/studygroups/com17/languages/X.690-0207.pdf>

ITU-T X.200: *Information technology – Open Systems Interconnection – Basic Reference Model*

available at <http://www.itu.int/rec/T-REC-X.200-199407-I/en>

ITU-T X.509: *Information technology – Open Systems Interconnection – The directory: Public Key and Attribute Certificate Frameworks*

available at <http://www.itu.int/rec/T-REC-X.509/en>

XML Schema Part 1: *XML Schema Part 1: Structures (Second Edition)*

available at <http://www.w3.org/TR/xmlschema-1/>

XML Schema Part 2: *XML Schema Part 2: Datatypes (Second Edition)*

available at <http://www.w3.org/TR/xmlschema-2/>

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[1] To be published.

[2] To be published.

[3] To be published.