

### SLOVENSKI STANDARD SIST EN ISO 16484-1:2011

01-april-2011

Sistemi za avtomatizacijo stavb in regulacijo - 1. del: Specifikacija projekta in izvedba (ISO 16484-1:2010)

Building automation and control systems (BACS) - Part 1: Project specification and implementation (ISO 16484-1:2010)

(standards.iteh.ai)
Systèmes d'automatisation et de gestion technique du bâtiment (BACS) - Partie 1:
Spécification et mise en oeuvre du projet (ISO 16484-1;2010)

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Ta slovenski standard je istoveten z: EN ISO 16484-1-2011

ICS:

35.240.67 Uporabniške rešitve IT v IT applications in building

gradbeništvu and construction industry

97.120 Avtomatske krmilne naprave Automatic controls for

za dom household use

SIST EN ISO 16484-1:2011 en,fr,de

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SIST EN ISO 16484-1:2011

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**EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM** 

**EN ISO 16484-1** 

November 2010

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#### **English Version**

### Building automation and control systems (BACS) - Part 1: Project specification and implementation (ISO 16484-1:2010)

Systèmes d'automatisation et de gestion technique du bâtiment - Partie 1: Spécification et mise en oeuvre d'un projet (ISO 16484-1:2010)

Systeme der Gebäudeautomation (GA) - Teil 1: Projektplanung und -ausführung (ISO 16484-1:2010)

This European Standard was approved by CEN on 30 October 2010.

CEN 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 CEN member.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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#### EN ISO 16484-1:2010 (E)

Contents	Page
Foreword	

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 16484-1:2011</u> https://standards.iteh.ai/catalog/standards/sist/f6056458-a107-4513-800f-ba36f9894c7a/sist-en-iso-16484-1-2011

EN ISO 16484-1:2010 (E)

#### **Foreword**

This document (EN ISO 16484-1:2010) has been prepared by Technical Committee CEN/TC 247 "Building Automation, Controls and Building Management", the secretariat of which is held by SNV, in collaboration with Technical Committee ISO/TC 205 "Building environment design".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2011, and conflicting national standards shall be withdrawn at the latest by May 2011.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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### INTERNATIONAL STANDARD

ISO 16484-1

First edition 2010-11-01

### Building automation and control systems (BACS) —

Part 1:

### **Project specification and implementation**

Systèmes d'automatisation et de gestion technique du bâtiment —

Teh STPartie 1: Spécification et mise en œuvre d'un projet

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<u>SIST EN ISO 16484-1:2011</u> https://standards.iteh.ai/catalog/standards/sist/f6056458-a107-4513-800f-ba36f9894c7a/sist-en-iso-16484-1-2011



ISO 16484-1:2010(E)

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Contents		Page
Forev	word	iv
Intro	ductionduction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Abbreviated terms	3
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7	Requirements and recommendations Overview Design phase Engineering phase Installation phase Completion phase Documentation Training	4 13 17 20 21
6 Biblio	Review and improvement of building performance	23 24

SIST EN ISO 16484-1:2011 https://standards.iteh.ai/catalog/standards/sist/f6056458-a107-4513-800f-ba36f9894c7a/sist-en-iso-16484-1-2011 ISO 16484-1:2010(E)

#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 16484-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 247, *Building automation*, *controls and building management*, in collaboration with ISO Technical Committee ISO/TC 205, *Building environment design*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 16484 consists of the following parts, under the general title *Building automation and control systems* (BACS):

SIST EN ISO 16484-1:2011

- Part 1: Project specification and implementation standards/sist/f6056458-a107-4513-800f-ba36f9894c7a/sist-en-iso-16484-1-2011
- Part 2: Hardware
- Part 3: Functions
- Part 5: Data communication protocol
- Part 6: Data communication conformance testing

The following part is under preparation:

— Part 4: Applications

#### Introduction

ISO 16484 (all parts) is aimed at the design of new buildings and the retrofitting of existing buildings for an acceptable indoor environment, practical energy conservation, and efficiency.

ISO 16484 (all parts) is applicable to building automation and control systems (BACS), as follows:

- The environmental design for all building types requires complex methods of automation and control. The functional integration of services other than heating, ventilating and air conditioning (HVAC) is a general task for all parties employed to develop an integrated multi-application system. The integration comprises, for example, lighting and electric power distribution control, security control, transportation, maintenance management or facilities management. This system integration allows the user to take advantage of synergies between the different applications. ISO 16484 (all parts) gives guidance to architects, consultants and contractors as well as guidance to users on how to share such resources.
- The innovation cycles between devices, systems and networks vary. In order to make it possible to add and to change existing devices and extend the building automation and control network, several interfaces, both proprietary and standardized, are defined between the BACS network and the other systems. A manufacturer can design a product, both to meet his specific marketing objectives and to give the option to integrate that special device into a multi-application BACS. Interfaces are also defined in appropriate parts of ISO 16484 along with the necessary communications protocol and conformance test required to support the interworking of devices.
- A manufacturer, a systems house, or an electrical or mechanical contractor can assemble the implementation of a building automation and control system.
- The application of ISO 16484 (all parts) is not to standardize the hardware and software design or the architecture of a system, but to define the process for the creation of project specifications, where the functionality and the quality of the solution are clearly defined.

ISO 16484 (all parts) is intended for use by those involved in the design, manufacture, engineering, installation, commissioning, operational maintenance and training of BACS when contracted, i.e.:

- as a guide to the terminology of the building automation and control trade. Unambiguous terminology is required for a complete and accurate conveyance of the intent and details of ISO 16484 (all parts);
- in product development, to avoid unnecessary duplication of function or terminology, but not necessarily
  placing a restraint on the evolution of new products, systems or applications;
- as a basis for interfacing products and systems. In order to interoperate, the elements of a BACS require a unified data communication protocol and information model;
- as a basis for drawing up a project specification for procurement;
- as a code of practice for expert commissioning;
- by educational establishments wishing to train people in the field of BACS.

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