

## SLOVENSKI STANDARD SIST EN 13321-1:2006

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Odprta izmenjava podatkov v avtomatizaciji stavb in izvršnih elementov ter pri upravljanju stavb – Elektronski sistemi za stanovanja in stavbe – 1. del: Zahteve za proizvode in sisteme

Open data communication in building automation, controls and building management -Home and building electronic system - Part 1. Product and system requirements

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Offene Datenkommunikation für die Gebäudeautomation und Gebäudemanagement -Elektrische Systemtechnik für Heim Und Gebäude<sup>00</sup> Teil 1: Produkt- und Systemanforderung<sup>en//standards.iteh.ai/catalog/standards/sist/caf75bac-0066-4ae2-b0b0b68d33c37b15/sist-en-13321-1-2006</sup>

Réseau ouvert de communication de données pour l'automatisation, la régulation et la gestion techniques du bâtiment - Systemes électroniques pour les foyers domestiques et les bâtiments - Spécifications des produits et des systemes

Ta slovenski standard je istoveten z: EN 13321-1:2006

#### ICS:

35.240.99	W][¦æà}ãz∖^Á^zãcç^ÁQVÁ,æ å¦ĭ*ã@Áj[å¦[bã@	IT applications in other fields
97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

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#### SIST EN 13321-1:2006

# EUROPEAN STANDARD NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 13321-1

January 2006

ICS 35.240.99: 97.120

Supersedes ENV 13154-2:1998, ENV 13321-1:1999

**English Version** 

#### Open data communication in building automation, controls and building management - Home and building electronic system -Part 1: Product and system requirements

Réseau ouvert de communication de données pour l'automatisation, la régulation et la gestion techniques du bâtiment - Systèmes électroniques pour les foyers domestiques et les bâtiments - Spécifications des produits et des systèmes

Offene Datenkommunikation für die Gebäudeautomation und Gebäudemanagement - Elektrische Systemtechnik für Heim und Gebäude - Teil 1: Produkt- und Systemanforderungen

This European Standard was approved by CEN on 12 December 2005.

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 Central Secretariat or to any CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

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#### EN 13321-1:2006 (E)

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#### Foreword

This document (EN 13321-1:2006) has been prepared by Technical Committee CEN/TC 247 "Building Automation, Controls and Building Management", the secretariat of which is held by SNV.

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 July 2006, and conflicting national standards shall be withdrawn at the latest by July 2006.

CEN /TC 247, "Building Automation, Controls and Building Management" - in collaboration with CENELEC TC205 "Home and Building Electronic Systems (HBES)" and its co-operation partner Konnex Association - has prepared this document to reference the relevant parts of the CENELEC TC205 EN 50090 series also as a CEN TC247 specification and to extend their area of application to Building, Automation and Control Systems (BACS).

This European Standard supersedes ENV 13154-2:1998, together with EN 14908-1:2005 and 14908-2:2005.

This European Standard supersedes ENV 13321-1:1999.

prEN 13321 supersedes the protocols Batibus, EHS and EIB of ENV 13 154-2, 1998 "Data communication for HVAC application" - Field net Part 2: Protocols A RD PREVIEW

EN 14908-1 and EN 14908-2 supersedes the protocol LonTalk of ENV 13 154-2, 1998 "Data communication for HVAC application" - Field net - Part 2: Protocols

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Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights other than those identified above. CEN shall not be held responsible for identifying any or all such patent rights.

This EN 13321-1 is part 1 of the EN 13321 series of European Standards under the general title *Building Automation and Control* - Home and Building Electronic Systems, which will comprise the following parts:

Part 1: Product and System requirements

Part 2: KNXnet/IP communication

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 United Kingdom.

#### Introduction

The permanent objective of CENELEC TC205 is to prepare standards for all aspects of Home and Building Electronic Systems (HBES) in relation to the Information Society. Such HBES standards shall ensure integration of a wide spectrum of control applications and the control and management aspects of other applications in and around homes and buildings, including the gateways to different transmission media and public networks. Moreover they shall take into account all matters of EMC and electrical and functional safety. Hence they are the pre-condition that conforming products interwork and are installer friendly to facilitate the system designers' and installers' task of providing the necessary networks according to their costumers services needs.

Extending these standardised Home and Building Electronic Systems (HBES) requirements also to Building Automation and Control System Application and Building Management (BACS) generates important synergies in functionality and further enhances the economy of scale in this growing, open multivendor market of interoperable BACS products.

This standard is intended for use by all involved in design, manufacture, engineering, installation and commissioning activities.

Moreover and in line with the EU's co-regulatory view of European standardisation this standard supports the eEurope objectives and helps to comply with important EU Directives such as the Construction Products' Directive and the Energy Performance of Buildings' Directive.

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#### 1 Scope

As for Home or Building Electronic Systems (HBES) this resulting standard provides for the domain of Building Automation and Control System Application and Building Management (BACS) common rules for a class of multi-application bus systems where the functions are decentralized and linked through a common communication process. This standard sets the basic requirements for products and systems. The requirements may also apply to the distributed functions of any equipment connected in a home or building control system if no specific standard exist for this equipment or system.

Consequently with its reference to the EN 50090 series this standard sets requirements for the BACS area as regards Architecture and Hardware, Application and Communication of systems based on HBES by specifying the basic requirements for:

- general considerations;
- environmental conditions/ external influences;
- electrical safety;
- functional Safety in normal use;
- EMC;
- security; **iTeh STANDARD PREVIEW**
- interoperability (between products and systems)s.iteh.ai)

The functional safety requirements of this Standard apply together with the relevant product standard for the device if any. <u>SIST EN 13321-1:2006</u>

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#### 2 Requirements

Building Automation and Control Systems (BACS) applications according to this standard shall use the requirements stated in the CENELEC EN 50090 series of European Standards, which comprises the following parts relevant to this EN

- Part 2: System overview
- Part 3: Aspects of application
- Part 4: Media independent layers
- Part 5: Media and media dependent layers
- Part 6: Interfaces
- Part 7: System management

All applicable parts of this CENELEC EN 50090 series are listed together with their exact references in **Annex** C.

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#### Annex A

#### (informative) General safety requirements and environmental conditions

As the part EN 50090-2-2, General technical requirements, is listed under the Low Voltage Directive and the EMC Directive it must be part of this CEN EN for the time being.

When drafting these requirements, the involved parties had in the first place HBES products in mind. However in view of extending the usage of HBES products to the BACS area and the possible use of BACS products in HBES, a review of these requirements has been started jointly by CEN TC247 and CENELEC TC205.

As soon as the joint CEN TC247 – CENELEC TC205 Working Group comes up with its results, the list of parts will be amended via the EN Maintenance provided by Annex B.

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#### Annex B

#### (normative) Maintenance procedure applicable to this EN

Considering that:

- CENELEC continues to further develop the EN 50090 series and/or related EN standards, e.g. the one to result from the process mentioned in Annex A above;
- these standards are already submitted to the Public Enquiry and Approval process within the same set of member countries;
- it would be therefore a waste of time and resources for any amendment to the list in Annex ZA to result in a running practically the process a second time;
- any necessary updating of the current standard by CENELEC can be likened to the EN ISO 16484-5 (and –6) case, where the processing of amendments already dealt with and approved in the originating organisation ASHRAE under an internationally open procedure is agreed to be submitted to the established CEN (and ISO) rules of the Maintenance Agency (cf. CEN BT RESOLUTION BT 146/1994).

any necessary updating in view of new CENELEC results shall be handled accordingly to the same set of rules with CENELEC being recognized as the Maintenance agency for this CEN TC247 standard.

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