

**Home and Building Electronic Systems  
(HBES) - Part 4-1: Media independent  
layers - Application layer for HBES  
Class 1**

Home and Building Electronic Systems (HBES) -  
Part 4-1: Media independent layers - Application  
layer for HBES Class 1

**EESTI STANDARDI EESSÖNA****NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 50090-4-1:2004 sisaldb Euroopa standardi EN 50090-4-1:2003 ingliskeelset teksti.	This Estonian standard EVS-EN 50090-4-1:2004 consists of the English text of the European standard EN 50090-4-1:2003.
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**Käsitlusala:**

This part of the EN 50090 specifies the services and protocol of the application layer for usage in Home and Building Electronic Systems. It provides the services and the interface to the user process as defined in EN 50090-3-2. This procedure is based on the services and the protocol is provided by the Transport Layer, Network Layer and Data Link Layer as specified in EN 50090-4-2.

**Scope:**

This part of the EN 50090 specifies the services and protocol of the application layer for usage in Home and Building Electronic Systems. It provides the services and the interface to the user process as defined in EN 50090-3-2. This procedure is based on the services and the protocol is provided by the Transport Layer, Network Layer and Data Link Layer as specified in EN 50090-4-2.

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**Võtmesõnad:**

English version

**Home and Building Electronic Systems (HBES)**  
**Part 4-1: Media independent layers –**  
**Application layer for HBES Class 1**

Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES)  
Partie 4-1: Couches indépendantes des media –  
Couche application pour HBES Classe 1

Elektrische Systemtechnik für Heim und Gebäude (ESHG)  
Teil 4-1: Medienunabhängige Schicht – Anwendungsschicht für ESHG Klasse 1

This European Standard was approved by CENELEC on 2003-12-02. 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 Central Secretariat or to any CENELEC member.

This European Standard exists in one official version (English). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official version.

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**CENELEC**

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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## Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 205, Home and Building Electronic Systems (HBES) with the help of CENELEC co-operation partner Konnex Association (formerly EHBESA).

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50090-4-1 on 2003-12-02.

This European Standard supersedes R205-007:1996.

CENELEC takes no position concerning the evidence, validity and scope of patent rights.

Konnex Association as Cooperating Partner to CENELEC confirms that to the extent that the standard contains patents and like rights, the Konnex Association's members are willing to negotiate licenses thereof with applicants throughout the world on fair, reasonable and non-discriminatory terms and conditions.

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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. CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-12-01

EN 50090-4-1 is part of the EN 50090 series of European Standards, which will comprise the following parts:

Part 1: Standardization structure

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

Part 8: Conformity assessment of products

Part 9: Installation requirements

## Introduction

This document specifies the services and protocol of the application layer for usage in Home and Building Electronic Systems. Some services are targeted to field level communication between devices. Other services are exclusively reserved for management purposes. Some services can be used for both management and run-time communication.

## 1 Scope

This part of the EN 50090 specifies the services and protocol of the application layer for usage in Home and Building Electronic Systems. It provides the services and the interface to the user process as defined in EN 50090-3-2. This procedure is based on the services and the protocol is provided by the Transport Layer, Network Layer and Data Link Layer as specified in EN 50090-4-2.

## 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.

EN 50090-1 <sup>1)</sup>	<i>Home and Building Electronic Systems (HBES) – Part 1: Standardization structure</i>
EN 50090-3-2:2004	<i>Home and Building Electronic Systems (HBES) – Part 3-2: Aspects of application – User process for HBES Class 1</i>
EN 50090-4-2:2004	<i>Home and Building Electronic Systems (HBES) – Part 4-2 Media independent layers – Transport layer, network layer and general parts of data link layer for HBES Class 1</i>
EN 50090-7-1:2004	<i>Home and Building Electronic Systems (HBES) – Part 7-1: System management – Management procedures</i>
EN 50173-1:2002	<i>Information technology - Generic cabling systems</i>

## 3 Terms, definitions and abbreviations

### 3.1 Terms and definitions

For the purposes of this part the terms and definitions given in EN 50090-1 and the following apply.

#### 3.1.1

##### **application (in the sense of network application)**

a system with its associated transmission method which is supported by telecommunications cabling

[EN 50173-1:2002, definition 3.1.2]

#### 3.1.2

##### **user application**

software functionality, the control algorithm that runs in one single device

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<sup>1)</sup> At draft stage.