

Home and Building Electronic Systems (HBES) - Part 3-2: Aspects of application - User process for HBES Class 1

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HBES Class 1

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50090-3-2:2004 sisaldab Euroopa standardi EN 50090-3-2:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50090-3-2:2004 consists of the English text of the European standard EN 50090-3-2:2004.</p> <p>This document is endorsed on 25.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of EN 50090 specifies the structure and functioning of servers for the objects which form the interface between the application layer and the application and management.</p>	<p>Scope:</p> <p>This part of EN 50090 specifies the structure and functioning of servers for the objects which form the interface between the application layer and the application and management.</p>
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English version

Home and Building Electronic Systems (HBES)
Part 3-2: Aspects of application -
User process for HBES Class 1

Systèmes électroniques pour les foyers
domestiques et les bâtiments (HBES)
Partie 3-2: Aspects de l'application -
Processus utilisateur HBES Classe 1

Elektrische Systemtechnik für Heim
und Gebäude (ESHG)
Teil 3-2: Anwendungsaspekte -
Anwendungsprozess 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 50090-3-2 on 2003-12-02.

This European Standard supersedes EN 50090-3-2:1995.

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 50090-3-2 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

The application interface layer is the layer between the application layer and the application. It contains the communication relevant tasks of the application. It eases the communication task of the application by offering a communication interface that abstracts from many application layer details.

This European Standard allows single-processor and dual-processor device designs. A dual processor device uses additional services to communicate via a serial External Message Interface with the external user application running in the second processor.

The following clauses specify the client and server functionality and the communication interface of the internal user application located in the Bus Access Unit (BAU).

The application interface layer contains the following objects and the access routines to them:

- **group objects:** can be accessed via Transport layer Service Access Points (TSAPs) on multicast communication services, see the corresponding clause in EN 50090-4-2. Group objects may also be references to interface objects;
 - **interface objects:** can be accessed via application services on point-to-point connection-less and point-to-point connection-oriented communication modes. The interface objects are divided to system interface objects and application interface objects.
 - System interface objects are at this time:
 - the device object;
 - the group address table object;
 - the association table object, and
 - the application object.
- System interface objects are relevant for network management as specified in EN 50090-7-1.
- Application interface objects are objects defined in the user application. They may be defined by the internal or external user application, based on interface object structure rules defined in this document. Application interface objects may also be referenced by a group object reference.

The following clause specifies the data structures of each of the application interface layer objects. Additionally they define by which application services these objects are accessible. Both the object client and object server functionality may be implemented by the external or the internal application interface layer. It is recommended to locate the group communication objects, the interface objects and the resource objects in the internal application interface layer.

1 Scope

This part of EN 50090 specifies the structure and functioning of servers for the objects which form the interface between the application layer and the application and management.

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 ¹⁾	<i>Home and Building Electronic Systems (HBES) – Part 1: Standardization structure</i>
EN 50090-4-1:2004	<i>Home and Building Electronic Systems (HBES) – Part 4-1: Media independent layers – Application layer 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>

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 EN 50090-4-1 apply.

3.2 Abbreviations

ASAP	Application Layer Service Access Point
BAU	Bus Access Unit
EMI	External Message Interface
HBES Class 1	refers to simple control and command
HBES Class 2	refers to Class 1 plus simple voice and stable picture transmission
HBES Class 3	refers to Class 2 plus complex video transfers
TSAP	Transport layer Service Access Point

4 Object models

This European Standard specifies two different kinds of objects that shall be supported for operational exchanges:

- a) group objects
group objects shall be used to support the shared variable model;
- b) interface objects
interface objects shall be used to support the client/server model and, if they are referenced by group objects, also the shared variable model of the group objects.

An application may use each kind of objects at any time.

¹⁾ At draft stage.