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**HOME AND BUILDING ELECTRONIC  
SYSTEMS (HBES), PART 3-2: ASPECTS OF  
APPLICATION - USER PROCESS FOR HBES  
CLASS 1**

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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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## 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.

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The following dates were fixed:

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with the EN have to be withdrawn                                                  | (dow) | 2006-12-01 |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

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