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Home and Building Electronic Systems (HBES) -- Part 3-3: Aspects of application - HBES Interworking model and common HBES data types

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English version

**Home and Building Electronic Systems (HBES) -
Part 3-3: Aspects of application -
HBES Interworking model and common HBES data types**

Systèmes électroniques
pour les foyers domestiques
et les bâtiments (HBES) -
Partie 3-3: Aspects de l'application -
Modèle d'inter-fonctionnement des HBES
et types de données communes

Elektrische Systemtechnik
für Heim und Gebäude (ESHG) -
Teil 3-3: Anwendungsaspekte -
ESHG-Interworking-Modell
und übliche ESHG-Datenformate

This European Standard was approved by CENELEC on 2008-12-01. 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.

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This European Standard exists in two official versions (English, French). 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 versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 205, Home and Building Electronic Systems (HBES), joined by the co-operating partner KNX Association.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50090-3-3 on 2008-12-01.

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KNX Association as Cooperating Partner to CENELEC confirms that to the extent that the standard contains patents and like rights, the KNX 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) 2009-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-12-01

EN 50090-3-3 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
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Introduction

Interworking between devices signifies that these products send and receive datagrams and are able to properly understand and react on them. This ability is provided without additional equipment (like translators or gateways).

NOTE Media couplers are needed if different media are used in an installation.

The market requires Interworking for a multi-vendor approach, this is, products from different manufacturers can interwork in a certain application segment or domain as well as across different applications (cross discipline Interworking).

Such an Interworking is only possible if a set of requirements is complied with as defined in an Interworking model. For this, Functional Blocks need to be defined, which in turn specify Datapoints and the communication mechanisms to be used. Such a set of requirements is referred to as "Application Interworking Specifications" (AIS).

AIS allow Interworking independent of the implementation by a manufacturer. Besides the advantages for the user (multi-vendor offer) Interworking also allows a broad OEM market and easy market access for niche-products providers. Furthermore Interworking allows the establishment of a common market infrastructure (i.e. common configuration tool, training, etc.)

1 Scope

This European Standard gives general guidelines and recommendations to ensure interworking between HBES devices made by different manufacturers. It also contains design guidelines for the design of Functional Blocks and new datapoint types, the building blocks of HBES interworking.

In this way, the standard can be used as a basis to design application specifications relative to an Application Domain. If designed and supported by a large group of manufacturers, such application specifications will ensure to end customers a high degree of interoperability between products based on the HBES Communication System of different manufacturers.

This European Standard is used as a product family standard. It is not intended to be used as a stand-alone standard.

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⁾	Home and Building Electronic Systems (HBES) – Part 1: Standardization structure
EN 50090-3-2:2004	Home and Building Electronic Systems (HBES) – Part 3-2: Aspects of application – User process for HBES Class 1
EN 50090-4-1:2004	Home and Building Electronic Systems (HBES) – Part 4-1: Media independent layers – Application Layer for HBES Class 1
EN 50090-4-2: 2004	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

¹⁾ Under consideration.

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