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IRISH STANDARD

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**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**

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EUROPEAN STANDARD

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English version

**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**

Systèmes électroniques pour les foyers
domestiques et les bâtiments (HBES)
Partie 4-2: Couches indépendantes
des media -
Couches transport, réseau
et parties générales de la couche
données pour HBES Classe 1

Elektrische Systemtechnik für Heim
und Gebäude (ESHG)
Teil 4-2: Medienunabhängige Schicht -
Transportschicht, Vermittlungsschicht
und allgemeine Teile
der Sicherungsschicht für ESHG Klasse 1

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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

European Committee for Electrotechnical Standardization
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 50090-4-2 on 2003-12-02.

This European Standard supersedes R205-008:1996.

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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 50090-4-2 is part of the EN 50090 series of European Standards, which will comprise the following parts:

- Part 1: Standardisation 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 standard specifies the Media independent requirements for the data link layer and the requirements for the network layer and the transport layer for Home and Building Electronic Systems.

This standard provides the communication stack targeted for providing the services specified in EN 50090-3-2 “User Process” and EN 50090-4-1 “Application Layer for HBES Class 1”. It can be used as communication stack on the physical layers as specified in EN 50090-5.

1 Scope

This part of the EN 50090 specifies the services and protocol in a physical layer independent way for the data link layer and for the network layer and the transport layer for usage in Home and Building Electronic Systems

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: Standardisation 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 50090-4-1:2004	<i>Home and Building Electronic Systems (HBES) – Part 4-1: Media independent layers – Application layer for HBES Class 1</i>
EN 50090-5 series	<i>Home and Building Electronic Systems (HBES) – Part 5: Media and media dependent layers</i>
ISO 7498 series	<i>Information technology - Open Systems Interconnection - Basic reference model</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

individual address

IA

unique identifier for every device in a network. The individual address is a 2-octet value that consists of an 8-bit subnetwork address and an 8-bit device address

¹⁾ At draft stage.

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