

**Home and Building Electronic Systems
(HBES) -- Part 5-3: Media and media
dependent layers - Radio frequency**

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frequency

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50090-5-3:2006 sisaldab Euroopa standardi EN 50090-5-3:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.11.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50090-5-3:2006 consists of the English text of the European standard EN 50090-5-3:2006.</p> <p>This document is endorsed on 27.11.2006 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: This European Standard defines the mandatory and optional requirements for the medium specific Physical and Data Link Layer of Radio Frequency for HBES products and systems, a multi-application bus system where the functions are decentralised, distributed and linked through a common communication process. This European Standard is used as a product family standard. It is not intended to be used as a stand-alone standard. Data Link Layer interface and general definitions, which are medium independent, are given in EN 50090-4-1.</p>	<p>Scope: This European Standard defines the mandatory and optional requirements for the medium specific Physical and Data Link Layer of Radio Frequency for HBES products and systems, a multi-application bus system where the functions are decentralised, distributed and linked through a common communication process. This European Standard is used as a product family standard. It is not intended to be used as a stand-alone standard. Data Link Layer interface and general definitions, which are medium independent, are given in EN 50090-4-1.</p>
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Võtmesõnad:

English version

**Home and Building Electronic Systems (HBES)
Part 5-3: Media and media dependent layers -
Radio frequency**

Systèmes électroniques pour les foyers
domestiques et les bâtiments (HBES)
Partie 5-3: Médias et couches
dépendantes des médias -
Radio fréquence

Elektrische Systemtechnik
für Heim und Gebäude (ESHG)
Teil 5-3: Medien und medienabhängige
Schichten -
Signalübertragung über Funk

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 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 Konnex Association.

The text of the draft was submitted to the Unique Acceptance Procedure (UAP) and was approved by CENELEC as EN 50090-5-3 on 2006-10-01.

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) 2007-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-10-01

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EN 50090-5-3 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: Transport layer and network layer
 - Part 5: Media and media dependent layers
 - Part 6: Interfaces
 - Part 7: Management
 - Part 8: Conformity assessment of products
 - Part 9: Installation requirements
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Contents

Introduction	5
1 Scope	5
2 Normative references	5
3 Terms, definitions and abbreviations	5
3.1 Terms and definitions	5
3.2 Abbreviations.....	5
4 Physical Layer Type RF	6
4.1 General.....	6
4.1.1 Frame structure related.....	6
5 Data Link Layer Type RF	7
5.1 Differences to existing (bi-directional) HBES protocol	7
5.1.1 Extended Group Address	7
5.1.2 Predefined Extended Group Addresses for transmit-only devices	7
5.1.3 RF Domain Address.....	8
5.1.4 RF Broadcast and RF System Broadcast.....	8
5.2 Data Link Layer Frame.....	8
5.2.1 General	8
5.2.2 Structure	8
5.2.3 Bit and octet order.....	9
5.2.4 First block.....	9
5.2.5 Second block	10
5.3 Medium access	10
5.3.1 Medium access times	11
5.4 Data Link Layer protocol	11
5.4.1 RF Repeat Counter for end devices	11
5.4.2 AddrExtensionType.....	11
5.4.3 Duplication prevention	11
5.5 The Layer-2 of an RF Retransmitter	12
5.5.1 History List	12
5.5.2 RF Repeat Counter.....	12
5.5.3 Filtering	13
5.5.4 Retransmitter Flowchart.....	13
5.6 The Layer-2 of an RF-TP Media Coupler.....	13
5.6.1 Introduction	13
5.6.2 Automatic translation	15
5.6.3 Configuration by a tool.....	21
5.6.4 Translation between standard and extended frames and RF frames	22
Figure 1 - Overview of the link layer frame.....	8
Figure 2 - Structure of the first block	9
Figure 3 - Structure of the second block.....	10
Figure 4 - Flowchart of the Data Link Layer and Network Layer of the retransmitter	13

Figure 5 - Logical Interpretation of Extended Group Address in automatic translation.....	14
Figure 6 - Coupling a HBES TP and RF system	15
Figure 7 - Automatic translation principle from RF to TP of the source Individual Address.....	16
Figure 8 - Example for the automatic conversion of the source individual address from RF to TP	16
Figure 9 - Automatic translation principle from RF to TP of the Group Address	17
Figure 10 - Example for the automatic conversion of the group address from RF to TP.....	17
Figure 11 - Automatic translation principle from TP to RF of the Group Address	18
Figure 12 - Example for the automatic conversion of the group address from TP to RF	18
Figure 13 - Automatic translation principle from TP to RF in case the Group Address is not in the range of RF Group Addresses Exxx.....	19
Figure 14 - Example for the automatic conversion of the group address from TP to RF (when not in the range of Exxxh).....	19
Figure 15 - Automatic translation principle form TP to RF for Destination Individual Addresses.....	20
Figure 16 - Example for the automatic conversion of the destination individual address from TP to RF	20
Figure 18 - Example for the automatic conversion of the destination individual address from TP to RF (if destination individual address not equal to coupler's subnetwork address)	21
Table 1 - General requirements for Physical Layer Type RF	6
Table 2 - Frame definition.....	6
Table 3 - Coding of the RF info field.....	9
Table 4 - Significance of fields of second block	10
Table 5 - Medium access time.....	11

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Introduction

According to the OSI reference model, the Physical Layer consists of the medium, the cable, the connectors, the transmission technology, etc. which refers to the hardware requirements. However, the focus of this European Standard lies first and foremost on the description of the “communication medium”.

1 Scope

This European Standard defines the mandatory and optional requirements for the medium specific Physical and Data Link Layer of Radio Frequency for HBES products and systems, a multi-application bus system where the functions are decentralised, distributed and linked through a common communication process.

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

Data Link Layer interface and general definitions, which are medium independent, are given in EN 50090-4-1.

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 300 220-1	2000	<i>ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW Part 1: Technical characteristics and test methods</i>
EN 301 489-3	2000	<i>Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz</i>
IEC 60870-5-1	1990	<i>Telecontrol equipment and systems Part 5: Transmission protocols - Section One: Transmission frame formats</i>

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purpose of this European Standard, the definitions given in EN 50090-1 apply.

3.2 Abbreviations

BER	bit error rate
DLL	Data Link Layer
ERP	effective radiated power
FSK	frequency shift keying

1) At draft stage.