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Irish Standard I.S. EN 50090-1:2011

Home and Building Electronic Systems (HBES) -- Part 1: Standardization structure

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<i>This document replaces:</i> EN 50090-2-1:1994	This document is based on: Publish EN 50090-1:2011 25 Feb EN 50090-2-1:1994 13 Sep		<i>ed:</i> ruary, 2011 tember, 1994		
This document was published under the authority of the NSAI and co 2 March, 2011	omes into effect on:			ICS number: 97.120	
NSAI T +35 1 Swift Square, F +35 Northwood, Santry E star Dublin 9 W N	3 1 807 3800 5 3 1 807 3838 ndards@nsai.ie F ISAI.ie	Sales: T +353 1 8 F +353 1 8 W standard:	57 6730 57 6729 s.ie		
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I.S. EN 50090-1:2011

EUROPEAN STANDARD

EN 50090-1

NORME EUROPÉENNE EUROPÄISCHE NORM

February 2011

ICS 97.120

Supersedes EN 50090-2-1:1994

English version

Home and Building Electronic Systems (HBES) -Part 1: Standardization structure

Systèmes électroniques pour les foyers domestiques et les bâtiments (HBES) -Partie 1: Structure de la norme Elektrische Systemtechnik für Heim und Gebäude (ESHG) -Teil 1: Aufbau der Norm

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CENELEC

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

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EN 50090-1:2011

Foreword

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

The text of the draft was submitted to the Unique Acceptance Procedure and was accepted by CENELEC as EN 50090-1 on 2011-02-21.

This document supersedes EN 50090-2-1:1994.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and 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)	2012-02-21
-	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-02-21

EN 50090-1 is part of the EN 50090 series "Home and Building Electronic Systems (HBES)", which will comprise the following parts (see Clause 2 for further details):

- Part 1: Standardization structure;
- Part 2: Void;

NOTE EN 50090-2-1:1994 is incorporated and superseded by this Part 1.

EN 50090-2-2:1996 and its amendments are incorporated and superseded by EN 50491-3:2009, EN 50491-5-1:2010, EN 50491-5-2:2010 and EN 50491-5-3:2010.

EN 50090-2-3:2005 will be incorporated and superseded by the EN 50491 series.

- 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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Introduction

This European Standard outlines the main elements of the HBES Open Communication System and the concept behind it. It should be used as a guideline for the EN 50090 series.

Home and Building Electronic Systems as provided by the HBES Open Communication System are a specialized form of automated, decentralised and distributed process control, dedicated to the needs of home and building applications.

The specification of the HBES Open Communication System provides, besides runtime characteristics, a "toolkit" of services and mechanisms for network management.

On the HBES Open Communication System Device Network, all devices form distributed applications, which are able to interact with one another taking into account Interworking rules (standardized Datapoint Types and "Functional Block" objects, modelling logical device channels). This run-time Interworking allows the creation of a comprehensive and multi-domain home and building communication system

The available communication media range from Twisted Pair to Powerline and 868 MHz band Radio Frequency.

The HBES Open Communication system is independent of any specific microprocessor platform or architecture. Depending on the profile chosen by the manufacturer, any suitable industry-standard chip can be chosen. Some HBES Open Communication System profiles allow a tiny system footprint (say < 5 kbit) and can run on an 8-bit processor. Implementations can however also be realised on 16-or 32-bit processors, or even PC's.

The features of HBES Open Communication System allow its use in different application domains and installation types, and also in "Service Network" environments (usually based on broadband networks running IP, the Internet Protocol). To address this need, the transmission of HBES Open Communication System frames across an IP network has been standardised in EN 50090-4-3:2007.



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