

English version

SmartHouse Code of Practice

This CENELEC Workshop Agreement has been drafted by a Workshop of representatives of interested parties and was approved on 2005-11-02.

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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 CENELEC Workshop Agreement has been developed through the collaboration of a large number of industry experts (see Annex E). Its final text was approved as CWA 50487 on 2005-11-02.

The contents of the corrigendum of January 2006 have been included in this copy.

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Preface

This Code of Practice is intended to provide a valuable reference for anyone involved in creating a SmartHouse, a house that has intelligent systems, intelligent equipment and networks and has services and applications that use the SmartHouse intelligence.

It has been put together from the efforts of a large number of industry experts. In order to cope with the very broad scope of the Code of Practice and the many stakeholders that were involved, it was seen as desirable that the document should be subdivided into Sections each of which covers a particular market segment in the service supply chain of services and applications to and within the SmartHouse.

Each Section has been constructed by a Section Editor who is an expert in the area of the section and overall editing and management of the project has been the task of an overall Managing Editor. Each Section Editor has had the assistance of a dedicated group of experts and around 160 experts have been involved in these working groups. Overall, there have been 4 Open Forums/Workshops attended by an average of 65 Experts for the first 3. Some 325 experts have been involved in the review process. The 10 section editors have worked incredibly hard with their experts to deliver the current text. The time recorded by the experts now adds up to more than 600 man days.

There have been numerous disagreements as to what should be in the text and what left out. These have been resolved although some hard decisions have had to be made. There is now agreement on the text and all the comments received have been resolved and put into the document

Because there is significant variability in the scope of the sections, some sections deal with hard physical facts whereas some deal with the objectives and needs of stakeholders such as the consumer and the service provider. Other sections deal with entities where the market is still evolving and therefore the hard physical facts are not readily available. Therefore, while there has been considerable attention to ensuring consistency, there are areas where there is overlap, because the sections lie side by side on the service supply chain, and some sections look at similar issues from different perspectives.

An example of this is the way in which we have used the term "cluster". In each section where it is used it describes a broadly market segment grouping but is used in a slightly different way and although the market segments are broadly similar, in some sections the market segments are sliced more thinly.

Overall, it is considered that this document will provide a most helpful document for the stakeholder of the SmartHouse market. It is hoped that the Code of Practice will bring understanding of the issues and in particular allow the system designer of the SmartHouse to work more effectively and with more understanding of the wider issues.

As managing editor, I would like to thank all the section editors and their teams of experts for the help and support they have given me in putting this Code of Practice together. The section editors were:

Luc Baranger	FFIE (FR)	Installation Section
Roy Brooker	ANEC (UK)	Consumer Section
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Stephen Pattenden	BSI (UK)	UI Section overall
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Bruno Ziegler	EDF	Service Providers

The document has been approved unanimously by experts in a CENELEC Workshop and by experts from previous workshops who have reviewed the document and indicated their approval by mail (See E.1). The Chairperson (Stephen Pattenden) accordingly decided that consensus had now been reached and the document should be adopted as a CENELEC Workshop Agreement.

Stephen Pattenden (06/11/2005)

Acknowledgements

In certain parts of this Code of Practice organisations and companies and their products may be mentioned. In all cases where used the names of any product and their trade marks are acknowledged as belonging to them and have been used where appropriate to illustrate particular concepts or the common usage of such products.

Disclaimer

Every effort has been taken to ensure the accuracy of this Code of Practice, however, in a document with such a broad scope and with multiple experts and authors, neither CENELEC, nor the Editors and experts involved in compiling this Code of Practice can accept any responsibility for any loss either direct or consequential arising from information provided by this Code of Practice. The reader is advised to satisfy him or her self as to the accuracy of any advice given by researching the referenced standards, glossary and bibliography.

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CONTENTS

Preface	3
1 Scope & introduction	9
1.1 The SmartHouse and its components	9
1.1.1 Scope of the SmartHouse Code of Practice	9
1.1.2 Parts of the Code of Practice	11
1.1.3 Issues	12
1.1.4 Recommendations	12
1.1.5 Annexes	13
2 The Environment of the SmartHouse	13
2.1 The reason for a SmartHouse and why its value is more than the sum of its parts;	13
2.1.1 Introduction	13
2.2 The consumers' needs and requirements	15
2.2.1 Introduction – Why the SmartHouse designer needs to understand the consumer.	15
2.2.2 The scope of this section	16
2.2.3 Issues	17
2.2.4 Additional recommendations	28
2.2.5 Conclusions	29
2.3 Service Providers, Services and Applications	30
2.3.1 Introduction	30
2.3.2 Scope	31
2.3.3 Issues	33
2.3.4 Relevant standards, developing standards and specifications	38
2.3.5 References	38
3 The design of the SmartHouse system and product development	39
3.1 Architectures	39
3.1.1 Introduction	39
3.1.2 Issues	42
3.1.3 Recommendations	49
3.2 The Wide Area and its network operators and delivery media	51
3.2.1 Introduction	51
3.2.2 Issues	52
3.2.3 Recommendations	56
3.2.4 Dependencies on Other SMARTHOUSE CoP sections	57
3.3 The Home Networks and their media	58
3.3.1 Introduction	58
3.3.2 Issues	62
3.3.3 Recommendations	65

3.4	NTE & gateways	76
3.4.1	Introduction.....	76
3.4.2	IP based Access Networks assumptions & requirements	79
3.4.3	Scope	80
3.4.4	The Residential Gateway Modules.	82
3.4.5	The Home Residential Gateway Project areas:	84
3.4.6	Goals	86
3.4.7	Quality of Service (QoS) requirements and functions	86
3.4.8	Issues	87
3.4.9	Relevant standards, developing standards and specifications.....	89
3.4.10	References	89
3.5	System security	90
3.5.1	Introduction	90
3.5.2	Scope	91
3.5.3	Issues	92
3.5.4	Security models	93
3.5.5	Threat analysis	94
3.5.6	Security to provide trust	95
3.5.7	Recommendations.....	98
	COMPONENTS - Product development.....	100
3.6	Service and application development.....	100
3.6.1	Introduction.....	100
3.6.2	Recommendations.....	100
3.7	Home Equipment (HE)	100
3.7.1	Introduction.....	100
3.7.2	Scope	101
3.7.3	Methodology	102
3.7.4	Usage cases.....	102
3.7.5	SmartHouse Home Equipment Usage case clusters	105
3.7.6	Home Automation Usage cases: example lighting control	105
3.7.7	SmartHouse Household Appliances Usage case	108
3.7.8	Business requirements	109
3.7.9	Relevant standards, developing standards and specifications.....	111
3.8	User Interfaces & A/V.....	112
3.8.1	Introduction.....	112
3.8.2	Scope	113
3.8.3	Issues	113
3.8.4	Services and their requirements	117
3.8.5	Services and applications	117
3.8.6	Consumer issues.....	122
3.8.7	Recommendations and checklists	122

4	Installation.....	123
4.1	Introduction – The installation process.....	123
4.1.1	Scope of this section	123
4.1.2	Analysis	124
4.1.3	Planning	127
4.1.4	Undertaking the installation	127
4.1.5	Maintenance.....	128
4.1.6	Standards identified.....	128
4.1.7	Documentation recommendations	128
	Annex A – Abbreviations, acronyms, terms and definitions	131
A.1	Comments on this Annex	131
A.2	Abbreviations and acronyms	131
A.3	Terms and definitions.....	135
	Annex B – Standards referenced.....	159
B.1	The EN 50090 series	159
B.2	Referenced standards.....	161
	Annex C – Additional material from sections	179
C.1	Additional material from Network Operators Section	179
C.1.1	QoS Service Model for the SmartHouse	179
C.1.2	SmartHouse QoS Service Architecture.....	179
C.1.3	Application Traffic Class Attributes (End-to-End Transport Layer).....	181
C.1.4	Service Attribute Selection – Examples	183
C.1.5	What Communications Technologies are available?	184
C.2	Discussion on the requirements for a SmartHouse Open Architecture.....	186
C.2.1	Overview	186
C.2.2	General.....	189
C.2.3	The Objectives for an Architecture for the SmartHouse.....	192
C.2.4	How to meet the objectives.....	192
C.2.5	Comments on these objectives.....	193
C.2.6	Further research.....	193
C.3	Additional material from Home Networks Section	194
C.4	Additional material from Home Equipment Section	196
C.4.1	Communications [external]	196
C.4.2	Home Automation Usage cases	199
C.5	Additional material from Installation section – Example forms.....	220
C.5.1	Inspection, test and commissioning certificates	220
	Annex D – Bibliography.....	225
D.1	Input from consumer's needs and requirements	225
D.2	Input from gateways.....	225

D.3	Input from security.....	225
D.4	Input form user interfaces.....	226
D.5	Input from installation process.....	227
D.5.1	French documents.....	227
D.5.2	German documents.....	227
D.5.3	Spanish documents.....	228
D.6	General documents.....	228
Annex E	229
E.1	Attendees of SmartHouse Open Forum/Workshops approving document	229
E.2	Contributors and attendees at forums and meetings.....	230

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1 Scope & introduction

1.1 The SmartHouse and its components

The SmartHouse consists of a large and wide ranging set of many Services, Applications, Equipment, Networks and Systems that act together in delivering the “intelligent” or “connected” home in order to address security and control, communications, leisure and comfort, environmental integration and accessibility. These components are represented by many actors that interact and work together to provide interoperable systems that benefit the home based user in the SmartHouse. Because of this wide ranging variability of the entities in the SmartHouse, there is a very high level of potential complexity in finding the optimal solution for any particular SmartHouse.

The main actors that influence the SmartHouse are the consumers (customers, subscribers, individuals) that live in and utilise the Services, Applications and Products that are designed for the SmartHouse. It is therefore appropriate that the other main set of actors are the service and application providers that deliver the services that the consumers need and require, including those responsible for installing systems in the SmartHouse and for maintaining them.

These consumers have needs and requirements in many areas and these are described in the Section on Consumers. Likewise the aims and objectives of the Service Providers in fulfilling consumer needs are described in the section on Service Providers. The installer also has to fulfil consumer needs and the Installation Process is described in the section on Installation.

1.1.1 Scope of the SmartHouse Code of Practice

The SmartHouse Code of Practice is a document that provides a “system designer” working to implement a SmartHouse (to be used as dwelling and as a home office) with a source of information on sensible and pragmatic guidelines for the design, installation and maintenance of SmartHouse systems and the services and applications provided.

It is recognised also that providers and installers must work within diverse regulatory environments and must be free to make choices appropriate to their business objectives (which in relation to this document focus on meeting the needs of domestic and small-office users, not large-scale commercial premises). Therefore, we consider standards as enablers and leave prescriptive aspects to local regulation.

SmartHouse includes the digital home, intelligent home, connected home, networked home. SmartHouse includes any “smart” activity, service or application in the SmartHouse including any form of “office” or working environment in the SmartHouse (but the smart office in commercial premises is excluded). SmartHouse covers any residential premises where people live (e.g. house or apartment) but excludes commercial and institutional premises (such as hotels or prisons and other commercial dwellings where the day to day management of the accommodation is not controlled by the resident.). SmartHouse includes consideration of the interface with the consumer (customer, subscriber, end user) and the consumer’s needs.

The aim is to provide a useful reference document to ensure that the user may exploit the benefits of a consistent system architecture by utilising European and International Standards and other generally accepted specifications in the design of the Smart House system. This document delivers a route to investment synergies, flexibility of services and useful and usable applications that satisfy the individual consumer’s needs and requirements.

There are many stakeholders in the SmartHouse, each with their own viewpoint and interests. Rather than try to provide a document that covers all the viewpoints, it was decided to write this Code of Practice as a guide for the System Designer of systems, applications and services in and into the SmartHouse. The interests of all the stakeholders overlap in the System Design of the SmartHouse.