



ISO/IEC TR 29107-1

Edition 1.0 2010-03

TECHNICAL REPORT



**Information technology – Intelligent homes – Taxonomy of specifications –
Part 1: Taxonomy method**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

P

ICS 35.200

ISBN 978-2-88910-839-8

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Terms, definitions and abbreviations.....	6
3 Conformance.....	6
4 Taxonomy concept.....	6
5 The presentation of specifications categorized according to this scheme.....	8
Annex A (informative) Background.....	9
A.1 Current situation.....	9
A.2 Integration trends.....	10
A.3 Taxonomy.....	11
A.3.1 Concept.....	11
A.3.2 Example of a taxonomy with three dimensions.....	11
A.3.3 Definition.....	12
A.4 Application.....	13
Bibliography.....	15
Figure A.1 – Different islands of residential services (with examples for networks).....	9
Figure A.2 – Emerging integration points for services and devices.....	11
Figure A.3 – Axes of the Intelligent Home Standards Taxonomy.....	12
Figure A.4 – Service delivery path.....	12
Figure A.5 – Existing specifications in the example taxonomy.....	14
Table 1 – Example of some specifications categorized according to this scheme.....	8

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INFORMATION TECHNOLOGY –
INTELLIGENT HOMES –
TAXONOMY OF SPECIFICATIONS –****Part 1: Taxonomy method**

FOREWORD

- 1) ISO (International Organization for Standardization) and IEC (International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards. Their preparation is entrusted to technical committees; any ISO and IEC member body interested in the subject dealt with may participate in this preparatory work. International governmental and non-governmental organizations liaising with ISO and IEC also participate in this preparation.
- 2) In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.
- 3) The formal decisions or agreements of IEC and ISO on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC and ISO member bodies.
- 4) IEC, ISO and ISO/IEC publications have the form of recommendations for international use and are accepted by IEC and ISO member bodies in that sense. While all reasonable efforts are made to ensure that the technical content of IEC, ISO and ISO/IEC publications is accurate, IEC or ISO cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 5) In order to promote international uniformity, IEC and ISO member bodies undertake to apply IEC, ISO and ISO/IEC publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any ISO/IEC publication and the corresponding national or regional publication should be clearly indicated in the latter.
- 6) ISO and IEC provide no marking procedure to indicate their approval and cannot be rendered responsible for any equipment declared to be in conformity with an ISO/IEC publication.
- 7) All users should ensure that they have the latest edition of this publication.
- 8) No liability shall attach to IEC or ISO or its directors, employees, servants or agents including individual experts and members of their technical committees and IEC or ISO member bodies for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication of, use of, or reliance upon, this ISO/IEC publication or any other IEC, ISO or ISO/IEC publications.
- 9) Attention is drawn to the normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 10) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

The main task of IEC and ISO technical committees is to prepare International Standards. In exceptional circumstances, ISO/IEC JTC 1 or a subcommittee may propose the publication of a technical report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;

- type 2, when the subject is still under technical development or where, for any other reason, there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the technical committee has collected data of a different kind from that which is normally published as an International Standard, for example 'state of the art'.

ISO/IEC 29107-1, which is a Technical Report of type 3, has been prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology

Technical reports of types 1 and 2 are subject to review within three years of publication to decide whether they can be transformed into International Standards. Technical reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

This Technical Report of type 3 has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

A list of all parts of the ISO/IEC 29107 series, under the general title *Information technology – Intelligent homes – Taxonomy of specifications*, can be found on the IEC website.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

ISO/IEC 29107 describes a taxonomy for the classification of standards and other specifications applicable to intelligent homes. It consist of two parts.

Part 1: Taxonomy method.

Part 2: Table of specifications.

INFORMATION TECHNOLOGY – INTELLIGENT HOMES – TAXONOMY OF SPECIFICATIONS –

Part 1: Taxonomy method

1 Scope

This part of ISO/IEC 29107 specifies the concept for a taxonomy of standards and other related specifications applicable to intelligent homes. It is intended for the classification of specifications from ISO, IEC, ISO/IEC JTC 1, ITU and from organizations with liaison status with any of these.

The target of this part of ISO/IEC 29107 are the various standardisation bodies that are contributing to the intelligent home. With the help of the concept described in this report they should be able to classify their specifications. This will benefit the standardisation bodies to determine if there are overlapping specifications or areas for which specifications are missing.

NOTE The collection of all classifications, is intended to be specified in ISO/IEC TR 29107-2.¹

2 Terms, definitions and abbreviations

For the purposes of this document, the following terms and definitions apply.

2.1

intelligent home

home in which the integration of services and interworking of devices improve the residents' comfort, well-being, safety and communication possibilities

NOTE 1 The focus of the integration is on a unified user access to services and devices and the interworking capabilities between different application areas.

NOTE 2 Example application areas are home security, home entertainment, home automation, health care, telecommunication, energy management and personalized information (as traffic, weather,...).

¹ The table of specifications will be held by ISO/IEC JTC 1/SC 25.