

Home and Building Electronic Systems (HBES)- Part 6-2
IoT Semantic Ontology model description

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50090-6-2:2021 sisaldab Euroopa standardi EN 50090-6-2:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 50090-6-2:2021 consists of the English text of the European standard EN 50090-6-2:2021.
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ICS 97.120; 35.240.67

English Version

Home and Building Electronic Systems (HBES)- Part 6-2 IoT Semantic Ontology model description

Systèmes électroniques pour les foyers domestiques et les
bâtiments (HBES) - Partie 6-2: Description du modèle
ontologie sémantique IoT

Elektrische Systemtechnik für Heim und Gebäude (ESHG) -
Teil 6-2: Beschreibung des IoT semantischen
Ontologiemodells

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50090-6-2:2021) has been prepared by CLC/TC 205 "Home and Building Electronic Systems (HBES)".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-09-20
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2022-09-20

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1 Scope

This document defines the HBES Information Model and a corresponding data exchange format for the Home and Building HBES Open Communication System.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 50090-1:2011, *Home and Building Electronic Systems (HBES) - Part 1: Standardization structure*

EN 50090-3-3, *Home and Building Electronic Systems (HBES) - Part 3-3: Aspects of application - HBES Interworking model and common HBES data types*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50090-1:2011 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1.1

actuator

point performing an *actuation* (executed by a specific *procedure*, with an expected *result*) that changes an Installation state during Runtime

Note 1 to entry:

- The term Actuator can be mapped to `sosa:Actuator` in the SSN Ontology.
- The subject *actuation* can be mapped to `sosa:Actuation` in the SSN Ontology.
- The subject *procedure* can be mapped to `sosa:Procedure` in the SSN Ontology.
- The subject *result* can be mapped to `sosa:Result` in the SSN Ontology.

3.1.2

Application Function

uses a set of Functions to achieve the desired behaviour of a technical system, typically using a combination of devices exchanging information via their input and output Datapoints

Note 1 to entry: An Application Function may be split into several Functional Blocks with their input and output Datapoints that are logically connected to each other. The Functional Blocks may be located in one or more devices.

EXAMPLE Application Functions examples are “direct electrical heating”, “electrical heating with accumulators”, “warm water heating”, “fan coil air-conditioning” ...

Note 2 to entry: The Application Function and Application are meant to be the same. Reason to introduce an alias term is to use a clear (understandable) reference from Application/ Application Function to the corresponding KIM class :ApplicationFunction or to the Function in the Management Client.