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TECHNICAL SPECIFICATION

**SmartM2M;
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Communication Framework**

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Smart Machine-to-Machine communications (SmartM2M).

The final scope is to provide a set of specifications that assure a smooth communication between the Smart Appliances in the building and between the Smart Appliances and remote applications.

An important aspect is to ensure a common interworking framework to cater for the communication among systems that apply the full set of specifications as referenced in the present document. This is in recognition of the potential long term existence of legacy and specialized systems and the need to communication amongst & between systems.

The full set of specifications cover three aspects:

- 1) The semantic aspect with a reference ontology and its mapping on the oneM2M Communication Framework, based on the Study on Semantic Assets for Smart Appliances Interoperability of the European Commission DG Communications Networks, Content & Technology [i.1].
 - ETSI TS 103 264 [1].
- 2) The communication framework, the present document.
- 3) The full testing support for the above mentioned documents:
 - ETSI TS 103 268-1 [i.6].
 - ETSI TS 103 268-2 [i.7].
 - ETSI TS 103 268-3 [i.8].
 - ETSI TS 103 268-4 [i.9].

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document defines a framework for Smart Appliances communication based on oneM2M specifications. It will also provide adjustments as required by the interested stakeholders.

The present document includes:

- An introduction to the oneM2M framework and its relation with the ETSI M2M one.
- The specification of the interworking framework for Smart Appliances with normative reference to oneM2M specifications.
- The specification about how to interwork with the oneM2M framework.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

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| [1] | ETSI TS 103 264: "SmartM2M Smart Appliances Common Ontology and oneM2M Mapping". |
| [2] | ETSI TS 118 111: "Common Terminology". |
| [3] | ETSI TS 118 102: "Requirements". |
| [4] | ETSI TS 118 101: "Functional architecture". |
| [5] | ETSI TS 118 104: "Service Layer Core Protocol Specification". |
| [6] | ETSI TS 118 103: "Security solutions". |
| [7] | ETSI TS 118 105: "Management Enablement (OMA)". |
| [8] | ETSI TS 118 106: "Management Enablement (BBF)". |
| [9] | ETSI TS 118 109: "HTTP Protocol Binding". |
| [10] | ETSI TR 102 966: "Machine-to-Machine communications (M2M); Interworking between the M2M Architecture and M2M Area Network technologies". |

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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