

# ETSI GS CIM 013 V3.1.1 (2025-07)



## Context Information Management (CIM); NGSI-LD Test Purposes Descriptions

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## Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) cross-cutting Context Information Management (CIM).

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## Modal verbs terminology

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# 1 Scope

The present document contains the description of each abstract test case using the Test Template [i.2] and using the Test Purposes Description Language identified in ETSI GS CIM 012 [i.3] and ETSI GR CIM 011 [i.1]. The test cases are described in tabular form. All clauses mentioned in tables of clause 4 of the present document are references to the NGSI-LD specification, hence to be found in ETSI GS CIM 009 [1].

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## 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 referenced document (including any amendments) applies.

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

- [1] [ETSI GS CIM 009 \(V1.6.1\) \(2022-08\)](#): "cross-cutting Context Information Management (CIM); NGSI-LD API".

### 2.2 Informative references

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The following referenced documents may be useful in implementing an ETSI deliverable or add to the reader's understanding, but are not required for conformance to the present document.

- [i.1] ETSI GR CIM 011 (V1.1.1) (2021-04): "Context Information Management (CIM); NGSI-LD Testing Framework: Test Purposes Description Language (TPDL)".
- [i.2] ETSI GS CIM 016 (V1.1.1) (2021-04): "Context Information Management (CIM); NGSI-LD Testing Framework: Test Template".
- [i.3] ETSI GS CIM 012 (V2.1.1) (2024-04): "Context Information Management (CIM); NGSI-LD Test Suite Structure".

## 3 Definition of terms, symbols and abbreviations

### 3.1 Terms

For the purposes of the present document, the following terms apply:

**NOTE:** The letters "NGSI-LD" were added to most terms to confirm that they are distinct from other terms of similar/same name in use in other organizations, however, in the present document the letters "NGSI-LD" are generally omitted for brevity.

**NGSI-LD Central Broker:** NGSI-LD Context Broker that only uses a local storage when serving NGSI-LD requests, without involving any external Context Sources

**NGSI-LD Context Broker:** architectural component that implements all the NGSI-LD interfaces

**NGSI-LD Context Consumer:** agent that uses the query and subscription functionality of NGSI-LD to retrieve context information

**NGSI-LD Context Producer:** agent that uses the NGSI-LD context provision and/or registration functionality to provide or announce the availability of its context information to an NGSI-LD Context Broker

**NGSI-LD Context Registry:** software functional element where Context Sources register the information that they can provide

**NOTE:** It is used by Distribution Brokers and Federation Brokers to find the appropriate Context Sources which can provide the information required for serving an NGSI-LD request.

**NGSI-LD Context Source:** source of context information which implements the NGSI-LD consumption and subscription (and possibly provision) interfaces defined by the present document

**NOTE:** It is usually registered with an NGSI-LD Registry so that it can announce what kind of information it can provide, when requested, to Context Consumers and Brokers.

**NGSI-LD Distribution Broker:** NGSI-LD Context Broker that uses both local context information and registration information from an NGSI-LD Context Registry, to access matching context information from a set of distributed Context Sources

**NGSI-LD Federation Broker:** Distribution Broker that federates information from multiple underlying NGSI-LD Context Brokers and across domains

### 3.2 Symbols

Void.

### 3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

HTTP	HperText Transfer Protocol
JSON	Java Script Object Notation
MQTT	Message Queueing Telemetry Transport
PICS	Profile Implementation Conformance Statement
QoS	Quality of Service
SUT	System Under Test
TP	Test Purpose
URI	Unified Resource Identification
URL	Unified Resource Location