



Multi-access Edge Computing (MEC); API Conformance Test Specification Part 1: Test Requirements and Implementation Conformance Statement (ICS)

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Reference

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Contents

Contents	3
Intellectual Property Rights	5
Foreword.....	5
Modal verbs terminology.....	5
Introduction	5
1 Scope	6
2 References	6
2.1 Normative references	6
2.2 Informative references.....	6
3 Definition of terms, symbols and abbreviations.....	7
3.1 Terms.....	7
3.2 Symbols.....	7
3.3 Abbreviations	7
4 Conformance requirement concerning ICS	8
Annex A (normative): MEC ICS Pro forma	9
A.1 Guidance for completing the ICS Pro forma	9
A.1.1 Purpose and structure	9
A.1.1 Abbreviations and conventions	9
A.1.2 Instructions for completing the ICS pro forma.....	9
A.2 Identification of the implementation	9
A.2.1 Introduction	9
A.3 Identification of the ETSI MEC APIs	9
A.4 Global statement of conformance.....	10
A.5 Requirements and ICS tables	10
A.5.1 ETSI GS MEC 010-1	10
A.5.1.1 Test Requirements	10
A.5.1.2 ICS	11
A.5.2 ETSI GS MEC 010-2	11
A.5.2.1 Test Requirements	11
A.5.2.2 ICS	16
A.5.3 ETSI GS MEC 011.....	24
A.5.3.1 Test Requirements	24
A.5.3.2 ICS	25
A.5.4 ETSI GS MEC 012.....	27
A.5.4.1 Test Requirements	27
A.5.4.2 ICS	29
A.5.5 ETSI GS MEC 013.....	31
A.5.5.1 Test Requirements	31
A.5.5.2 ICS	32
A.5.6 ETSI GS MEC 014.....	34
A.5.6.1 Test Requirements	34
A.5.6.2 ICS	34
A.5.7 ETSI GS MEC 015.....	34
A.5.7.1 Test Requirements	34
A.5.7.2 ICS	35
A.5.8 ETSI GS MEC 016.....	35
A.5.8.1 Test Requirements	35
A.5.8.2 ICS	36
A.5.9 ETSI GS MEC 021.....	36

A.5.9.1	Test Requirements	36
A.5.9.2	ICS	38
A.5.10	ETSI GS MEC 028.....	41
A.5.10.1	Test Requirements	41
A.5.11	ETSI GS MEC 029.....	41
A.5.11.1	Test Requirements	41
A.5.11.2	ICS	42
A.5.12	ETSI GS MEC 030.....	43
A.5.12.1	Test Requirements	43
A.5.12.2	ICS	44
Annex B (informative): Bibliography		45
Annex C (informative): Change History		46
History		47

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Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) Multi-access Edge Computing (MEC).

The present document is part 1 of a multi-part deliverable covering Conformance Test Specification for MEC APIs as identified below:

- Part 1: "Test Requirements and Implementation Conformance Statement (ICS)";
- Part 2: "Test Purposes (TP)";
- Part 3: "Abstract Test Suite (ATS).

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).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

Editor's note: This clause will introduce the reader to the background on conformance testing and rationale behind API Conformance testing for MEC. Moreover, an overview of the testing methodology and the role of the present document may be introduced.

1 Scope

Based on the testing methodology guidelines and framework specified in ETSI GR MEC 025 [i.11], the present document specifies part 1 of a multi-part conformance test specification for the MEC service APIs (currently ETSI GS MEC 012 [4], ETSI GS MEC 013 [i.3], ETSI GS MEC 014 [i.4], ETSI GS MEC 015 [i.5], ETSI GS MEC 016 [i.6], ETSI GS MEC 028 [i.7], ETSI GS MEC 029 [i.8] and ETSI GS MEC 030 [i.9]) and the MEC Application Enablement API (ETSI GS MEC 011 [i.1]). The present document specifies the Test requirements and Implementation Conformance Statement (ICS).

Editor's note: May be extended.

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.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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

- [1] ETSI GS MEC 002: "Multi-access Edge Computing (MEC); Phase 2: Use Cases and Requirements".
- [2] ETSI GS MEC 010-1: "Mobile Edge Computing (MEC); Mobile Edge Management; Part 1: System, host and platform management".
- [3] ETSI GS MEC 010-2: "Multi-access Edge Computing (MEC); Mobile Edge Management; Part 2: Application lifecycle, rules and requirements management".
- [4] ETSI GS MEC 012: "Mobile Edge Computing (MEC); Radio Network Information API".

Editor's note: Versions TBD.

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 referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI GS MEC 011: "Multi-access Edge Computing (MEC); Edge Platform Application Enablement".
- [i.2] ETSI GS MEC 013: "Multi-access Edge Computing (MEC); Location API".
- [i.3] ETSI GS MEC 014: "Mobile Edge Computing (MEC); UE Identity API".
- [i.4] ETSI GS MEC 015: "Mobile Edge Computing (MEC); Bandwidth Management API".

- [i.5] ETSI GS MEC 016: "Multi-access Edge Computing (MEC); UE application interface".
- [i.6] ETSI GS MEC 028: "Multi-access Edge Computing (MEC); WLAN Information API".
- [i.7] ETSI GS MEC 029: "Multi-access Edge Computing (MEC); Fixed Access Information API".
- [i.8] ETSI GS MEC 030: "Multi-access Edge Computing (MEC); MEC V2X API".
- [i.9] ETSI GS MEC 021: "Multi-access Edge Computing (MEC); MEC Application Mobility Service API".
- [i.10] ETSI GR DEC-MEC 025: "Multi-access Edge Computing (MEC); MEC Testing Framework", V2.1.1 (2019-06) .

Editor's note: TBD

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the [following] terms [given in ... and the following] apply:

- Use the **Normal** style.
- The term shall be in **bold**, and shall start with a lower case letter (unless it is always rendered with a leading capital) followed by a colon, one space, and the definition of term starting with a lower case letter and no ending full-stop.

<term>: <definition of term>

EXAMPLE 1:

communal site: location at which there is more than one fixed transmitter *(style Normal)*

NOTE: There are two types of communal site; one having separate equipment and antennas but housed in a common equipment room, and the other having an engineered system employing common antenna working where the isolation between equipment is determined by the filter system. At all communal sites equipment installed on the site meet the limits as specified in the relevant standards. *(style NO)*

EXAMPLE 2:

fast channel: channel with low latency but higher BER in comparison to the slow channel *(style Normal)*

EXAMPLE: In contrast to the slow channel, the fast channel is not interleaved. *(style EX)*

Editor's note: TBD

3.2 Symbols

EXAMPLE:

dB decibel *(style EW)*
 DDI Direct Dialling-In, or direct dialling-in *(style EX)*

Editor's note: TBD

3.3 Abbreviations

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

AMS
API
ATS
BSS
DNS
FAI
GR
ICS
LCM
ME
MEH
MEO
MEPM
NR
OSS
PLMN
RNI
RNIS
STA
TP
UE
URI
WIS
WLAN

WLAN Information MEC Service

Editor's note: TBD

4 Conformance requirement concerning ICS

If it claims to conform to the present document, the actual ICS pro forma to be filled in by a supplier shall be technically equivalent to the text of the ICS pro forma given in annex A, and shall preserve the numbering, naming and ordering of the pro forma items.

An ICS which conforms to the present document shall be a conforming ICS pro forma completed in accordance with the instructions for completion given in clause A.1.

Annex A (normative): MEC ICS Pro forma

A.1 Guidance for completing the ICS Pro forma

A.1.1 Purpose and structure

The purpose of this ICS pro forma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in ETSI MEC APIs specifications may provide information about the implementation in a standardized manner.

The ICS pro forma is subdivided into clauses for the following categories of information:

- guidance for completing the ICS pro forma;
- identification of the implementation;
- identification of the ETSI MEC API;
- global statement of conformance;
- requirements and ICS tables.

A.1.1 Abbreviations and conventions

Editor's note: here explain how requirements and ICSs are defined, referring when applicable to the recommendations reported in ETSI GR MEC-DEC 025.

A.1.2 Instructions for completing the ICS pro forma

The supplier of the implementation shall complete the ICS pro forma in each of the spaces provided. In particular, an explicit answer shall be entered, in each of the support or supported column boxes provided.

If necessary, the supplier may provide additional comments in space at the bottom of the tables or separately. More detailed instructions are given at the beginning of the different clauses of the ICS pro forma.

Editor's note: To be enhanced.

A.2 Identification of the implementation

A.2.1 Introduction

Editor's note: TBD

A.3 Identification of the ETSI MEC APIs

This ICS pro forma applies to the following standards:

- ETSI MEC ...

Editor's note: Here a list of MEC specifications and related APIs will be defined for the user to provide information on which of the APIs are supported by the implementation.

A.4 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No)

NOTE: Answering "No" to this question indicates non-conformance to the MEC API standard specification.

Non-supported mandatory capabilities are to be identified in the ICS, with an explanation of why the implementation is non-conforming, on pages attached to the ICS pro forma.

Editor's note: May be refined to capture the basic set of requirements (e.g. "at least one API is supported" and/or "all the mandatory capabilities of the selected APIs are supported").

A.5 Requirements and ICS tables

Editor's note: The following clauses will contain the tables of collected requirements and ICS (list of functionalities and the provisions associated) that were originally developed for MEC 025. This clause will be used as a reference for implementation providers to define the capabilities supported as well as a selection criteria for the conformance tests that a given product shall undergo.

A.5.1 ETSI GS MEC 010-1

A.5.1.1 Test Requirements

Table A.5.1.1-1 reports the functional requirements specified in ETSI GS MEC 010-1 [2], classified per MEPM features.

Table A.5.1.1-1: Classification of MEPM requirements per MEPM features (Mm2)

Feature	Requirement ID	Requirement description	Reference
MEH configuration management (active)	REQ-MM2-MEH-CM-3	The Mm2 reference point shall support a capability allowing the OSS to configure the mobile edge host.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.1
	REQ-MM2-MEH-CM-4	The Mm2 reference point shall support a capability allowing the OSS to configure the DNS rules.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.1
	REQ-MM2-MEH-CM-5	The Mm2 reference point shall support a capability allowing the OSS to configure the traffic rules.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.1
MEH configuration management (passive)	REQ-MM2-MEH-CM-1	The Mm2 reference point shall support a capability allowing the OSS to retrieve the information model of the mobile edge host, or parts thereof, from the mobile edge platform manager.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.1
	REQ-MM2-MEH-CM-2	The Mm2 reference point shall support a capability allowing the mobile edge platform manager to notify changes related to the information model of the mobile edge host to the OSS.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.1
MEH fault management	REQ-MM2-MEH-FM-1	The Mm2 reference point shall support a capability allowing the mobile edge platform manager to send mobile edge platform related alarms to the OSS.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.2
	REQ-MM2-MEH-FM-2	The Mm2 reference point shall support a capability allowing the OSS to retrieve and manage alarms from the mobile edge platform manager.	ETSI GS MEC 010-1 [2], Clause 5.1.1.1.2

Feature	Requirement ID	Requirement description	Reference
Mobile Edge Applications configuration management (active)	REQ-MM2-MEA-CM-1	The Mm2 reference point shall support a capability allowing the OSS to create managed object instances representing mobile edge application instances in the mobile edge platform manager.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.1
	REQ-MM2-MEA-CM-2	The Mm2 reference point shall support a capability allowing the OSS to delete managed object instances representing mobile edge application instances in the mobile edge platform manager.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.1
	REQ-MM2-MEA-CM-3	The Mm2 reference point shall support a capability allowing the OSS to activate and deactivate the DNS rules related to a certain mobile edge application instance.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.1
	REQ-MM2-MEA-CM-4	The Mm2 reference point shall support a capability allowing the OSS to activate and deactivate the traffic rules related to a certain mobile edge application instance.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.1
Mobile Edge Applications configuration management (passive)	REQ-MM2-MEA-CM-5	The Mm2 reference point shall support a capability allowing the mobile edge platform manager to notify changes of managed object instances representing mobile edge application instances to the OSS.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.1
	REQ-MM2-MEA-CM-6	The Mm2 reference point shall support a capability allowing the mobile edge platform manager to notify object creation and deletion events of managed object instances representing mobile edge application instances to the OSS.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.1
Mobile Edge Applications state management	REQ-MM2-MEA-SM-1	The Mm2 reference point shall support a capability allowing the mobile edge platform manager to expose the operational state of instantiated mobile edge applications to the OSS.	ETSI GS MEC 010-1 [2], Clause 5.1.1.2.2

A.5.1.2 ICS

No Implementation Conformance Statements are reported or specified for ETSI GS MEC 030 [1.8].

A.5.2 ETSI GS MEC 010-2

This clause reports the functional requirements and the Implementation Conformance Statements for the APIs specified in ETSI GS MEC 010-2 [3].

A.5.2.1 Test Requirements

This clause reports the functional requirements of the MEO and the MEC Platform Manager, as specified explicitly in ETSI GS MEC 010-2 [3] or derived from the workflows and API definition, classified per features and focusing on Mm1 (see Table A.5.2.1-1 to Table A.5.2.1-4) and Mm3 (see Table A.5.1.1-5 to Table A.5.2.1-9).

Table A.5.2.1-1: Classification of requirements per features (Mm1): Application Package Management

Requirement ID	Requirement description	Reference
Mm1.001	The Mm1 reference point shall support the application package management interface produced by the MEC Orchestrator.	ETSI GS MEC 010-2 [3] Clause 4.1.1.1
Mm1.AppPkgm.001	The Application Package Management interface produced by the MEO on the Mm1 reference point shall support on-boarding an Application Package.	ETSI GS MEC 010-2 [3] Clause 4.1.1.2.1, 5.2.2 and 6.3.3.5
Mm1.AppPkgm.002	The Application Package Management interface produced by the MEO on the Mm1 reference point shall support querying Application Package information.	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.1, 5.2.3 and 6.3.3.8
Mm1.AppPkgm.003	The Application Package Management interface produced by the MEO on the Mm1 reference point shall support deleting an Application Package.	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.1, 5.2.6 and 6.3.3.9
Mm1.AppPkgm.004	The Application Package Management interface produced by the MEO on the Mm1 reference point shall support enabling an application package.	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.1, 5.2.5 and 6.3.3.6
Mm1.AppPkgm.005	The Application Package Management interface produced by the MEO on the Mm1 reference point shall support disabling an application package.	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.1, 5.2.4 and 6.3.3.7
MEC032.Mm1.AppPkgm.001	The Application Package Management interface produced by the MEO on the Mm1 reference point shall support aborting an Application Package deletion operation.	ETSI GS MEC 010-2 [3] Clause 6.3.3.10

Table A.5.2.1-2: Classification of requirements per features (Mm1): Application Package Management (Application Package format)

Requirement ID	Requirement description	Reference
AppPkt.001	The application package shall contain software image(s) or link(s) to software image(s).	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.002	The application package shall contain an application descriptor that describes the application requirements and rules which are required or preferred by the MEC application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.003	The application package shall be signed by the application provider. The digest and the public key of the entity signing shall be included in the package along with the corresponding certificate.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.004	Files in the package may be individually signed. For each signed file, the corresponding public key, algorithm and certificate used shall be stored in a well-known location within the application package.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.005	The application package shall contain a manifest file which lists files that the package contains and a hash of their content.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1

**Table A.5.2.1-3: Classification of requirements per features (Mm1):
Application Package Management (Application Descriptor)**

Requirement ID	Requirement description	Reference
AppDesc.001	The application descriptor shall contain a description of minimum computation resources required by the application, e.g. amount, characteristics and capabilities for virtual compute.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.002	The application descriptor shall contain a description of minimum virtual storage resources the required by application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.003	The application descriptor shall contain a description of minimum virtual network resources required by the application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.004	The application descriptor shall support describing a list of services a MEC application requires to run.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.005	The application descriptor shall support describing a list of additional services that a MEC application may use if available.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.006	The application descriptor shall support describing a list of features a MEC application requires to run.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.007	The application descriptor shall support describing a list of additional features a MEC application may use if available.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.008	The application descriptor shall support a description of Traffic Rules.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.009	The application descriptor shall support a description of DNS Rules which provide specific FQDNs to be registered into the ME system (e.g. for redirection of traffic to local host).	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.010	The application descriptor shall support a description of latency required by the MEC application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2

**Table A.5.2.1-4: Classification of requirements per features (Mm1):
Application Lifecycle Management**

Requirement ID	Requirement description	Reference
Mm1.002	The Mm1 reference point shall support the application lifecycle management interface produced by the MEC Orchestrator.	ETSI GS MEC 010-2 [3] Clause 4.1.1.1
Mm1.AppLcm.001	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support instantiating an Application instance.	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.2, 5.3 and 6.3.1.3
Mm1.AppLcm.002	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support terminating an Application instance.	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.2 and 5.4 Clause 6.3.1.7
Mm1.AppLcm.003	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support requesting to change the state of an application instance. (Changing the state of an application instance refers to starting or stopping an application instance. These operations are complementary to instantiating or terminating an application.)	ETSI GS MEC 010-2 [3] Clauses 4.1.1.2.2 and 6.3.1.4
MEC032.Mm1.AppLcm.001	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support creating an application instance identifier.	ETSI GS MEC 010-2 [3] Clause 6.3.1.2
MEC032.Mm1.AppLcm.002	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support deleting an application instance identifier.	ETSI GS MEC 010-2 [3] Clause 6.3.1.8
MEC032.Mm1.AppLcm.003	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support querying information about an application instance.	ETSI GS MEC 010-2 [3] Clause 6.3.1.5
MEC032.Mm1.AppLcm.004	The Application Lifecycle Management interface produced by the MEO on the Mm1 reference point shall support querying the status of a lifecycle operation.	ETSI GS MEC 010-2 [3] Clause 6.3.1.6

**Table A.5.1.1-5: Classification of requirements per features (Mm3):
Application Package Management**

Requirement ID	Requirement description	Reference
Mm3.001	The Mm3 reference point shall support the application package management interface produced by the MEC Orchestrator.	ETSI GS MEC 010-2 [3] Clause 4.1.2.1
Mm3.AppPkgm.001	The Application Package Management interface produced by the MEO on the Mm3 reference point shall support querying application package information.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.1 and 6.3.3.2
Mm3.AppPkgm.002	The Application Package Management interface produced by the MEO on the Mm3 reference point shall support providing notifications as a result of changes on application package states.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.1 and 6.3.3.4
Mm3.AppPkgm.003	The Application Package Management interface produced by the MEO on the Mm3 reference point shall support providing notifications about the on-boarding of application packages.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.1 and 6.3.3.4
Mm3.AppPkgm.004	The Application Package Management interface produced by the MEO on the Mm3 reference point shall support fetching an application package, or selected files contained in a package.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.1 and 6.3.3.1
MEC032.Mm3.AppPkgm.001	The MEPM shall be able to subscribe with a filter to the MEO for notifications related to events of application packages.	ETSI GS MEC 010-2 [3] Clause 6.3.3.3

**Table A.5.2.1-6: Classification of requirements per features (Mm3):
Application Package Management (Application Package format)**

Requirement ID	Requirement description	Reference
AppPkt.001	The application package shall contain software image(s) or link(s) to software image(s).	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.002	The application package shall contain an application descriptor that describes the application requirements and rules which are required or preferred by the mobile edge application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.003	The application package shall be signed by the application provider. The digest and the public key of the entity signing shall be included in the package along with the corresponding certificate.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.004	Files in the package may be individually signed. For each signed file, the corresponding public key, algorithm and certificate used shall be stored in a well-known location within the application package.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1
AppPkt.005	The application package shall contain a manifest file which lists files that the package contains and a hash of their content.	ETSI GS MEC 010-2 [3] Clause 4.1.3.1

**Table A.5.2.1-7: Classification of requirements per features (Mm3):
Application Package Management (Application Descriptor)**

Requirement ID	Requirement description	Reference
AppDesc.001	The application descriptor shall contain a description of minimum computation resources required by the application, e.g. amount, characteristics and capabilities for virtual compute.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.002	The application descriptor shall contain a description of minimum virtual storage resources the required by application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.003	The application descriptor shall contain a description of minimum virtual network resources required by the application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.004	The application descriptor shall support describing a list of services a mobile edge application requires to run.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.005	The application descriptor shall support describing a list of additional services that a mobile edge application may use if available.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.006	The application descriptor shall support describing a list of features a mobile edge application requires to run.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.007	The application descriptor shall support describing a list of additional features a mobile edge application can may if available.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.008	The application descriptor shall support a description of Traffic Rules.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.009	The application descriptor shall support a description of DNS Rules which provide specific FQDNs to be registered into the ME system (e.g. for redirection of traffic to local host).	ETSI GS MEC 010-2 [3] Clause 4.1.3.2
AppDesc.010	The application descriptor shall support a description of latency required by the mobile edge application.	ETSI GS MEC 010-2 [3] Clause 4.1.3.2

**Table A.5.2.1-8: Classification of requirements per features (Mm3):
Application Lifecycle Management**

Requirement ID	Requirement description	Reference
Mm3.002	The Mm3 reference point shall support the application Lifecycle Management interface produced by the MEC Platform Manager.	ETSI GS MEC 010-2 [3] Clause 4.1.2.1
Mm3.AppLcm.001	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support instantiating an Application.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.2, 5.3.1 and 6.3.1.3
Mm3.AppLcm.002	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support terminating an application instance.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.2, 5.3.2 and 6.3.1.7
Mm3.AppLcm.003	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support querying information about an application instance.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.2 and 6.3.1.5
Mm3.AppLcm.004	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support requesting to change the state of an application instance. (Changing the state of an application instance refers to starting or stopping an application instance. These operations are complementary to instantiating or terminating an application.)	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.2 and 6.3.1.4
Mm3.AppLcm.005	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support querying the status of an ongoing application lifecycle management operation.	ETSI GS MEC 010-2 [3] Clauses 4.1.2.2.2 and 6.3.1.6
MEC032.Mm3.AppLcm.001	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support creating an application instance identifier.	ETSI GS MEC 010-2 [3] Clause 6.3.1.2
MEC032.Mm3.AppLcm.002	The Application Lifecycle Management interface produced by the MEC Platform Manager on the Mm3 reference point shall support deleting an application instance identifier.	ETSI GS MEC 010-2 [3] Clause 6.3.1.8

**Table A.5.2.1-9: Classification of requirements per features (Mm3):
Application Lifecycle Change Notification**

Requirement ID	Requirement description	Reference
Mm3.003	The Mm3 reference point shall support the application Lifecycle Change Notification interface produced by the MEC Platform Manager.	ETSI GS MEC 010-2 [3] Clause 4.1.2.1
Mm3.AppLccn.001	The Application Lifecycle Change Notification interface produced by the MEC Platform Manager on the Mm3 reference point shall support providing to the MEO notifications about changes of an application instance that are related to application lifecycle management operations.	ETSI GS MEC 010-2 [3] Clause 4.1.2.2.3 and 6.3.2.3
Mm3.AppLccn.002	Notifications provided on the Application Lifecycle Change Notification interface produced by the MEC Platform Manager on the Mm3 reference point shall contain information about the type of application lifecycle operation, the identification of the application instance.	ETSI GS MEC 010-2 [3] Clause 4.1.2.2.3
Mm3.AppLccn.003	Notifications provided on the Application Lifecycle Change Notification interface produced by the MEC Platform Manager on the Mm3 reference point shall support indicating the start of the lifecycle procedure, the end and the results of the lifecycle procedure including any error produced from the lifecycle procedure.	ETSI GS MEC 010-2 [3] Clause 4.1.2.2.3
Mm3.AppLccn.004	The Application Lifecycle Change Notification interface produced by the MEC Platform Manager on the Mm3 reference point shall support notifying the result (successful or failed) of application instantiation with indicating the application instance identifier, and the consumed, modified or released resources.	ETSI GS MEC 010-2 [3] Clause 4.1.2.2.3
MEC032.Mm3.AppLccn.001	The Application Lifecycle Change Notification interface produced by the MEC Platform Manager on the Mm3 reference point shall support notifying the creation of an application instance identified.	ETSI GS MEC 010-2 [3] Clause 6.3.2.3
MEC032.Mm3.AppLccn.002	The Application Lifecycle Change Notification interface produced by the MEC Platform Manager on the Mm3 reference point shall support notifying the deletion of an application instance identified.	ETSI GS MEC 010-2 [3] Clause 6.3.2.3
MEC032.Mm3.AppLccn.003	The MEO shall be able to subscribe with a filter to the MEPM for notifications about application lifecycle changes.	ETSI GS MEC 010-2 [3] Clause 6.3.2.2

A.5.2.2 ICS

Table A.5.2.2-1 defines the list of Implementation Conformance Statements for the features addressed in the MEC APIs for Application Package Management on Mm1 reference point.

Table A.5.2.2-1: Application package management (Mm1)

ID	Resource	Reference	HTTP Method	Requirement according to GS	Query parameters	Request Body	Response Body
1	Application packages /app_packages	Table 7.2-1 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.3.1.3.2-1	n/a	Table 7.3.1.3.2-2 OnboardedAppPkgInfo Table 6.2.3.3.2-1
2			POST	M	n/a	Table 7.3.1.3.1-2 AppPkg Table 6.2.3.2.2-1	Table 7.3.1.3.1-2 OnboardedAppPkgInfo Table 6.2.3.3.2-1
3			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
4	Individual on-boarded application package /app_packages/{appPkgId}	Table 7.2-1 in clause 7.2 in ETSI GS MEC 010-2 [3]	GET	M	n/a	n/a	Table 7.3.2.3.2-2 OnboardedAppPkgInfo Table 6.2.3.3.2-1
5			PUT	M	appPkgOperation Table 7.3.2.3.3-1	n/a	n/a Table 7.3.2.3.3-2
6			DELETE	M	n/a	n/a	n/a Table 7.3.2.3.4-2
7			POST & PATCH	n/a	n/a	n/a	n/a
8	Application descriptor /app_packages/{appPkgId}/appDId	Table 7.2-1 (Mm1) in clause 7.2 in ETSI GS MEC 010-2 [3]	GET	M	Table 7.3.6.3.2-1	n/a	Table 7.3.6.3.2-2 AppD Table 6.2.1.2.2-1
9			POST & PUT & DELETE & PATCH	n/a	n/a	n/a	n/a
10	Subscriptions /subscriptions	Table 7.2-1 in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.3.3.3.1-1 AppPkgSubscription Table 6.2.3.7.2-1	Table 7.3.3.3.1-1 AppPkgSubscriptionInfo Table 6.2.3.4.2-1
11			GET	M	n/a	n/a	Table 7.3.3.3.2-2 AppPkgSubscriptionLinkList Table 6.2.3.5.2-1
14			PUT & DELETE & PATCH	n/a	n/a	n/a	n/a
15	Individual subscription /subscriptions/{subscriptionId}	Table 7.2-1 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	n/a	n/a	Table 7.3.4.3.2-2 AppPkgSubscriptionInfo Table 6.2.3.4.2-1
16			DELETE	M	n/a	n/a	n/a Table 7.3.4.3.4-2
17			POST & PUT & PATCH	n/a	n/a	n/a	n/a

NOTE: The payload body shall contain a copy of the file representing the AppD or a ZIP file that contains the file or multiple files representing the AppD. The "Content-Type" HTTP header shall be set according to the format of the returned file.

Table A.5.2.2-2 defines the list of Implementation Conformance Statements for the features addressed in the MEC APIs for Application Package Management on Mm3 reference point.

Table A.5.2.2-2: Application package management (Mm3)

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	Application packages	Table 7.2-3 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.4.1.3.2-1	n/a	Table 7.4.1.3.2-2 OnboardedAppPkgInfo Table 6.2.3.3.2-1
2	/app_packages		POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
3	Individual on-boarded application package	Table 7.2-3 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.4.2.3.2-1	n/a	Table 7.4.2.3.2-2 OnboardedAppPkgInfo Table 6.2.3.3.2-1
4	/app_packages/{appPkgId}		POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
5	Content of an individual on-boarded application package	Table 7.2-3 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.4.3.3.2-1	n/a	Table 7.4.3.3.2-2
6	/app_packages/{appPkgId}/appPkgContent		POST & PUT & DELETE & PATCH	n/a	n/a	n/a	n/a
10	Application descriptor	Table 7.2-3 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.4.4.3.2-1	n/a	Table 7.4.4.3.2-2
11	/app_packages/{appPkgId}/app_descriptor		POST & PUT & DELETE & PATCH	n/a	n/a	n/a	n/a
12	Subscriptions	Table 7.2-3 in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.4.5.3.1-1 AppPkgSubscription Table 6.2.3.7.2-1	Table 7.4.5.3.1-1 AppPkgSubscriptionInfo Table 6.2.3.4.2-1
13	/subscriptions		GET	M	Table 7.4.5.3.2-1	n/a	Table 7.4.5.2-2 AppPkgSubscription LinkList Table 6.2.3.5.2-1

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
14			PUT & DELETE & PATCH	n/a	n/a	n/a	n/a
15	Individual subscription /subscriptions/{subscriptionId}	Table 7.2-3 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	n/a Table 7.4.6.3.2-1	n/a	Table 7.4.6.3.2-2 AppPkgSubscriptionInfo Table 6.2.3.4.2-1
16			DELETE	M	n/a Table 7.4.6.3.4-1	n/a	n/a Table 7.4.6.3.4-2
17			POST & PUT & PATCH	n/a	n/a	n/a	n/a

NOTE 1: On success, the response body should include a copy of the on-boarded application package. The "Content-Type" HTTP header shall be set according to the type of the file.

NOTE 2: On success, the response body should include the content of the application descriptor of the on-boarded application package.

The list of Implementation Conformance Statements for App Package Management notifications is defined in Table A.5.2.2-3 for both Mm1 and Mm3 reference points.

Table A.5.2.2-3: App Package Management notification callback

ID	Client provided callback reference	Reference	HTTP Method	Required according to GS	Request Body
1	App_package_notification	Clauses 7.2 to 7.3.5 (Mm1) and 7.4.7 (Mm3) of ETSI GS MEC 010-2 [3]	GET, PUT, PATCH & DELETE	n/a	n/a
2			POST	M	Table 7.3.5.3.1-2 (Mm1) Table 7.4.7.3.1-2 (Mm3) AppPkgNotification (clause 6.2.3.8 ETSI GS MEC 010-2 [3])

Table A.5.2.2-4 defines the list of Implementation Conformance Statements for the features addressed in the MEC APIs for Application Life Cycle Management on Mm1 and Mm3 reference point.

Table A.5.2.2-4: Application life cycle management (Mm1 and Mm3)

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	application instances	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.5.1.3.2-1 ETSI GS MEC 010-2 [3]	n/a	Table 7.5.1.3.2-2 ETSI GS MEC 010-2 [3] AppInstanceInfo Table 6.2.2.4.2-1 ETSI GS MEC 010-2 [3]
2	/app_instances		POST	M	n/a	Table 7.5.1.3.1-2 CreateAppInstanceRequest Table 6.2.2.3.2-1	Table 7.5.1.3.1-2 AppInstanceInfo Table 6.2.2.4.2-1
3			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
4	Individual application instance	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.5.2.3.2-1	n/a	Table 7.5.2.3.2-2 AppInstanceInfo Table 6.2.2.4.2-1
5	/app_instances/{appInstanceId}		DELETE	M	n/a	Table 7.5.2.3.4-1	n/a Table 7.5.2.3.4-2
6			POST & PATCH	n/a	n/a	n/a	n/a
7	Operational state	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Editor's note: pending base specification updates	Editor's note: pending base specification updates	Editor's note: pending base specification updates
8	/app_instances/{appInstanceId}/operational_state		POST, PUT & PATCH & DELETE	n/a	n/a	n/a	n/a

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
9	Instantiate application instance task /app_instances/{appInstanceId}/instantiate	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.5.6.3.1-2 InstantiateAppRequest (Table 6.2.2.7.2-1)	n/a Table 7.5.6.3.1-2
10			PUT & PATCH & GET & DELETE	n/a	n/a	n/a	n/a
11	Terminate application instance task /app_instances/{appInstanceId}/terminate	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.5.7.3.1-2 TerminateAppRequest (Table 6.2.2.9.2-1)	n/a Table 7.5.7.3.1-2
12			PUT & PATCH & GET & DELETE	n/a	n/a	n/a	n/a
13	Operate application instance task /app_instances/{appInstanceId}/operate	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.5.8.3.1-2 OperateAppInstanceRequest (Table 6.2.2.8.2-1)	n/a Table 7.5.8.3.1-2
14			PUT & PATCH & GET & DELETE	n/a	n/a	n/a	n/a
15	Application lifecycle operation occurrences /app_lcm_op_occs	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.5.9.1.3.2-1	n/a	Table 7.5.9.1.3.2-2 List<AppInstanceLcmOpOcc> Table 6.2.2.14.2-1

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
16			POST & PUT & PATCH & DELETE	n/a	n/a	n/a	n/a
17	Individual application lifecycle operation occurrence /app_lcm_op_occs/{appLcmOcclId}	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	n/a Table 7.5.10.2.3.2-1	n/a	Table 7.5.10.2.3.2-2 AppInstanceLcmOpOcc (Table 6.2.2.14.2-1)
18			POST & PUT & PATCH & DELETE	n/a	n/a	n/a	n/a
19	Subscriptions /subscriptions	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.5.3.3.1-2 AppInstSubscriptionRequest (Table 6.2.2.13.2-1) Or AppLcmOpOccSubscriptionRequest (Table 6.2.2.15.2-1)	Table 7.5.3.3.1-2 AppInstSubscriptionInfo (Table 6.2.2.10.2-1) Or AppLcmOpOccSubscriptionInfo (Table 6.2.2.16.2-1)
20			GET	M	n/a	n/a Table 7.5.3.3.2-2	Table 7.5.3.3.2-2 SubscriptionLinkList
21			PUT & PATCH & DELETE	n/a	n/a	n/a	n/a

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
22	Individual subscription /subscriptions/{subscriptionId}	Table 7.2-2 (Mm1) in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	Table 7.5.4.3.2-1	n/a Table 7.5.4.3.2-2	Table 7.5.4.3.2-2 AppInstSubscriptionInfo (Table 6.2.2.10.2-1) Or AppLcmOpOccSubscriptionInfo (Table 6.2.2.16.2-1)
23	DELETE		M	n/a	n/a Table 7.5.4.3.4-2	n/a Table 7.5.4.3.4-2	
24	POST & PUT & PATCH		n/a	n/a	n/a	n/a	
NOTE: The HTTP response shall include a "Location" HTTP header that contains the URI of the newly-created "application LCM operation occurrence" resource that corresponds to this application instance LCM operation.							

The list of Implementation Conformance Statements for App Lifecycle Management notifications is defined in Table A.5.2.2-5.

Table A.5.2.2-5: Application life cycle management notification call-backs (Mm1)

ID	Client provided callback reference	Reference	HTTP Method	Required according to GS	Request Body
1	App_lifecycle_notification	Clause 7.2 of ETSI GS MEC 010-2 [3]	GET, PUT, PATCH & DELETE	n/a	n/a
2			POST	M	Table 7.5.5.3.1-2 AppInstNotification (Table 6.2.2.12.2-1) Or AppLcmOpOccNotification (Table 6.2.2.18.2-1)

Table A.5.2.2-6 defines the list of Implementation Conformance Statements for the granting features addressed in the MEC APIs for Application Life Cycle Management on Mm3 reference point.

Table A.5.2.2-6: Granting for application life cycle management operations (Mm3)

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	Grants /grants	Table 7.2-5 in clause 7.2 of ETSI GS MEC 010-2 [3]	POST	M	n/a	Table 7.6.1.3.1-2 GrantRequest Table 6.2.4.2.2-1	Table 7.6.1.3.1-2 Grant Table 6.2.4.4.2-1
2			GET, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
3	Individual grant /grants/{grantId}	Table 7.2-5 in clause 7.2 of ETSI GS MEC 010-2 [3]	GET	M	n/a Table 7.6.2.3.2-1	n/a	Table 7.6.2.3.2-2 Grant Table 6.2.4.4.2-1
4			POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a

A.5.3 ETSI GS MEC 011

A.5.3.1 Test Requirements

ETSI GS MEC 002 [1], clause 6.2, defines the Platform essential MEC services. Upon analysis of such features, no specific test requirements were deemed necessary to improve the conformance and interoperability levels. Therefore Table A.5.3.1-1 contains no information.

Table A.5.3.1-1: Classification of requirements for the Platform services

Feature	Requirement ID	Requirement description	Reference
Platform	n/a	n/a	n/a

A.5.3.2 ICS

Table A.5.3.2-1 defines the list of Implementation Conformance Statements for the features addressed in the MEC Platform Application Enablement API.

Table A.5.3.2-1: Simple queries

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	Services	Clause 7.4 ETSI GS MEC 011 [i.1]	GET	O	Table 7.4.3.1-1	n/a	ServiceInfo Table 6.2.2-1
2			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
3	Application Services	Clause 7.15 ETSI GS MEC 011 [i.1]	GET	O	Table 7.15.3.1-1 or 7.15.3.1-2	n/a	ServiceInfo Table 6.2.2-1
4			POST	O	n/a	ServiceInfo Table 6.2.2-1	ServiceInfo Table 6.2.2-1
5			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
6	Application Notifications	Clause 7.6 ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	Mp1SubscriptionLinkList Table 6.3.4-1
7			POST	O	n/a	SerAvailabilityNotificationSubscription Table 6.4.2-1 or AppTerminationNotificationSubscription Table 6.4.3-1	SerAvailabilityNotificationSubscription Table 6.4.2-1 or AppTerminationNotificationSubscription Table 6.4.3-1
8			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
9	Timing capabilities	Clause 7.7 ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	TimingCaps Table 6.2.6-1
10			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
11	Current time	Clause 7.8 ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	CurrentTime Table 6.2.7-1
12			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
13	Transports	Clause 7.9 ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	TransportInfo Table 6.2.3-1
14			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
15	Application Traffic routing	Clause 7.10 ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	TrafficRule Table 6.2.4-1
16			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
17	Application DNS rules	Clause 7.12 ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	DnsRule Table 6.2.5-1
18			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a

Table 5.3.2-2 defines the list of Implementation Conformance Statements for the instances of every feature addressed in the MEC Platform Application Enablement API.

Table 5.3.2-2: Manage a specific item

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	Service instance	Table 7.2-1 in clause 7.3 [i.1], of ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	ServiceInfo Table 6.2.2-1
2			POST, PATCH & DELETE	n/a	n/a	n/a	n/a
3	Application Service instance	Table 7.2-1 in clause 7.3 of ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	ServiceInfo Table 6.2.2-1
4			PUT	O	n/a	ServiceInfo Table 6.2.2-1	ServiceInfo Table 6.2.2-1
5			POST, PATCH & DELETE	n/a	n/a	n/a	n/a
6	Application Notification subscription	Table 7.2-1 in clause 7.5, of ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	SerAvailabilityNotificationSubscription Table 6.4.2-1 or AppTerminationNotificationSubscription Table 6.4.3-1
7			DELETE	O	n/a	n/a	n/a
8			PUT & PATCH	n/a	n/a	n/a	n/a
9	Application Traffic rule	Table 7.2-1 in clause 7.11, of ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	TrafficRule Table 6.2.4-1
10			PUT	O	n/a	TrafficRule Table 6.2.4-1	TrafficRule Table 6.2.4-1
11			POST, PATCH & DELETE	n/a	n/a	n/a	n/a
12	Application DNS rule	Table 7.2-1 in clause 7.13, T of ETSI GS MEC 011 [i.1]	GET	O	n/a	n/a	DnsRule Table 6.2.5-1
13			PUT	O	n/a	DnsRule Table 6.2.5-1	DnsRule Table 6.2.5-1
14			POST, PATCH & DELETE	n/a	n/a	n/a	n/a

A.5.4 ETSI GS MEC 012

This clause reports the functional requirements and the Implementation Conformance Statements for the APIs specified in ETSI GS MEC 012 [4].

A.5.4.1 Test Requirements

Table A.5.4.1-1 reports the functional requirements of the RNI service, as derived from the API definition in ETSI GS MEC-012 [4].

Table A.5.4.1-1: RNIS requirements

Requirement ID	Requirement description	Reference
Mec032.RNI.query.01	When the mobile edge system supports the feature RadioNetworkInformation, there shall be a RNI service that provides cell level Radio Access Bearer information on request.	ETSI GS MEC 012 [4] Clauses 5.2.2 and 7.3.3
Mec032.RNI.query.02	When the mobile edge system supports the feature RadioNetworkInformation, there shall be a RNI service that provides cell level Public Land Mobile Network (PLMN) information related to a specific mobile edge application instance on request.	ETSI GS MEC 012 [4] Clauses 5.2.3 and 7.4.3
Mec032.RNI.query.03	When the mobile edge system supports the feature RadioNetworkInformation, there shall be a RNI service that provides S1 bearer information on request.	ETSI GS MEC 012 [4] Clauses 5.2.4 and 7.5.3
Mec032.RNI.query.04	When the mobile edge system supports the feature RadioNetworkInformation, there shall be a RNI service that provides Layer 2 measurements information on request.	ETSI GS MEC 012 [4] Clauses 5.2.4a and 7.5a.3
Mec032.RNI.subscription.01	When the mobile edge system supports the feature RadioNetworkInformation, there shall be a RNI service that support requests for subscribing to RNI event notifications.	ETSI GS MEC 012 [4] Clauses 5.2.5.1 and 7.6.3.4
Mec032.RNI.subscription.02	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service may trigger notifications about subscriptions expiration.	ETSI GS MEC 012 [4] Clauses 5.2.5.2 and 6.4.9
Mec032.RNI.subscription.03	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall support requests to modify the subscriptions to RNI event notifications.	ETSI GS MEC 012 [4] Clauses 5.2.5.3 and 7.8.3.2
Mec032.RNI.subscription.04	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall support requests to delete the subscriptions to RNI event notifications.	ETSI GS MEC 012 [4] Clauses 5.2.5.4 and 7.8.3.5
Mec032.RNI.subscription.05	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall support requests to query all the active subscriptions to RNI event notifications for the given requestor.	ETSI GS MEC 012 [4] Clauses 7.6.3.1
Mec032.RNI.subscription.06	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall support requests to retrieve information about an existing subscription to RNI event notifications.	ETSI GS MEC 012 [4] Clauses 7.8.3.1
Mec032.RNI.notification.01	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about cell changes to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.6 and 6.4.2
Mec032.RNI.notification.02	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about Radio Access Bearer establishment to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.7 and 6.4.3
Mec032.RNI.notification.03	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about Radio Access Bearer modification to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.8 and 6.4.4

Requirement ID	Requirement description	Reference
Mec032.RNI.notification.04	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about Radio Access Bearer release to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.9 and 6.4.5
Mec032.RNI.notification.05	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about UE measurement reports to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.10 and 6.4.6
Mec032.RNI.notification.06	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about UE timing advance to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.11 and 6.4.7
Mec032.RNI.notification.07	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about carrier aggregation reconfiguration to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.12 and 6.4.8
Mec032.RNI.notification.08	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about S1 bearer to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.13 and 6.4.10
Mec032.RNI.notification.09	When the mobile edge system supports the feature RadioNetworkInformation, the RNI service shall send RNI event notifications about 5G NR UE measurement reports to service consumers with active subscriptions.	ETSI GS MEC 012 [4] Clauses 5.2.14 and 6.4.11

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A.5.4.2 ICS

The list of Implementation Conformance Statements for RNIS queries is defined in Table A.5.4.2-1.

Table A.5.4.2-1: RNIS simple queries

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	/queries/rab_info	Clause 7.3 ETSI GS MEC 012 [4]	GET	M	Table 7.3.3.1-1	n/a	Table 7.3.3.1-2 RabInfo (clause 6.2.3)
2			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
3	/queries/plmn_info	Clause 7.4 ETSI GS MEC 012 [4]	GET	M	Table 7.4.3.1-1	n/a	Table 7.4.3.1-2 PlmnInfo (clause 6.2.2)
4			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
5	/queries/s1_bearer_info	Clause 7.5 ETSI GS MEC 012 [4]	GET	M	Table 7.5.3.1-1	n/a	Table 7.5.3.1-2 S1BearerInfo (clause 6.2.4)
6			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
7	/queries/layer2_meas	Clause 7.5a ETSI GS MEC 012 [4]	GET	M	Table 7.5a.3.1-1	n/a	Table 7.5a.3.1-2 L2Meas (clause 6.4.2a)
8			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a

The list of Implementation Conformance Statements for RNIS subscription is defined in Table A.5.4.2-2 (subscriptions list) and in Table A.5.4.2-3 (individual subscriptions).

Table A.5.4.2-2: All subscriber's subscriptions

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	/subscriptions	Clause 7.6 ETSI GS MEC 012 [4]	GET	M	Table 7.6.3.1-1	n/a	Table 7.6.3.1-2 SubscriptionLinkList (clause 6.3.10)
2			POST	M	n/a	NotificationSubscription (clause 6.3.2-11)	Table 7.6.3.4-1 NotificationSubscription (clause 6.3.2-11)
3			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a

Table A.5.4.2-3: Individual subscriptions

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	subscriptions/{subscriptionId}	Clause 7.8 ETSI GS MEC 012 [4]	GET	M	n/a	n/a	Table 7.8.3.1-2 NotificationSubscription (clause 6.3.2-11)
2			PUT	M	n/a	Table 7.8.3.2-2 NotificationSubscription (clause 6.3.2-11)	Table 7.8.3.2-2 NotificationSubscription (clause 6.3.2-11)
3			DELETE	M	n/a	n/a	n/a
4			POST & PATCH	n/a	n/a	n/a	Table 7.8.3.5-2

The list of Implementation Conformance Statements for RNIS notification is defined in Table A.5.4.2-4.

Table A.5.4.2-4: Notification callback

ID	Client provided callback reference	Reference	HTTP Method	Required according to GS	Request Body
1	cell_change	Clause 6.4.2 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
2			POST	M	CellChangeNotification (clause 6.4.2)
3	rab_est	Clause 6.4.3 & table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
4			POST	M	RabEstNotification (clause 6.4.3)
5	rab_mod	Clause 6.4.4 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
6			POST	M	RabModNotification (clause 6.4.4)
7	rab_rel	Clause 6.4.5 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
8			POST	M	RabRelNotification (clause 6.4.5)
9	meas_rep_ue	Clause 6.4.6 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
10			POST	M	MeasRepUeNotification (clause 6.4.6)
11	ta	Clause 6.4.7 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
12			POST	M	MeasTaNotification (clause 6.4.7)
13	ca_reconf	Clause 6.4.8 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
14			POST	M	CaReConfNotification (clause 6.4.8)
15	s1_bearer	Clause 6.4.10 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
16			POST	M	S1BearerNotification (clause 6.4.10)
17	nr_meas_rep_ue	Clause 6.4.11 & Table 7.2-1 ETSI GS MEC 012 [4]	GET, PUT, PATCH & DELETE	n/a	n/a
18			POST	M	NrMeasRepUeNotification (clause 6.4.11)
19	ExpiryNotification	Clause 6.4.9	GET, PUT, PATCH & DELETE	n/a	n/a
20			POST	M	ExpiryNotification (clause 6.4.9)

A.5.5 ETSI GS MEC 013

A.5.5.1 Test Requirements

ETSI GS MEC 002 [1], clause 6.3.4, defines the features for the Location service. Upon analysis of such features, the following list of requirements was collected, including provisions that are not explicitly marked but which can be tested to improve conformance and interoperability levels. These requirements are defined in Table A.5.5.1-1.

Table A.5.5.1-1: Classification of requirements for the Feature "LocationService"

Requirement ID	Requirement description	Reference
MEC032.Mp1.Location.001	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that provides UE Information pertaining to one or more UEs in a particular location.	ETSI GS MEC 013 [i.2], Clauses 5.3.3 and 7.3.3
MEC032.Mp1.Location.002	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows the subscription of notifications about location information changes of a specific UE or a group of UEs.	ETSI GS MEC 013 [i.2], Clauses 5.3.4 and 7.3.4
MEC032.Mp1.Location.003	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that provides notifications on location information changes of a specific UE or a group of UEs. Such notifications will continue to report the subscribed information until the subscription is cancelled, or an optional specified time limit.	ETSI GS MEC 013 [i.2], Clauses 5.3.4 and 7.3.4
MEC032.Mp1.Location.004	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows to cancel the subscription on notifications for location information changes.	ETSI GS MEC 013 [i.2], Clauses 5.3.4 and 7.3.4
MEC032.Mp1.Location.005	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows the subscription of notifications about UE information updates for a specified UE.	ETSI GS MEC 013 [i.2], Clauses 5.3.5 and 7.3.5
MEC032.Mp1.Location.006	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows the subscription of notifications about UE information updates for the list of UEs in a particular location.	ETSI GS MEC 013 [i.2], Clauses 5.3.5 and 7.3.5
MEC032.Mp1.Location.007	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service which provides notifications on UE information changes. Such notifications will continue to report the subscribed information until the subscription is cancelled.	ETSI GS MEC 013 [i.2], Clauses 5.3.5 and 7.3.5
MEC032.Mp1.Location.008	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows to cancel the subscription on notifications for UE information updates.	ETSI GS MEC 013 [i.2], Clauses 5.3.5 and 7.3.5
MEC032.Mp1.Location.009	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that provides the current distance of a specific UE to a geographical location, or another UE.	ETSI GS MEC 013 [i.2], Clause 5.3.9 and 7.3.9
MEC032.Mp1.Location.010	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows the subscription of notifications about the up-to-date distance for a specific UE to a geographical location, or another UE. Such notifications will continue to report the subscribed information until the subscription is cancelled.	ETSI GS MEC 013 [i.2] Clauses 5.3.10 and 7.3.10

Requirement ID	Requirement description	Reference
MEC032.Mp1.Location.011	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows to cancel the subscription on notifications for UE distance updates.	ETSI GS MEC 013 [i.2], Clauses 5.3.10 and 7.3.10
MEC032.Mp1.Location.012	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows the subscription of UE movement notifications in relation to a geographic area. Such notifications will continue to report the subscribed information until the subscription is cancelled.	ETSI GS MEC 013 [i.2], Clauses 5.3.11 and 7.3.11
MEC032.Mp1.Location.013	When the mobile edge system supports the feature LocationService, there shall be a mobile edge service that allows to cancel the subscription on notifications for UE movement updates.	ETSI GS MEC 013 [i.2], Clauses 5.3.11 and 7.3.11

A.5.5.2 ICS

Table A.5.5.2-1 defines the list of Implementation Conformance Statements for the features addressed in the Location API.

Table A.5.5.2-1: Simple queries

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1			GET	O	Table 7.3.2.1-1	n/a	UserInfo 6.2.2
2	UE Location Lookup	Clause 7.3.2 ETSI GS MEC 013 [i.2]	POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
3			GET	O	Table 7.3.2.1-1	n/a	UserInfo 6.2.1
4	UE Information Lookup	Clause 7.3.3 ETSI GS MEC 013 [i.2]	POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
5	Radio Node Location Lookup	Clause 7.3.7 ETSI GS MEC 013 [i.2]	GET	O	[i.2] clause 6.3.3	n/a	AccessPointList 6.2.1
6			PUT, PATCH, POST & DELETE	n/a	n/a	n/a	n/a
7		Clause 7.3.10 ETSI GS MEC 013 [i.2]	POST	O	n/a	DistanceNotificationSubscription 6.3.2	DistanceNotificationSubscription 6.3.2
8	UE Distance Subscribe		GET, PUT, PATCH, & DELETE	n/a	n/a	n/a	n/a
9		Clause 7.3.11 ETSI GS MEC 013 [i.2]	POST	O	n/a	CircleNotificationSubscription 6.3.2	CircleNotificationSubscription 6.3.2
10	UE Area Subscribe		GET, PUT, PATCH, & DELETE	n/a	n/a	n/a	n/a

Table A.5.5.2-2 defines the list of Implementation Conformance Statements for the instances of every feature addressed in the Location API.

Table A.5.5.2-2: Manage a specific item

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	UE Location Subscription	Clause 7.3.4 ETSI GS MEC 013 [i.2]	POST & PUT	O	n/a	UserTrackingSubscription 6.3.1	UserTrackingSubscription 6.3.1
2			GET, PATCH & DELETE	n/a	n/a	n/a	n/a
3	UE Information Subscription	Clause 7.3.5 ETSI GS MEC 013 [i.2]	POST & PUT	O	n/a	zonalTrafficSubscription 6.3.1	zonalTrafficSubscription 6.3.1
4			GET, PATCH & DELETE	n/a	n/a	n/a	n/a
5	UE Location Unsubscribe	Clause 7.3.6 ETSI GS MEC 013 [i.2]	DELETE	O	n/a	n/a	n/a
6			GET, POST, PUT & PATCH	n/a	n/a	n/a	n/a
7	UE Information Unsubscribe	Clause 7.3.6 ETSI GS MEC 013 [i.2]	DELETE	O	n/a	n/a	n/a
8			GET, POST, PUT & PATCH	n/a	n/a	n/a	n/a
9	UE Tracking Unsubscribe	Clause 7.3.6 ETSI GS MEC 013 [i.2]	DELETE	O	n/a	n/a	n/a
10			GET, POST, PUT & PATCH	n/a	n/a	n/a	n/a
11	UE Distance Unsubscribe	Clause 7.3.6 ETSI GS MEC 013 [i.2]	DELETE	O	n/a	n/a	n/a
12			GET, POST, PUT & PATCH	n/a	n/a	n/a	n/a
13	UE Area Unsubscribe	Clause 7.3.6 ETSI GS MEC 013 [i.2]	DELETE	O	n/a	n/a	n/a
14			GET, POST, PUT & PATCH	n/a	n/a	n/a	n/a
15	UE Tracking Subscription	Clause 7.3.8 ETSI GS MEC 013 [i.2]	POST & PUT	O	n/a	PeriodicNotificationSubscription 6.3.2	PeriodicNotificationSubscription 6.3.2
16			GET, POST, PATCH & DELETE	n/a	n/a	n/a	n/a

A.5.6 ETSI GS MEC 014

A.5.6.1 Test Requirements

ETSI GS MEC 002 [1], clause 6.3.6, defines the features for the UE Identity service. Upon analysis of such features, the following list of requirements was collected, including provisions that are not explicitly marked but which can be tested to improve conformance and interoperability levels. These requirements are defined in Table A.5.6.1-1.

Table A.5.6.1-1: Classification of requirements for the Feature "UEIdentity"

Requirement ID	Requirement description	Reference
MEC032.Mp1.UEIdentity.001	When the mobile edge system supports the feature UEIdentity, the mobile edge platform shall provide functionality for a mobile edge application to de-register a token (representing a UE) or a list of tokens.	ETSI GS MEC 014 [i.3], Clauses 5.2.3 and 7.3.3

A.5.6.2 ICS

Table A.5.6.2-1 defines the list of Implementation Conformance Statements for the instances of every feature addressed in the UE Identity API.

Table A.5.6.2-1: Manage a specific item

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	UE Identity tag	Clause 7.3.6	GET	O	Table 7.3.3.1-1	n/a	UeIdentityTagInfo Table 6.2.2-1
2			PUT	O	n/a	UeIdentityTagInfo Table 6.2.2-1	UeIdentityTagInfo Table 6.2.2-1
3			POST, PATCH & DELETE	n/a	n/a	n/a	n/a

A.5.7 ETSI GS MEC 015

A.5.7.1 Test Requirements

ETSI GS MEC 002 [1], clause 6.3.5, defines the features for the Bandwidth Management service. Upon analysis of such features, the following list of requirements was collected, including provisions that are not explicitly marked but which can be tested to improve conformance and interoperability levels. These requirements are defined in Table A.5.7.1-1.

Table A.5.7.1-1: Classification of requirements for the Feature "BandwidthManager"

Requirement ID	Requirement description	Reference
MEC032.Mp1.BandwidthManager.001	When the mobile edge system supports the feature BandwidthManager, the dedicated mobile edge application may update the requested bandwidth requirements and/or priority.	ETSI GS MEC 015 [i.4], Clauses 6.2.4 and 8.3
MEC032.Mp1.BandwidthManager.002	When the mobile edge system supports the feature BandwidthManager, the dedicated mobile edge application may cancel a previous request for bandwidth requirements and/or priority.	ETSI GS MEC 015 [i.4], Clauses 6.2.3 and 8.3

A.5.7.2 ICS

Table A.5.7.2-1 defines the list of Implementation Conformance Statements for the features addressed in the Bandwidth Management API.

Table A.5.7.2-1: Simple queries

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	Bandwidth Allocations	Clause 8.4.3	GET	O	Table 8.4.3.1-1	n/a	BwInfo Table 7.2.2-1
2			POST	O	n/a	BwInfo Table 7.2.2-1	BwInfo Table 7.2.2-1
3			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a

Table A.5.7.2-2 defines the list of Implementation Conformance Statements for the instances of every feature addressed in the Bandwidth Management API.

Table A.5.7.2-2: Manage a specific item

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	Resource Bandwidth Allocation	Clause 8.3.3	GET	O	n/a	n/a	BwInfo Table 7.2.2-1
2			PUT	O	n/a	BwInfo Table 7.2.2-1	BwInfo Table 7.2.2-1
3			PATCH	O	n/a	BwInfo Table 7.2.2-1	BwInfo Table 7.2.2-1
4			DELETE	O	n/a	n/a	n/a
5			POST	n/a	n/a	n/a	n/a

A.5.8 ETSI GS MEC 016

A.5.8.1 Test Requirements

ETSI GS MEC 002 [1], clause 6.3.1, defines the features for the Location service. Upon analysis of such features, the following list of requirements was collected, including provisions that are not explicitly marked but which can be tested to improve conformance and interoperability levels. These requirements are defined in Table A.5.8.1-1.

Table A.5.8.1-1: Classification of requirements for the Feature "UserApps"

Requirement ID	Requirement description	Reference
MEC032.Mx2.UserApps.001	When the mobile edge system supports the feature UserApps, the mobile edge management shall support querying information about the available MEC applications.	ETSI GS MEC 016 [i.5], Clauses 5.1.2 and 7.3
MEC032.Mx2.UserApps.002	When the mobile edge system supports the feature UserApps, the mobile edge management shall support storing the context data for a MEC application.	ETSI GS MEC 016 [i.5], Clauses 5.1.3 and 7.5
MEC032.Mx2.UserApps.003	When the mobile edge system supports the feature UserApps, the mobile edge management shall support updating and deleting the context data for an individual MEC application.	ETSI GS MEC 016 [i.5], Clauses 5.1.4, 5.1.5 and 7.5

A.5.8.2 ICS

Table A.5.8.2-1 defines the list of Implementation Conformance Statements for the features addressed in the UE application interface API.

Table A.5.8.2-1: Simple queries

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	UE Applications	Clause 7.3.3	GET	O	Table 7.3.3.1-1	n/a	ApplicationList Table 6.2.2-1
2			POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
3	UE Application Contexts	Clause 7.4.3	POST	O	n/a	AppContext Table 6.2.3-1	AppContext Table 6.2.3-1
4			GET, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a

Table A.5.8.2-2 defines the list of Implementation Conformance Statements for the instances of every feature addressed in the UE application interface API.

Table A.5.8.2-2: Manage a specific item

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	Individual UE Application Context	Clause 7.5.3	PUT	O	n/a	AppContext Table 6.2.3-1	n/a
2			DELETE	O	n/a	n/a	n/a
3			GET, POST & PATCH	n/a	n/a	n/a	n/a

A.5.9 ETSI GS MEC 021

A.5.9.1 Test Requirements

Table A.5.9.1-1 reports the functional requirements of the MEC App Mobility Service (AMS), as derived from the API definition in ETSI GS MEC 021 [i.9].

Table A.5.9.1-1: MEC App Mobility Service (AMS) requirements

Requirement ID	Requirement description	Reference
AppMobility.01	The mobile edge system shall be able to maintain connectivity between a UE and an application instance when the UE performs a handover to another cell associated with the same mobile edge host.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.02	The mobile edge system shall be able to maintain connectivity between a UE and an application instance when the UE performs a handover to another cell not associated with the same mobile edge host.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.03	The mobile edge platform may use available radio network information to optimize the mobility procedures required to support service continuity.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.04	The mobile edge platform may use available core network information to optimize the mobility procedures required to support service continuity.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1

Requirement ID	Requirement description	Reference
AppMobility.05	The mobile edge system shall support two instances of a mobile edge application running on different mobile edge hosts to communicate with each other.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.06	The mobile edge platform shall be able to allow an authorized mobile edge application to communicate with another mobile edge application located on another mobile edge host.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.07	When the mobile edge system supports the feature SmartRelocation, the mobile edge management shall support the relocation of a mobile edge application instance from one mobile edge host to a different host within the system.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.08	When the mobile edge system supports the feature SmartRelocation, a mobile edge host may support the relocation of a mobile edge application instance from a different host (within the system) to this particular host, and from this particular host to a different host (within the system).	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.09	When the mobile edge system supports the feature SmartRelocation, the system shall be able to move mobile edge application instances between mobile edge hosts in order to continue to satisfy the requirements of the mobile edge application.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
AppMobility.10	When the mobile edge system supports the feature SmartRelocation, and based on a request from the UE, the system shall be able to relocate a mobile edge application running in a cloud environment to a mobile edge host fulfilling the requirements of the mobile edge application, and relocate a mobile edge application from a mobile edge host to a cloud environment outside the mobile edge system.	ETSI GS MEC 021 [i.9] Clause 4.2 - Table 4.2-1
Mec032.AMS.01	The AMS shall allow service consumers to register to the AMS offered by the MEC system.	ETSI GS MEC 021 [i.9] Clauses 6.1 and 6.2
Mec032.AMS.02	The AMS shall allow service consumers to un-register from the AMS offered by the MEC system.	ETSI GS MEC 021 [i.9] Clauses 6.1 and 6.3
Mec032.AMS.03	The AMS shall allow the service consumers to update user or other information of the registered AMS for a single or multiple devices.	ETSI GS MEC 021 [i.9] Clauses 6.1 and 6.4
Mec032.AMS.04	The AMS shall support queries from the service consumers about AMS information on endpoint of adjacent application instances with communication links.	ETSI GS MEC 021 [i.9] Clause 6.1
Mec032.AMS.05	The AMS shall support queries from the service consumers about AMS information on identification of application instances running on the target MEC host.	ETSI GS MEC 021 [i.9] Clause 6.1
Mec032.AMS.06	The AMS shall support queries from the service consumers about AMS information on communication link information between the source and target instances of the same application.	ETSI GS MEC 021 [i.9] Clause 6.1
Mec032.AMS.07	The AMS shall allow the service consumers to subscribe to the AMS for receiving notifications on particular AMS events.	ETSI GS MEC 021 [i.9] Clauses 6.1 and 6.6
Mec032.AMS.08	The AMS shall allow the service consumers to unsubscribe to the notifications of AMS events.	ETSI GS MEC 021 [i.9] Clause 6.7
Mec032.AMS.09	The AMS shall allow the service consumers to update their subscriptions to AMS events.	ETSI GS MEC 021 [i.9] Clause 6.8
Mec032.AMS.10	The AMS shall be able to send notifications to subscribed service consumers when a target event occurs.	ETSI GS MEC 021 [i.9] Clause 6.1
Mec032.AMS.11	The AMS shall allow the service consumers to subscribe to the AMS for receiving notifications about application mobility status and shall be able to provide such notifications.	ETSI GS MEC 021 [i.9] Clauses 6.1, 7.3.2 and 7.4.2
Mec032.AMS.12	The AMS shall allow the service consumers to subscribe to the AMS for receiving notifications about adjacent application instances and shall be able to provide such notifications.	ETSI GS MEC 021 [i.9] Clause 73.3 and 7.4.3

Requirement ID	Requirement description	Reference
Mec032.AMS.13	The AMS may be able to send notifications regarding to expiry of the existing subscription.	ETSI GS MEC 021 [i.9] Clause 7.4.4
Mec032.AMS.14	The AMS shall provide assistance to clean up the user information at the source application instance and MEC platform when the user context has been transferred to the target application instance.	ETSI GS MEC 021 [i.9] Clause 6.1

A.5.9.2 ICS

The list of Implementation Conformance Statements for AMS APIs for registrations, queries and subscriptions is defined in Table A.5.9.2-1.

Table A.5.9.2-1: AMS APIs

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
1	Application mobility services	Table 8.2-2 in clause 8.2	POST	M	n/a	Table 8.3.3.4-1 Registration Request Editor's note: pending base specification updates	Table 8.3.3.4-1 AppMobility ServiceInfo (clause 7.2.2)
2	/appMobilityServices	Of ETSI GS MEC 021 [i.9]	GET	M	Table 8.3.3.1-1	n/a	Table 8.3.3.1-2 AppMobility ServiceInfo (clause 7.2.2)
3			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
4	Individual application mobility services /appMobilityServices/{appMobilityServiceId}	Table 8.2-2 in clause 8.2 of ETSI GS MEC 021 [i.9]	GET	M	Editor's note: pending base specification updates	Editor's note: pending base specification updates	Editor's note: pending base specification updates
5			DELETE	M	Editor's note: pending base specification updates	Editor's note: pending base specification updates	Editor's note: pending base specification updates
6			PUT	M	Editor's note: pending base specification updates	Editor's note: pending base specification updates	Editor's note: pending base specification updates
7			PATCH POST &	n/a	n/a	n/a	n/a

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
8	Unregister application mobility service task /appMobilityServices/{appMobilityServiceId}/unregistrationTask	Table 8.2-2 in clause 8.2 of ETSI GS MEC 021 [i.9]	POST	M	Editor's note: pending base specification updates	Editor's note: pending base specification updates	Editor's note: pending base specification updates
9			GET, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
10	Parent resource of all AMS subscriptions /subscriptions	Table 8.2-2 in clause 8.2 of ETSI GS MEC 021 [i.9]	POST	M	n/a	Table 8.6.3.4-1 Mobility Procedure Subscription (clause 7.3.2) Or Adjacent AppInfo Subscription (clause 7.3.3)	Table 8.6.3.4-1 Mobility Procedure Subscription (clause 7.3.2) Or Adjacent AppInfo Subscription (clause 7.3.3)
11			GET	M	Table 8.6.3.1-1	n/a	Table 8.6.3.1-2 Subscription LinkList (clause 7.3.4)
12			PUT, PATCH, & DELETE	n/a	n/a	n/a	n/a

ID	Resource	Reference	HTTP Method	Required according to GS	Query parameters	Request Body	Response Body
13	Individual AMS subscription /subscriptions/{subscriptionId}	Table 8.2-2 in clause 8.2 of ETSI GS MEC 021 [i.9]	GET	M	Table 8.7.2-1	n/a	Table 8.7.3.1-2 Mobility Procedure Subscription (clause 7.3.2) Or Adjacent ApplInfo Subscription (clause 7.3.3)
14			DELETE	M	n/a	n/a	n/a
15			PUT	M	n/a	Table 8.7.3.2-2 Mobility Procedure Subscription (clause 7.3.2) Or Adjacent ApplInfo Subscription (clause 7.3.3)	Table 8.7.3.2-2 Mobility Procedure Subscription (clause 7.3.2) Or Adjacent ApplInfo Subscription (clause 7.3.3)
16			POST & PATCH	n/a	n/a	n/a	n/a

The list of Implementation Conformance Statements for AMS notification is defined in Table A.5.9.2-2.

Table A.5.9.2-2: Notification callback

ID	Client provided callback reference	Reference	HTTP Method	Required according to GS	Request Body
1	MobilityProcedureNotification	Table 7.4.2-1 in clause 7.4.2 of ETSI GS MEC 021 [i.9]	GET, PUT, PATCH & DELETE	n/a	n/a
2			POST	M	MobilityProcedureNotification (clause 7.4.2)
3	AdjacentAppInfoNotification	Table 7.4.3-1 in clause 7.4.3 of ETSI GS MEC 021 [i.9]	GET, PUT, PATCH & DELETE	n/a	n/a
4			POST	M	AdjacentAppInfoNotification (clause 7.4.3)
5	ExpiryNotification	Table 7.4.4-1 in clause 7.4.4 of ETSI GS MEC 021 [i.9]	GET, PUT, PATCH & DELETE	n/a	n/a
6			POST	M	ExpiryNotification (clause 7.4.4)

A.5.10 ETSI GS MEC 028

A.5.10.1 Test Requirements

Table A.5.10.1-1 reports the functional requirements of the WLAN Information MEC Service (WIS), as derived from the API definition in ETSI MEC GS 028.

Table A.5.10.1-1: WLAN Information MEC Service requirements

Requirement ID	Requirement description	Reference
Mec032.WIS.01	The WIS shall support queries from the service consumers about information on Access Points.	ETSI GS MEC 028 [i.9] Clauses 5.2.2
Mec032.WIS.02	The WIS shall support queries from the service consumers about information on client stations.	ETSI GS MEC 028 [i.9] Clauses 5.2.3
Mec032.WIS.03	The WIS shall allow the service consumers to subscribe to the WIS for receiving notifications on particular WLAN events.	ETSI GS MEC 028 [i.9] Clauses 5.2.4.1
Mec032.WIS.04	The WIS shall be able to notify service consumers about the expiry of WLAN event subscriptions.	ETSI GS MEC 028 [i.9] Clause 5.2.4.2
Mec032.WIS.05	The WIS shall allow the service consumers to update their subscriptions to WLAN events.	ETSI GS MEC 028 [i.9] Clause 5.2.4.3
Mec032.WIS.06	The WIS shall allow the service consumers to unsubscribe to the notifications of WLAN events.	ETSI GS MEC 028 [i.9] Clause 5.2.4.4
Mec032.WIS.07	The WIS shall be able to send notifications to subscribed service consumers about WLAN station physical rates.	ETSI GS MEC 028 [i.9] Clause 5.3.5
Mec032.WIS.08	The WIS shall be able to send notifications to subscribed service consumers about WLAN stations that are associated with a particular access point whose information is requested.	ETSI GS MEC 028 [i.9] Clause 5.3.6
Mec032.WIS.09	The WIS shall support queries from the service consumers for Basic Service Set (BSS) information.	ETSI GS MEC 028 [i.9] "Clause 5.X Sending a request for BSS Information"
Mec032.WIS.10	The WIS shall support queries from the service consumers for Station (STA) information.	ETSI GS MEC 028 [i.9] "Clause 5.X Sending a request for STA Information"

A.5.11 ETSI GS MEC 029

A.5.11.1 Test Requirements

ETSI GS MEC 002 [1] does not contemplate fixed access information features. As such, the following list of requirements was collected from ETSI GS MEC 029 [i.7], including provisions that are not explicitly marked but which can be tested to improve conformance and interoperability levels. These requirements are defined in Table 5.11.1-1.

Table 5.11.1-1: Classification of requirements for the Feature "UserApps"

Requirement ID	Requirement description	Reference
MEC032.Mp1.FAI.001	When the mobile edge system supports the feature FAI, the mobile edge application shall support querying about the available fixed access information.	ETSI GS MEC 029 [i.7], Clauses 5.2.2 and 7.3
MEC032.Mp1.FAI.002	When the mobile edge system supports the feature FAI, the mobile edge platform shall support querying about the available fixed access information.	ETSI GS MEC 029 [i.7], Clauses 5.2.2 and 7.3
MEC032.Mp1.FAI.003	When the mobile edge system supports the feature FAI, the mobile edge application shall support querying information on the devices connected to a fixed access network.	ETSI GS MEC 029 [i.7], Clauses 5.2.3 and 7.4
MEC032.Mp1.FAI.004	When the mobile edge system supports the feature FAI, the mobile edge application shall support querying information of the available cable line of a fixed access network.	ETSI GS MEC 029 [i.7], Clauses 5.2.4 and 7.5

Requirement ID	Requirement description	Reference
MEC032.Mp1.FAI.005	When the mobile edge system supports the feature FAI, the mobile edge application shall support querying about the available information of an optical network.	ETSI GS MEC 029 [i.7], Clauses 5.2.5 and 7.6
MEC032.Mp1.FAI.006	When the mobile edge system supports the feature FAI, the mobile edge application shall support the subscription for notifications to certain specific FAI event.	ETSI GS MEC 029 [i.7], Clauses 5.2.6 and 7.7
MEC032.Mp1.FAI.007	When the mobile edge system supports the feature FAI, the mobile edge application shall support querying information about its subscriptions.	ETSI GS MEC 029 [i.7], Clauses 5.2.6 and 7.7
MEC032.Mp1.FAI.008	When the mobile edge system supports the feature FAI, the mobile edge application shall support querying information about a specific subscription.	ETSI GS MEC 029 [i.7], Clauses 5.2.6 and 7.8
MEC032.Mp1.FAI.009	When the mobile edge system supports the feature FAI, the mobile edge application shall support replace information on an existing subscription.	ETSI GS MEC 029 [i.7], Clauses 5.2.6 and 7.8
MEC032.Mp1.FAI.0010	When the mobile edge system supports the feature FAI, the mobile edge application shall support cancelling an existing subscription.	ETSI GS MEC 029 [i.7], Clauses 5.2.6 and 7.8
MEC032.Mp1.FAI.0011	When the mobile edge system supports the feature FAI, the mobile edge application shall support sending FAI event notifications to the service consumer, using the provided callback URI.	ETSI GS MEC 029 [i.7], Clauses 5.2.7, 5.2.8, 5.2.9 and 5.2.10

A.5.11.2 ICS

Table 5.11.2-1 defines the list of Implementation Conformance Statements for the features addressed in the Fixed Access Information API.

Table 5.11.2-1: Simple queries

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1	fixed access information	Clause 7.3	GET	O	Table 7.3.3.1-1	n/a	FaInfo Table 6.2.2-1
2			POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
3	device information	Clause 7.4	GET	O	Table 7.4.3.1-1	n/a	DeviceInfo Table 6.2.3-1
4			POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
5	cable line information	Clause 7.5	GET	O	Table 7.5.3.1-1	n/a	CableLineInfo Table 6.2.4-1
6			POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
7	optical network information	Clause 7.6	GET	O	Table 7.6.3.1-1	n/a	PonInfo Table 6.2.5-1
8			POST, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
9	all subscriptions	Clause 7.7	GET	O	Table 7.7.3.1-1	n/a	SubscriptionLinkList Table 6.3.5-1

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
10	for a subscriber		POST	O	n/a	OnuAlarmSubscription Table 6.3.2-1 or DevInfoSubscription Table 6.3.3-1 or CmConnSubscription Table 6.3.4-1 or AniAlarmSubscription Table 6.3.6-1	OnuAlarmSubscription Table 6.3.2-1 or DevInfoSubscription Table 6.3.3-1 or CmConnSubscription Table 6.3.4-1 or AniAlarmSubscription Table 6.3.6-1
11			PUT, PATCH & DELETE	n/a	n/a	n/a	n/a
12	notification callback	Clauses 5.2.7 to 5.2.10	POST	O	Table	OnuAlarmNotification Table 6.4.2-1 or DevInfoNotification Table 6.4.3-1 or CmConnNotification Table 6.4.4-1 or AniAlarmNotification Table 6.4.6-1	n/a
13			GET, PUT, PATCH & DELETE	n/a	n/a	n/a	n/a

Table 5.11.2-2 defines the list of Implementation Conformance Statements for the instances of every feature addressed in the Fixed Access Information API.

Table 5.11.2-2: Manage a specific item

ID	Resource	Reference	HTTP Method	Required according to GS	Query Parameters	Request Body	Response Body
1			GET	O	n/a	n/a	OnuAlarmSubscription Table 6.3.2-1 or DevInfoSubscription Table 6.3.3-1 or CmConnSubscription Table 6.3.4-1 or AniAlarmSubscription Table 6.3.6-1
2	existing subscription	Clause 7.8	PUT	O	n/a	OnuAlarmSubscription Table 6.3.2-1 or DevInfoSubscription Table 6.3.3-1 or CmConnSubscription Table 6.3.4-1 or AniAlarmSubscription Table 6.3.6-1	OnuAlarmSubscription Table 6.3.2-1 or DevInfoSubscription Table 6.3.3-1 or CmConnSubscription Table 6.3.4-1 or AniAlarmSubscription Table 6.3.6-1
3			DELETE	O	n/a	n/a	n/a
4			POST & PATCH	n/a	n/a	n/a	n/a

A.5.12 ETSI GS MEC 030

A.5.12.1 Test Requirements

No Test Requirements are reported or specified for ETSI GS MEC 030 [i.8].

A.5.12.2 ICS

No Implementation Conformance Statements are reported or specified for ETSI GS MEC 030 [i.8].

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Annex B (informative): Bibliography

- <Publication>: "<Title>". (style B1+)

Editor's note: The usage of this clause is to be evaluated.

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Annex C (informative): Change History

Date	Version	Information about changes
July 2019	0.0.1	Initial proposal: MECDECODE(19)000013r1
July 2019	0.0.2	Included changes approved in contributions: - MECDECODE(19)000016 - MECDECODE(19)000017 - MECDECODE(19)000018 - MECDECODE(19)000019 - MECDECODE(19)000020 - MECDECODE(19)000021 - MECDECODE(19)000022 - MECDECODE(19)000023 - MECDECODE(19)000024 - MECDECODE(19)000025 - MECDECODE(19)000026 - MECDECODE(19)000027
Aug 2019	0.0.3	Moved to Stable Draft having incorporated feedback from editHelp.

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History

Document history		
V0.0.3	August 2019	Clean-up done by <i>editHelp!</i> E-mail: mailto:edithelp@etsi.org

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