ETSI GR MEC 001 V3.1.1 (2022-01)

GROUP REPORT

Multi-access Edge Computing (MEC); Terminology

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00   Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

Important notice

The present document can be downloaded from:
http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or
print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any
existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI
deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

Users of the present document should be aware that the document may be subject to revision or change of status.
Information on the current status of this and other ETSI documents is available at
https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

If you find errors in the present document, please send your comment to one of the following services:
https://portal.etsi.org/People/CommiteeSupportStaff.aspx

Notice of disclaimer & limitation of liability

The information provided in the present deliverable is directed solely to professionals who have the appropriate degree of
experience to understand and interpret its content in accordance with generally accepted engineering or
other professional standard and applicable regulations.
No recommendation as to products and services or vendors is made or should be implied.
No representation or warranty is made that this deliverable is technically accurate or sufficient or conforms to any law
and/or governmental rule and/or regulation and further, no representation or warranty is made of merchantability or fitness
for any particular purpose or against infringement of intellectual property rights.
In no event shall ETSI be held liable for loss of profits or any other incidental or consequential damages.

Any software contained in this deliverable is provided "AS IS" with no warranties, express or implied, including but not
limited to, the warranties of merchantability, fitness for a particular purpose and non-infringement of intellectual property
rights and ETSI shall not be held liable in any event for any damages whatsoever (including, without limitation, damages
for loss of profits, business interruption, loss of information, or any other pecuniary loss) arising out of or related to the use
of or inability to use the software.

Contents

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The declarations pertaining to these essential IPRs, if any, are publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (https://ipr.etsi.org/).

Pursuant to the ETSI Directives including the ETSI IPR Policy, no investigation regarding the essentiality of IPRs, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP™** and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2M™** logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners. **GSM**® and the GSM logo are trademarks registered and owned by the GSM Association.

Foreword

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

Modal verbs terminology

In the present document "**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.

# 1	Scope

The present document provides a glossary of terms relating to the conceptual, architectural and functional elements within the scope of work on Multi-access Edge Computing.

The purpose of this glossary is to ensure that all terminology defined in the present document is used in a consistent way by all ETSI MEC deliverables as well as in wider industry discussions on Multi-access Edge Computing.

# 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.

Not applicable.

## 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 NFV 003: "Network Functions Virtualisation (NFV); Terminology for Main Concepts in NFV".

[i.2]	ETSI TS 123 002: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; Network architecture (3GPP TS 23.002)".

# 3	Definition of terms, symbols and abbreviations

## 3.1	Terms

A

aggregation point: location in a physical network deployment intermediate between the core network and a number of homogeneous or heterogeneous network termination points (base station, cable modems, WLAN access points, etc.) which can act as a location for a MEC host

application context: set of reference data about an application instance that is used to identify it, enable lifecycle management operations and associate it with its device application

application descriptor: descriptor provided by the application provider which describes the application rules and requirements of a MEC application

application package: bundle of files provided by an application provider, to on-boarded into a MEC system and used by the MEC system for application instantiation, including package metadata (application descriptor, manifest) and artifacts (software image(s), e.g. VM image or container images, and optionally other files), or URIs to artifacts

application provider: entity that manages and distributes software-based services and solutions to customers

application rules and requirements: rules and requirements associated to MEC applications, such as required resources, maximum latency, required or useful services, traffic rules, DNS rules, mobility support, etc.

B

Void.

C

client application: application software running on a device (e.g. UE, laptop with internet connectivity) in order to utilize functionality provided by one or more specific MEC application(s)

content provider: entity (e.g. a web server, or a content distribution network) that provides content to consumers

D

device application: application running in the device that has the capability to interact with the MEC system via the user application lifecycle management proxy

E - H

Void.

I

infrastructure provider: entity that provides components into the network infrastructure ranging from compute elements and/or platforms to a software component (i.e. software component examples include security, virtualisation, controller, etc.)

J - K

Void.

L

lawful interception: action (based on the law), performed by a network operator/service provider/access provider, of making available certain information and providing that information to a law enforcement monitoring facility

lifecycle management: set of functions required to manage the instantiation, maintenance and termination of a MEC application instance

M

MEC application: application that can be instantiated on a MEC host within the MEC system and can potentially provide or consume MEC services

MEC host: entity that contains a MEC platform and a virtualisation infrastructure which provides compute, storage and network resources to MEC applications

MEC host level management: components which handle the management of the MEC specific functionality of a particular MEC platform, MEC host and the MEC applications running on it

MEC management: MEC system level management and MEC host level management

MEC platform: collection of functionality that is required to run MEC applications on a specific MEC host virtualisation infrastructure and to enable them to provide and consume MEC services, and that can provide itself a number of MEC services

MEC service: service provided via the MEC platform either by the MEC platform itself or by a MEC application

MEC system: collection of MEC hosts and MEC management necessary to run MEC applications

MEC system level management: management components which have the overview of the complete MEC system

mobile edge application: MEC application that can be instantiated on a mobile edge host within the mobile edge system and can potentially provide or consume mobile edge services

mobile edge host: MEC host that contains a mobile edge platform and a virtualisation infrastructure which provides compute, storage and network resources to mobile edge applications

mobile edge host level management: components which handle the management of the mobile edge specific functionality of a particular mobile edge platform, mobile edge host and the mobile edge applications running on it

mobile edge management: mobile edge system level management and mobile edge host level management

mobile edge platform: MEC platform to run mobile edge applications on a specific mobile edge host virtualisation infrastructure and to enable them to provide and consume mobile edge services, and that can provide itself a number of mobile edge services

mobile edge service: MEC service provided via the mobile edge platform either by the mobile edge platform itself or by a mobile edge application

mobile edge system: special kind of MEC system that is a collection of mobile edge hosts and mobile edge management necessary to run mobile edge applications within an operator network or a subset of an operator network

mobile edge system level management: management components which have the overview of the complete mobile edge system

Multi-access Edge Computing (MEC): system which provides an IT service environment and cloud-computing capabilities at the edge of an access network which contains one or more type of access technology, and in close proximity to its users

N

Network Functions Virtualisation (NFV): principle of separating network functions from the hardware they run on by using virtual hardware abstraction, as defined in ETSI GS NFV 003 [i.1]

network operator: organization that provides a network for the provision of telecommunications services

NOTE: If the same organization also offers services it also becomes the service provider.

O - Q

Void.

R

resource: object with a type, associated data, a set of methods that operate on it, and, if applicable, relationships to other resources

NOTE: A resource is a fundamental concept in a RESTful API. Resources are acted upon by the RESTful API using the Methods (e.g. POST, GET, PUT, DELETE, etc.). Operations on Resources affect the state of the corresponding managed entities.

retained data: set of data elements for a specific subscriber/user related to a specific service transaction

S - T

Void.

U

user application: MEC application that is instantiated in the MEC system in response to a request from a user via a device application

user context: application-specific runtime data maintained by the MEC application, which is associated with a user of that application

User Equipment (UE): mobile equipment used to access the operator's mobile network and supporting applications that transmit IP packets over the mobile network

NOTE: User Equipment is originally defined in ETSI TS 123 002 [i.2]. For the purpose of the present document, the definition above is used instead.

V

virtualised resource: compute, storage or network resource provided by the virtualisation infrastructure to a mobile edge application

W - Z

Void.

3.2 Symbols

Void.

3.3 Abbreviations

0 - 9

| 3GPP | 3rd Generation Partnership Project |
| 5G | Fifth Generation |

A-F

ACK/ack	ACKnowledgement
API	Application Programming Interface
App/app	Application/application
CAPEX	CAPital EXpenditure
CAPIF	Common API Framework for 3GPP northbound APIs
CCF	CAPIF Core Function

DNS	Domain Name System
FTP	File Transfer Protocol

G

GPRS	General Packet Radio Service
GSMA	Global System for Mobile communications Association
GTP	GPRS Tunnelling Protocol
GTP-U	GPRS Tunnelling Protocol - User plane
GW	Gateway

H - J

HTTP	Hyper Text Transfer Protocol
HTTPS	HTTP over TLS
IETF	Internet Engineering Task Force
IP	Internet Protocol
ISG	Industry Specification Group
IT	Information Technology
JSON	JavaScript Object Notation

K

Void.

L

LAN	Local Area Network
LCM	Life Cycle Management
LTE	Long Term Evolution

M

MAC	Media Access Control
MANO	Management And Orchestration
MEAO	MEC Application Orchestrator
MEC	Multi-access Edge Computing
MEO	MEC Orchestrator
MEP	MEC Platform
MEPM	MEC Platform Manager
MEPM-V	MEC Platform Manager - NFV
MNO	Mobile Network Operator

N

NFV	Network Functions Virtualisation
NFVI	Network Functions Virtualisation Infrastructure
NFVO	Network Functions Virtualisation Orchestrator
NGMN	Next Generation Mobile Network
NS	Network Service
NSD	Network Service Descriptor

O - Q

OEM	Original Equipment Manufacturer
OSS	Operations Support System
PLMN	Public Land Mobile Network
QCI	Quality Class Indicator

QoE   Quality of Experience
QoS   Quality of Service

R

RAN   Radio Access Network
reconfig   reconfiguration
ref   reference
req   request
REST   REpresentational State Transfer
RFC   Request For Comments
RNI   Radio Network Information
RNIS   Radio Network Information Service

S - T

TCP   Transmission Control Protocol
TLS   Transport Layer Security

U

UE   User Equipment
UMTS   Universal Mobile Telecommunications System
UP   User Plane
UPF   User Plane Function
URI   Uniform Resource Indicator or Uniform Resource Identifier or Universal Resource Identifier
UTC   Coordinated Universal Time

V

V2X   Vehicle-to-Everything
VIM   Virtualised Infrastructure Manager
VM   Virtual Machine
VNF   Virtualised Network Function
VNFM   Virtualised Network Function Manager

W - Z

WLAN   Wireless LAN

Annex A (informative):
Change History

Date	Version	Information about changes
July 2021	3.0.1	Base line for phase 3
August 2021	3.0.2	MEC(21)000363 MEC001 add some term definitions MEC(21)000365 MEC001 add some abbreviations
October 2021	3.0.3	MEC(21)000483 MEC001 prepare for stable draft MEC(21)000490r1 MEC001 capturing short expressions as abbreviations MEC(21)000498 MEC001 postpone abbreviations for federation MEC(21)000502 MEC001-update to the abbreviations

History

Document history		
V1.1.1	March 2016	Publication as ETSI GS MEC 001
V2.1.1	January 2019	Publication as ETSI GS MEC 001
V3.1.1	January 2022	Publication