



Mobile-Edge Computing (MEC); Proof of Concept Framework

STANDARD PREVIEW
(standard.it-eeteh.ai)
Full standard: <https://standards.iteh.ai/catalog/standards/etsi-gs-mec-005-v1.1.1-2015-08>
Full standard: <https://standards.iteh.ai/catalog/standards/etsi-gs-mec-005-v1.1.1-2015-08>

Disclaimer

This document has been produced and approved by the Mobile-Edge Computing (MEC) ETSI Industry Specification Group (ISG) and represents the views of those members who participated in this ISG. It does not necessarily represent the views of the entire ETSI membership.

ReferenceDGS/MEC-IEG005

KeywordsMEC, proof of concept

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 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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 only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

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

<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:

<https://portal.etsi.org/People/CommitteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2015.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP™** and **LTE™** are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	4
Foreword.....	4
Modal verbs terminology.....	4
1 Scope	5
2 References	5
2.1 Normative references	5
2.2 Informative references.....	5
3 Definitions and abbreviations.....	6
3.1 Definitions.....	6
3.2 Abbreviations	6
4 PoC framework	6
4.0 Rationale.....	6
4.1 Roles and responsibilities.....	7
4.2 PoC activity process	7
4.3 PoC proposal acceptance criteria.....	11
4.4 PoC report acceptance criteria.....	12
5 PoC support tools	12
5.0 General	12
5.1 PoC mailing list.....	12
5.2 PoC WIKI.....	12
Annex A (informative): Bibliography.....	13

ITeH STANDARD PREVIEW
 (standards.iteh.ai)
 Full standard available at
<https://standards.iteh.ai/catalog/standards/sist/85af5b15-c127-45e7-929d-173d4242eb4c/etsi-gs-mec-ieg-005-v1.1.1-2015-08>

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is 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 (<http://ipr.etsi.org>).

Pursuant to the ETSI IPR Policy, no investigation, 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.

Foreword

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

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/8535515-c127-45e7-929d-173d4242eb4c/etsi-gs-mec-ieg-005-v1.1.1-2015-08>

1 Scope

The present document defines a framework to be used by ETSI ISG MEC to coordinate and promote multivendor Proofs of Concept (PoC) projects illustrating key aspects of MEC technology. Proofs of Concept are an important tool to demonstrate the viability of a new technology during its early days and or pre-standardisation phase.

The main objectives of the MEC PoC framework are:

- to ensure the PoC projects are scoped around relevant topics for ISG MEC that require from-the-field input;
- to ensure that the PoC results, lessons learnt and identified gaps are feedback to ISG MEC;
- to build confidence on the viability of MEC technology;
- to encourage the development of a diverse and open ecosystem by fostering the integration of components from different players;
- to support standardization and industry promotion activities of ISG MEC.

This framework describes:

- The different roles and responsibilities in the PoC activity process.
- The PoC activity process.
- The acceptance criteria for PoC proposals and reports.

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 <http://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.

Not applicable.

3 Definitions and abbreviations

3.1 Definitions

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

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

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

expected contribution: input/feedback expected from the PoC team on a specific PoC topic

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, virtualization, controller, etc.)

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

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

PoC demo: public demonstration of a PoC project

PoC project: multi-party endeavour targeting to prove some concepts in the context of a given technology

PoC proposal: initial description of a multivendor PoC project, and the feedback it will provide

PoC report: compilation of test results, lessons learned, contributions and recommendations provided by a PoC team during or at the end of a PoC project

PoC team: organizations participating in the PoC project

PoC test plan: description of the test objectives of each targeted scenario

PoC topic: specific topic identified by the ISG MEC, where some from-the-field input or feedback is required from the PoCs

3.2 Abbreviations

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

CTI	Centre for Testing and Interoperability
ISG	Industry Standardization Group
MEC	Mobile-Edge Computing
PoC	Proof of Concept

4 PoC framework

4.0 Rationale

MEC proposes a new edge based service and computation platform, which may inspire the development and of new types of applications and services. Proof of Concepts are an important tool to demonstrate MEC as a viable technology. Results and feedback from the PoCs can guide the work in the ISG MEC on interoperability and other technical challenges. The public demonstration of MEC concepts helps to build commercial awareness and confidence in this technology, and helps to develop a diverse, open, MEC ecosystem.

The PoCs are scoped around the PoC Topics identified by the ISG MEC (i.e. service scenarios, use cases, etc.).

4.1 Roles and responsibilities

ISG MEC: The ISG MEC is interested in the outcome of the PoC projects. In the context of the PoC framework, it is in charge of:

- identifying PoC topics;
- identifying expected contributions and timelines for PoC topics;
- processing the contributions made by the PoC teams on those topics.

PoC Support Team: Entity in charge of administering the PoC activity process. It is in charge of:

- maintaining and making available the PoC topics;
- reviewing PoC proposals and PoC reports against the acceptance criteria;
- declaring the acceptance and end of each PoC;
- compiling the accepted PoC Proposals and Reports and making them available to the ISG MEC;
- monitoring the PoC project timelines, and sending the appropriate reminders to the PoC teams (for expected contributions, PoC report, etc.).

PoC Team: Group of organizations participating in a PoC project. The PoC team is in charge of:

- writing the PoC proposal;
- submitting the expected contributions to the ISG MEC;
- writing the PoC report.

4.2 PoC activity process

Figure 1 provides a description of the PoC activity process.

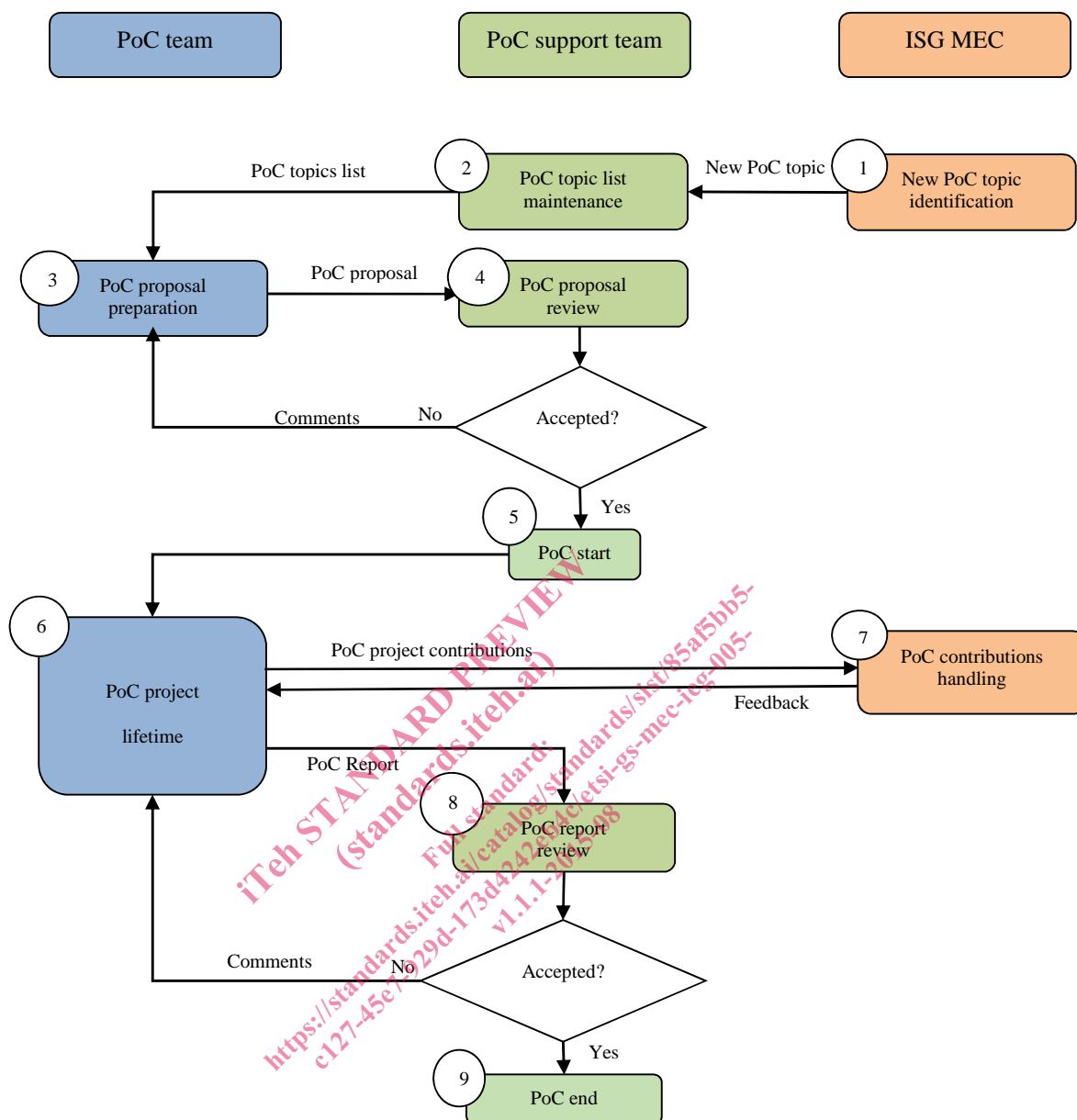


Figure 1

It includes 9 stages:

1) Stage 1: New PoC topic identification

Main task: To identify and describe a new PoC topics.

Responsibility: ISG MEC.

Input: None.

Output: New PoC topic.

Duration: Any.

Description: The ISG MEC identify the topics and contributions expected from the PoC projects. This information is sent to the PoC support team to feed the PoC topics list. For each PoC topic, ISG MEC provides detailed information on:

- the contribution(s) expected from the PoC;

- the expected timing for the contributions.

2) Stage 2: PoC topics list maintenance

Main task: To maintain and make available the PoC topics list. To notify the community when there is a change in the list.

Responsibility: PoC support team.

Input: New PoC topics.

Output: PoC topics list, notifications (e.g. New PoC topic).

Duration: Any.

Description: The PoC support team maintains and gives visibility to the PoC topics list in the MEC WIKI. The PoC topics and the description of the specific contributions expected for each of them helps PoC teams to concentrate their efforts on the most valuable topics for the ISG MEC. The PoC topics list is made widely available among the community, and appropriate notifications are sent to the community when it is updated.

3) Stage 3: PoC proposal preparation

Main task: To prepare and submit the PoC proposal.

Responsibility: PoC team.

Input: Previous ISG MEC publications, PoC topics, PoC proposal template.

Output: PoC proposal.

Duration: Any.

Description: During this stage, the PoC team is formed. PoC team formation is beyond the scope of the ISG MEC. The PoC team prepares a PoC proposal according to the PoC proposal template available in the MEC WIKI, in compliance with the PoC proposal acceptance criteria. The PoC proposal will be uploaded on the ETSI Portal as a contribution to ISG MEC IEG and a link to the contribution sent to the ISG_MEC_IEG@LIST.etsi.org mailing list with [ISG MEC PoC proposal] in the subject line.

4) Stage 4: PoC proposal review

Main task: To review the PoC proposal according to the PoC proposal acceptance criteria.

Responsibility: PoC support team.

Input: PoC proposal, PoC proposal acceptance criteria.

Output: Response (Accepted / Not accepted), Comments.

Duration: 14 calendar days.

Description: The PoC support team reviews the PoC proposal against the PoC proposal acceptance criteria identified in clause 4.3. Comments are sent back to the PoC Team with the response: Accepted / Not accepted.

The PoC Team can incorporate the comments received to the PoC proposal and re-submit it as follows:

- The updated PoC proposal is uploaded to the ETSI portal as a revision of the original PoC proposal contribution to ISG MEC IEG.
- The PoC Team informs of the PoC proposal re-submission by emailing the revised contribution link to ISG_MEC_IEG@LIST.etsi.org.

5) Stage 5: PoC Start

Main task: To announce and create awareness of the new PoC project. To monitor the new PoC project milestones and to send the appropriate reminders to the PoC team.

Responsibility: PoC support team.