Work Item	Work Item
Work Item Title:	Effective IoT Communication to Protect 3GPP Networks
Document Number	WI-0096
Supporting Members or Partner type 2	Deutsche Telekom, QualComm, BT, Convida, AT&T, Orange, TIM, Nokia, Hansung University, Hyundai Motors
Date:	2021-01-04
Abstract:	This Work Item is intended to produce a specification that describes how a oneM2M service layer hosted on a 3GPP Cellular IoT device ensures that the device operates in an efficient manner that applies the requirements described by GSMA TS.34.

1 Title (Acronym)

Effective IoT Communication to Protect 3GPP Networks (EICP-3GPP)

2 Justification

The oneM2M WI-0037 Interworking with 3GPP Rel-13-15 MTC features (see oneM2M TR-0024) was the basis to initiate consideration of 3GPP TS 23.682 architecture interworking with oneM2M. WI-0058 further addresses 3GPP progress on low power wide area (LPWA) technologies for the Cellular IoT network. This WI will cover explicit operating procedures for oneM2M[1] nodes hosted on Cellular IoT devices.

The GSM Association has created guidelines for efficient IoT device connectivity is GSMA TS.34. The oneM2M standard is well suited to implementing all the relevant recommendations described in GSMA TS34. In this WI we will describe the GSMA guidelines and provide one or more descriptions of oneM2M standard-based solutions that fulfill those GSMA requirements.

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[1]oneM2M is a trademark of the Partners Type 1 of oneM2M

For example, as shown in this figure, the GSMA TS.34 architecture is well aligned with the oneM2M architecture.
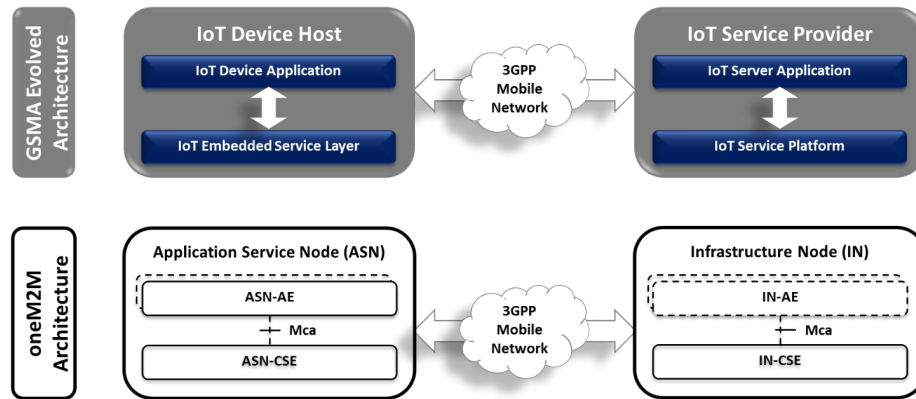

Figure 1: Figure 1 - Evolved GSMA Architecture compared to oneM2M Architecture

Furthermore, GSMA TS.34 has organized the recommended requirements into categories that align with specific IoT Service Platform capabilities (oneM2M capabilities) as well as device capabilities (device management) and Mobile Network Capabilities (TS-0026 oneM2M interworking with 3GPP).
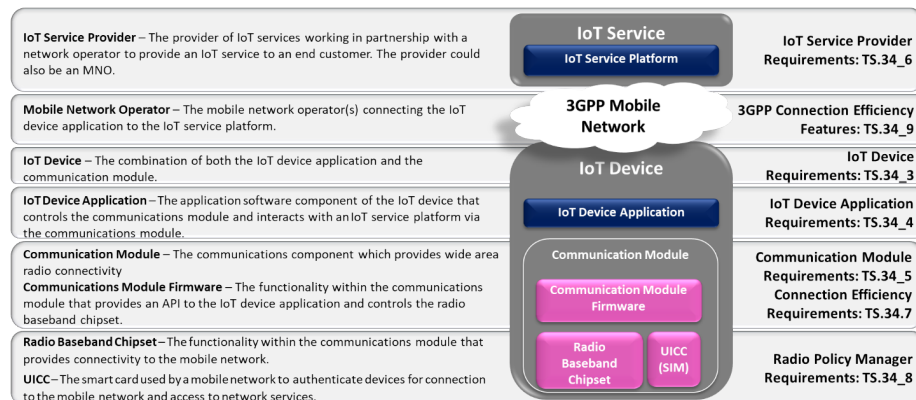
missing caption

3 Intended Output

Tick all the appropriate cases

Check	Case
X	Change request(s) to existing Technical Specification(s)
X	Change request(s) to existing Technical Reports(s)
	New Normative Technical Specifications(s)
X	New Permanent Technical Reports(s)
	New Temporary Technical Reports(s)

4 Impact

4.1 oneM2M Work Items

None

5 Scope

The objective of this work item is to study the GSMA TS.34 requirements and describe how the requirements can be implemented using oneM2M services.

A new Technical Report (TR-00xx) will be generated. If there are gaps in the oneM2M services, solutions to address those gaps will be proposed via STEs of current services.

Depending on this TR, Change Requests to following specifications may be needed:

- Technical Specification TS-0001 on Functional Architecture
- Technical Specification TS-0004 on Service Layer Core Protocol
- Technical Specification TS-0003 on Security
- Technical Specification TS-0026 on 3GPP Interworking
- Technical Specification TS-0025 on Product Profiles

Also, CRs to the following technical reports are expected:

- The Technical Report TR-0024 on 3GPP Interworking
- The Technical Report TR-0047 on developer's guide of 3GPP interworking

6 Schedule and impacted specifications

6.1 New Specifications (if any)

Document Type	Document Number*	Title	Schedule (TP No.) Start	Schedule (TP No.) Change Control	Schedule (TP No.) Freeze	Schedule (TP No.) Approval	Lead WG	Impacted WGs	Comments
TR	TR-0063	Effective IoT Communication to Protect 3GPP Networks	TP#43	n/a		TP#51	TP#52	WG2	WG3	

* Optional for first versions (i.e. before it will be assigned by the secretariat)

6.2 CRs to existing specifications (if any)

Impacted TS/TR	CR number (when known)	Subject of the CR	Approved at plenary#	Impacted WGs	Comments
TS-0001		Enhancements to TS-0001	TP#51	WG2	
TS-0004		Enhancements to TS-0004	TP#51	WG2	
TS-0003		Enhancements to TS-0003	TP#51	WG2	
TR-0047		Enhancements to TR-0047	TP#51	WG3	
TR-0024		Enhancements to TR-0024	TP#51	WG2	
TS-0025		Enhancements to TS-0025	TP#51	WG3	

7 Work Item Rapporteur(s)

Rapporteurs: Bob Flynn (Exacta)

8 History

Document history

Version	Date	Description
V0.0.1	2019-12-02	Initial proposal
V0.0.1	2019-12-12	Uploaded as a permanent document following approval of TP-2019-0177R04
V0.0.2	2020-12-18	Update schedule
V0.0.2	2021-01-04	Uploaded as a permanent document following approval of TP-2020-0138