3GPP TSG CT WG1 Meeting #141e C1-232318

Online, 17-21 April 2023 (revision of CP-223207)

3GPP TSG CT WG3 Meeting #127e C3-231176

Electronic, 17th - 21st April, 2023 (revision of CP-223207)

**Source: Samsung**

**Title: Revised WID on CT aspects for Enabling Edge Applications Phase 2**

**Document for: Approval**

**Agenda Item: 18.1.1**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>   
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

Title: CT aspects for Enabling Edge Applications Phase 2

Acronym: EDGEAPP\_Ph2

Unique identifier: 980035

Potential target Release: Rel-18

# 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  | X |  | X |  |
| No |  |  | X |  |  |
| Don't know | X |  |  |  | X |

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
|  | Feature |
| X | Building Block |
|  | Work Task |
|  | Study Item |

## 2.2 Parent Work Item

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Parent Work / Study Items | | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| EDGEAPP\_Ph2 | SA6 | 970040 | Architecture for enabling Edge Applications Phase 2 |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work /Study Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 950023 | Study on Security of Edge Computing phase 2 | Security aspects of Edge Computing (SA3) |
| 940024 | Enhanced Service Enabler Architecture Layer for Verticals Phase 2 | SEAL aspects of Edge Enabler Layer (SA6) |
| 980044 | CT aspects of Enhanced Service Enabler Architecture Layer for Verticals Phase 2 | Protocol aspects of SEAL Notification Management Service (CT1). |

Dependency on non-3GPP (draft) specification: None

# 3 Justification

A substantial justification appears in the work item description for the parent feature (EDGEAPP\_Ph2, Unique ID: 970040) and applies to this building block work item description as well.

The EDGEAPP\_Ph2 WID in SA6, specifies the application layer architecture, procedures and information flows necessary for enabling deployment of edge applications over 3GPP networks. The EDGEAPP\_Ph2 work is captured in Release 18 3GPP TS 23.558, TS 23.222 and TS 23.434. The Stage-2 normative work specified in 3GPP TS 23.558 has impacts to the Stage-3 protocol aspects and related APIs that need to be specified in CT WGs.

CT WGs need to define protocol aspects of the architecture for enabling edge applications, usage of SEAL services and related APIs based on normative stage 2 specification developed by 3GPP SA6 WG.

CT WGs also need to define protocol aspects of the security solutions related to architecture for enabling edge applications to be developed by 3GPP SA3 WG.

# 4 Objective

To define the protocol aspects and related APIs for enabling edge applications based upon the normative Stage 2 technical specifications developed by SA6 WG.

For CT1, based on normative stage-2 work developed in 3GPP TS 23.558, the expected work includes (additional CT WGs impacts areas will be identified based on the progress of the normative stage 2 in SA6):

1. Stage 3 for EDGE-1, EDGE-4 and EDGE-5 reference points;
2. Usage of SEAL services (e.g. Notification Management Service).

NOTE: EDGE-5 implementation may be realized using AT commands or other mechanism.

For CT3, based on Rel-18 normative stage-2 work developed in 3GPP TS 23.558, TS 23.222 and TS 23.434, the expected work includes:

1. APIs for EDGE-3, EDGE-6, EDGE-9 and EDGE-10 reference points;
2. CAPIF enhancements for alignment of any northbound API definitions (e.g. EAS Service API enablement).
3. Usage of SEAL services (e.g. Notification Management Service).

NOTE: WID Objectives and Expected Output can be updated based on Stage-2 progress.

# 5 Expected Output and Time scale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| New specifications {One line per specification. Create/delete lines as needed} | | | | | |
| Type | TS/TR number | Title | For info  at TSG# | For approval at TSG# | Rapporteur |
|  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Impacted existing TS/TR {One line per specification. Create/delete lines as needed} | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| 24.558 | Enabling Edge Applications; Protocol specification. | TSG CT#102 (December 2023) | CT1 |
| 27.007 | Enhancements to EDGE-5 interface; AT command set for User Equipment (UE) | TSG CT#102 (December 2023) | CT1 |
| 29.558 | Enhancements to Enabling Edge Applications; Application Programming Interface (API) specification; Stage 3. | TSG CT#102 (December 2023) | CT3 |
| 29.222 | Enhancements related to alignment of any northbound API definitions (e.g. EAS Service API enablement) with CAPIF. | TSG CT#102 (December 2023) | CT3 |

# 6 Work item Rapporteur(s)

Narendranath Durga Tangudu (n.tangudu@samsung.com)

# 7 Work item leadership

CT3

# 8 Aspects that involve other WGs

SA3 for security aspects.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Samsung |
| Apple |
| NTT |
| Convida Wireless |
| CATT |
| Ericsson |
| Nokia |
| Nokia Shanghai Bell |
| Intel |
| Verizon |
| AT&T |
| Huawei |
| Lenovo |
| InterDigital |