**3GPP TSG-CT WG3 Meeting #121-eC3-222082**

**E-Meeting, 6th – 12th April 2022**

**3GPP TSG-CT WG1 Meeting #135eC1-222701**

**E-Meeting, 6th – 12th April 2022**

**3GPP TSG-CT WG4 Meeting #109-eC4-222294**

**E-Meeting, 6th – 12th April 2022**

(revision of CP-220061)

**Source: Huawei, Ericsson**

**Title: Revised WID on CT aspects for enabling Edge Applications**

**Document for: Approval**

**Agenda Item: 17.1.1**

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

## Acronym: EDGEAPP

## Unique identifier: 900006

Potential target Release: Rel-17

## 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 | SA6 | 860006 | Architecture for enabling Edge Applications |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work Items (if any) |
| Unique ID | Title | Nature of relationship |
| 870029 | Study on enhancements of edge computing management | OAM aspects of Edge Computing (SA5). |
| 880030 | Study on charging aspects of Edge Computing | Charging aspects of Edge Computing (SA5) |
| 880002 | Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC | Security aspects of Edge Computing (SA3) |

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

## 3 Justification

A substantial justification appears in the work item description for the parent feature (EDGEAPP, Unique ID: 860006) and applies to this building block work item description as well.

The EDGEAPP WID in SA6, specifies the application layer architecture, procedures and information flows necessary for enabling deployment of edge applications over 3GPP networks. The EDGEAPP work is captured in release 17 3GPP TS 23.558 and TS 23.222. The normative work specified in 3GPP TS 23.558 has impacts to the stage-3 protocol aspects and related APIs of EDGEAPP need to be specified in CT WGs.

CT WGs need to define protocol aspects of the architecture for enabling edge applications 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, SA5 and SA3 WGs.

For CT1, based on normative stage-2 work developed in 3GPP TS 23.558, the expected work includes:

* Stage 3 for EDGE-1 and EDGE-4 reference point;

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

- CAPIF enhancement for enabling Edge Applications;

- APIs for EDGE-3, EDGE-6, and EDGE-9 reference points.

- AF specific UE ID retrieval based on TS 23.502 requirements.

And based on normative stage-2 work developed in 3GPP TS 33.558 and 3GPP TS 23.558 on user’s consent, the expected work also includes:

- Impacts to support user consent procedures upon EES or NEF acts as the consent enforcing entity.

NOTE 1: Definition of EDGE-5 reference point is out of Rel-17 scope as per 3GPP TS 23.558.

## 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 |
| *TS* | *24.558* | *Enabling Edge Applications; Protocol specification* | TSG CT#94-e (December 2021) | TSG CT#96 (June 2022) | WG CT1Rapporteur:Sapan Shah (Samsung) sapan.shah@samsung.com |
| *TS* | *29.558* | *Enabling Edge Applications; Application Programming Interface (API) specification; Stage 3* | TSG CT#93-e (September 2021) | TSG CT#96 (June 2022) | WG CT3Rapporteur:Narendranath Durga Tangudu (Samsung) n.tangudu@samsung.com |

|  |
| --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| 29.222 | Enhancements for enabling Edge Applications. | TSG CT#95 (June 2022) | CT3 |
| 29.122 | Enhancement for enabling Edge Applications. | TSG CT#96e (June 2022) | CT3 |
| 29.522 | Enhancement for enabling Edge Applications. | TSG CT#96e (June 2022) | CT3 |

NOTE 2: SA6 TS 23.558 contains EN which may require changes to TS 24.501 or TS 27.007. Based on the resolution the EN or any other normative stage#2 requirement, update of the work item to include TS 24.501 or TS 27.007 will be considered.

## 6 Work item Rapporteur(s)

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

## 7 Work item leadership

CT3

## 8 Aspects that involve other WGs

The parent feature has linkage to ongoing studies in SA3 and SA5. When normative work progress for these studies, this WID must be evaluated for possible aspects.

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Samsung |
| AT&T |
| Airbus |
| Alibaba |
| Convida Wireless |
| Intel |
| InterDigital  |
| KDDI |
| Lenovo |
| Matrixx |
| Motorola Mobility  |
| Qualcomm Incorporated |
| Softil |
| Vodafone |
| ZTE |
| Kontron Transportation France |
| ASUSTek |
| China Telecom |
| SK Telecom |
| LG Electronics |
| MediaTek Inc. |
| CATT |
| Apple |
| China Mobile |
| ENENSYS |
| Deutsche Telekom |
| Charter Communications |
| Verizon |
| Ericsson |
| Huawei |
| NTT |