**3GPP TSG-SA3 Meeting #119 *S3-245342-r1***

**Orlando, US 11 - 15 November 2024** Revision of *S3-244782*

**Source: China Unicom, Huawei, HiSilicon**

**Title: New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3**

**Document for: Approval**

**Agenda Item: 6**

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: New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3

Acronym: EDGE\_Ph3

Unique identifier: TBD

Potential target Release: Rel-19

# 1 Impacts

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

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
|  | Study  |
|  | Normative – Stage 1 |
| X | Normative – Stage 2 |
|  | Normative – Stage 3 |
|  | Normative – Other\* |

**\* Other = e.g. testing**

## 2.2 Parent Work Item

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|  |
| --- |
| Parent Work / Study Items  |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| FS\_EDGE\_Ph3 | SA3 | 1030036 | Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3 |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
| 1040036 | Enhancement of support for Edge Computing in 5G Core network - Phase 3(eEDGE\_5GC\_Ph3)  | Rel-19 WID for Edge Computing Phase 3 (SA2) |
| 1010007 | Architecture for enabling Edge Applications Phase 3 (EDGEAPP\_Ph3) | Rel-19 WID for enabling Edge Applications (SA6) |

**Dependency on non-3GPP (draft) specification:**

None

# 3 Justification

SA2 has finalized the study item and started the normative work on Enhancement of support for Edge Computing in 5G Core network - Phase 3 (eEDGE\_5GC\_Ph3). In SA3’s FS\_EDGE\_Ph3 study item, the key issue on security aspects related to enhancements of EAS and local UPF (re)selection is concluded. Normative works are needed to be specified in order to support the work taken by SA2.

SA6 is about to finalize the normative work on enabling Edge Applications Phase 3 (EDGEAPP\_Ph3). SA3’s FS\_EDGE\_Ph3 study item has progressed with a key issue on secure retrieval of 5G system Ids and privacy related information based on SA6 architecture, which is now concluded.

Therefore, it is proposed to start the normative work via this WID.

# 4 Objective

The objective of the work item is to specify the security aspects of enabling Edge Computing in 5GC concluded in TR 33.749. The security aspects to be specified include following:

- Normative security requirements on the protocol used for N6 delay management protection in TS 33.501.

- Normative secure retrieval of 5G system Ids requirement based on short-lived security information, and informative Annex for the corresponding potential mechanisms in TS 33.558.

TU estimates and dependencies

|  |  |  |
| --- | --- | --- |
| TU Estimate (Normative)  | RAN Dependency (Yes/No/Maybe)   | Inter Work Tasks Dependency   |
| 1 TU | No | No |

## TU estimates and dependencies

Total TU estimates: 1

# 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 |
| TS 33.501 | Normative sSecurity requirements on the protocol used for N6 delay management protection in TS 33.501. | SA#107March 2025 |  |
| TS 33.558 | Normative Ssecure retrieval of 5G system Ids requirement based on short-lived security information, and informative Annex for the corresponding potential mechanisms in TS 33.558 | SA#107March 2025 |  |

# 6 Work item Rapporteur(s)

TBD

# 7 Work item leadership

SA3

# 8 Aspects that involve other WGs

SA2 for system architecture, SA6 for EDGE application architecture

# 9 Supporting Individual Members

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| --- |
| Supporting IM name |
| China Unicom |
| Huawei |
| Hisilicon |
| CATT |
| NOKIA |
| NOKIA Shanghai Bell |
| Ericsson |
| Samsung |