**3GPP TSG-SA3 Meeting #105-e *S3-213920r3***

e-meeting, 8 - 19 November 2021 (revision of S3-yyxxxx)

**Source: Huawei, HiSilicon, Lenovo, Motorola Mobility, China Mobile, China Unicom, CATT, ZTE, CAICT**

**Title: New WID on enhanced security for Phase 2 network slicing**

**Document for: Approval**

**Agenda Item: 4.25**

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: enhanced security for Phase 2 network slicing

Acronym: eNS2\_SEC

Unique identifier: TBD

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 …

|  |  |
| --- | --- |
| X | Feature |
|  | 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) |
| FS\_eNS2\_SEC | SA3 | 910023 | Study on enhanced security for network slicing Phase 2 |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work /Study Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 900032 | Enhancement of Network Slicing Phase 2 | SA2 Stage-2 normative work |
| 911007 | Enhancement of RAN slicing for NR | RAN2/3 normative work |

# 3 Justification

System enhancements with new features and procedures to support parameters of GST (Generic Slice Template) are being specified in TS23.501, TS23.502, and TS23.503. In the meantime, RAN procedures for slice-based cell (re)selection is being specified to update TS38.300, TS38.331, TS38.321, TS38.304, or TS38.306.

The potential security risks or privacy concerns with respect to the above works have been studied and documented in TR33.874. There is a need to convert the agreed security requirements and solutions in the study into normative text for TS33.501.

# 4 Objective

The objective of this work item is to specify security requirements and enhancements to address the security risks or privacy concerns as agreed and documented in TR33.874. Specifically,

* Define security enhancements and security services to allow only authenticated and authorized AFs to access network slice information in 3GPP systems.

# 5 Expected Output and Time scale

|  |  |  |  |
| --- | --- | --- | --- |
| 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 | Security enhancements of network slicing phase 2 | TSG#95 March 2022 | Zander Lei, Huawei, lei.zhongding@huawei.com |
|  |  |  |  |

# 6 Work item Rapporteur(s)

Lei, Zander, Huawei, lei.zhongding@huawei.com

# 7 Work item leadership

SA3

# 8 Aspects that involve other WGs

None

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Huawei |
| HiSilicon |
| Lenovo |
| Motorola Mobility |
| China Mobile |
| China Unicom |
| CATT |
| ZTE |
| CAICT |