3GPP TSG|WG-3 Meeting #105-e draft\_S3-213976-r1

Electronic meeting, 08 – 19 November 2021

**Source: LG Electronics**

**Title: New WID on Security Aspects of Minimization of Service Interruption (MINT)**

**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: Security Aspects of Minimization of Service Interruption (MINT)

Acronym: MINT

Unique identifier: *{A number to be provided by MCC at the plenary}*

Potential target Release: Rel-17

# 1 Impacts

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

# 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) |
| MINT | SA WG1 | 850036 | Stage 1 of MINT |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work /Study Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 830018 | Study on MINT | Rel-17 Stage 1 study on MINT (SA1) |
| 900004 | Study on the CT aspects of Support for Minimization of service Interruption | Rel-17 Stage 2 study on MINT (CT1) |
| 920062 | Minimization of Service Interruption | Rel-17 Stage 2 of MINT |
| 930003 | CT aspects of MINT | Rel-17 Stage 3 of MINT |

# 3 Justification

CT1 has finalized the stage 2 study on MINT in TR 24.811, and SA2 is in the progress of their stage 2 normative work.

While SA2 is developing the specifications, it was identified that there is at least one security aspect that needs to be addressed by SA3 on whether the Disaster Roaming service indication is needed during the authentication procedure.

Thus, this WID aims at specifying the normative work on the security aspects of the MINT architecture.

# 4 Objective

The objective of this work is to specify the security related normative specification under SA3 control for supporting MINT feature based on CT1 and SA2 works.

Based on the conclusion of TR 24.811, and CRs against TS 23.501 and TS 23.502, the following issues have been identified to be addressed in SA3 work:

* Specify how the AUSF and the UDM can be notified about a Disaster Condition via OAM configuration
* Specify how the indication for a Disaster Condition is delivered from the AMF/SEAF to AUSF and the AUSF forwards it to UDM for authentication of the UE during the authentication procedure.

NOTE: The use of the indication can be removed from the objective based on SA2 decision.

# 5 Expected Output and Time scale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| New specifications | | | | | |
| Type | TS/TR number | Title | For info  at TSG# | For approval at TSG# | Rapporteur |
|  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Impacted existing TS/TR | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| TS 33.501 | Updating the authentication procedure for MINT | SA#94  (Dec. 2021) |  |

# 6 Work item Rapporteur(s)

Dongjoo Kim, LG Electronics, [dongjoo7.kim@lge.com](mailto:dongjoo7.kim@lge.com)

# 7 Work item leadership

SA3

# 8 Aspects that involve other WGs

Any system architecture aspects are to be addressed in SA2,

Any stage 3 aspects are to be addressed in CT WGs,

Any RAN aspects are to be addressed in RAN WGs.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| LG Electronics |
| LG Uplus |
| KT Corp |
| SK Telecom |
| Apple |
|  |