**3GPP TSG-SA3 Meeting #119 draft\_S3-245323-r3**

**Orlando, US 11 – 15 November 2024** **(revision of S3-24xxxx)**

**Source: Samsung**

**Title: New WID on** **security aspects of 5G Mobile Metaverse services**

**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 5G Mobile Metaverse services

Acronym: Metaverse\_Sec

Unique identifier:

Potential target Release: Rel-19

# 1 Impacts

{For Normative work, identify the anticipated impacts. For a Study, identify the scope of the study}

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

For a brand-new topic, use “N/A” in the table below. Otherwise indicate the parent Work Item.

|  |
| --- |
| Parent Work / Study Items  |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| NA | NA | NA | NA |

### 2.3 Other related Work Items and dependencies

{List here other Work Items which relate to the proposed one, such as a Work Item in an earlier Release if further enhancing the feature from the previous Release)}

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
| 1000028 | Mobile Metaverse Services | Related stage-1 Rel-19 3GPP SA1 work item |
| 1020052 | Study on application enablement for Localized Mobile Metaverse Services | Related stage-2 Rel-19 3GPP SA6 study item |
| 1040076 | Application enablement for mobile metaverse services | Related stage-2 Rel-19 3GPP SA6 work item |

# 3 Justification

SA3 studied the security of security aspects of 5G Mobile Metaverse services as part of TR 33.721. The key issues studied were as follows:

 (1) Key issue #1: Authorization supporting spatial localization service

 (2) Key issue #2: Privacy of user sensitive information

This work item is proposed for normative work of this study based on the conclusions captured in TR 33.721 for the above-mentioned key issues.

# 4 Objective

The objective of this work item is to specify security aspects of mobile metaverse services based on the conclusions in TR 33.721:

WT1: Authorization procedure for consumer of spatial localization service.

WT2: Privacy protection of user sensitive information during exposure of user specific information (e.g. user identity, user location) in localized mobile metaverse services through the application enabler layer.

# 5 Expected Output and Time scale

***{If this WID covers both stage 2 and stage 3, clearly indicate the different completion dates.}***

|  |
| --- |
| 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 33.434 | New clause for mobile metaverse services and detail the requirements and utilization of existing procedure of SEAL and CAPIF for concluded key issue 1 and key issue 2 in TR 33.721. | TSG#107, March 2025 |  |

# 6 Work item Rapporteur(s)

Rohini Rajendran, r.rohini@samsung.com , Lihui Xiong, xionglihui@oppo.com

# 7 Work item leadership

SA3

# 8 Aspects that involve other WGs

SA6 for the application specific procedures.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Samsung |
| OPPO |
| Xiaomi |
| Nokia |
| Nokia Shanghai Bell |
|  |