**3GPP TSG-SA3 Meeting #120 S3-251166**

Athens, Greece, 17 - 21 February 2025

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| *CR-Form-v12.1* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **33.434** | **CR** |  ***draft***  | **rev** | **-** | **Current version:** | **18.2.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

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|  |
| ***Title:***  | Living document on Metaverse\_Sec |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | S3 |
|  |  |
| ***Work item code:*** | Metaverse\_Sec  |  | ***Date:*** | 2025-02-21 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-19 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | This draftCR is proposed to specify security for metaverse services. |
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| ***Summary of change:*** | New clauses in TS 33.434 to be added to introduce security aspects for metaverse services. |
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| ***Consequences if not approved:*** | There will not be any reference on security for metaverse services. |
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| ***Clauses affected:*** |  6(new), 6.X(new), 6.Y(new), 6.Z(new) |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

# 6 Security procedures for mobile metaverse services

## 6.X Authentication and authorization for spatial localization services

## 6.x.a Authentication and authorization for spatial localization services when CAPIF is used

When CAPIF is used as specified in TS 23.434 [2], the security mechanism for CAPIF specified in TS 33.122 [29] is referred to protect interfaces between spatial anchors client and spatial anchors server specified in TS 23.437 [x], between VAL server and spatial anchors server, between spatial map client and spatial map server specified in TS 23.437 [x], VAL server and spatial map server. Spatial anchors client, spatial map client and VAL server take role of API Invoker in CAPIF. Spatial anchors server and spatial map server take role of AEF in CAPIF.

NOTE: If Resource owner-aware northbound API access is required, Authentication and authorization for RNAA specified in clause 6.5.3 of TS 33.122 [29] are followed to protect the interfaces. Otherwise, Authentication and authorization specified in clause 6.5.2 of TS 33.122 [29] shall be followed to protect the interfaces.

Editor’s Note: Authorization on service operation level and resource level granularity is to be aligned with CAPIF\_Ph3-Sec.

## 6.x.b Authentication and authorization for spatial localization services when CAPIF is not used

When CAPIF is not used, in order to gain access to SEAL spatial localization services, the spatial anchors (SAn)/spatial map (SM) client shall present an access token to the SAn/SM server for each spatial localization service of interest. If the access token is valid, then the SAn/SM client shall be granted to use the service.

Editor’s Note: How the SAn/SM client gets access token is FFS.

\* \* \* Next Change \* \* \* \*

## 6.Y Authentication and authorization for digital asset services

Editor’s Note: This clause will be updated to define procedure for authentication and authorization for digital asset services.

\* \* \* Next Change \* \* \* \*

## 6.Z Privacy protection for user information exposure

Editor’s Note: This clause will be updated to define procedure for privacy protection of user information.

\* \* \* End of Changes \* \* \* \*