**3GPP TSG-SA3 Meeting #116 *S3-241784***

**Jeju, Korea (Republic Of), 20th May 2024 - 24th May 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.501** | **CR** | **1979** | **rev** | **-** | **Current version:** | **18.5.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Addition of UDR security requirements | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | BSI (DE) | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2024-05-13 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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 can be 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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This UDM can use its own storage for the subscription data, or it can use the UDR for this purpose. In the latter case, it is important that the security requirements of the UDR are clearly defined, since the UDR contains the security sensitive information, such as the permanent subscriber information, but also the sequence numbers.  While the requirements for the UDM are described in the AKA product description (clause 6.1.3 in 33.501), it is important that these requirements also apply to the UDR. In other words, the UDR must inherit the requirements of the UDM, otherwise the UDR becomes the weak link.  TS23.501 (clause 6.2.11) partially defines the requirements of the UDR, but only from a functional perspective. It is important that we also define them from a security functional perspective for threat modeling and implementation references. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add security requirements of the UDR. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Vendors may overlook the importance of the security requirements for UDR and implement the UDR interfaces incorrectly, resulting in faulty implementations that undermine network security. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\*\*\* START OF 1st CHANGE \*\*\*\*\*\*\*\*\*\*

## 5.8a Requirements on AUSF

The Authentication server function (AUSF) shall handle authentication requests for both, 3GPP access and non-3GPP access.

The AUSF shall provide SUPI to the VPLMN only after authentication confirmation if authentication request with SUCI was sent by VPLMN.

The AUSF shall inform the UDM that a successful or unsuccessful authentication of a subscriber has occurred.

## 5.8b Requirements on the UDR

The UDR shall prevent unauthorized access to the stored UE authentication data.

Only the UDM shall be able to update the security related information in the UDR, such as the SQN for resynchronization.

NOTE: The requirements stated only apply in the case where UDR and UDM are implemented as separate network functions (non-colocated).

\*\*\*\*\*\*\*\*\*\* END OF CHANGE \*\*\*\*\*\*\*\*\*\*