**3GPP TSG-SA3 Meeting #107-e *S3-220915***

**e-meeting, 16 - 20 May 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **1383** | **rev** | - | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HELP***](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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2022-05-09 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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)* | |
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| ***Reason for change:*** | | In the case of onboarding using DCS where the DCS uses AAA Server for primary authentication, UDM interaction shall be omitted according to the current specification. This also means that SUCI de-concealment is not possible by UDM. The AAA which is a non-3gpp entity cannot be expected to implement 3gpp SUCI privacy mechanisms. Instead SUCI null scheme must be used. If SUPI privacy is needed, then anonymous SUCI can be used. | | | | | | | | |
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| ***Summary of change:*** | | Clarifying in Annex I.9.2.3 that SUCI null scheme shall be used for onboarding. If SUPI privacy is needed, anonymous SUCI may be used. | | | | | | | | |
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| ***Consequences if not approved:*** | | Incomplete specification | | | | | | | | |
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| ***Clauses affected:*** | | Annex I.9.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \*\*\*\*\*\*\*\*\*\*\*\*

### I.9.2.3 Primary authentication using DCS

When the primary authentication is performed between the UE and the DCS, the authentication requirements and procedures defined in clause I.2 for Credential Holder shall apply with the DCS taking the role of the Credentials Holder. When the DCS uses AAA Server for primary authentication, AUSF directly selects the NSSAAF as specified in 23.501 [2]. In this case, the UDM is not involved in the procedure defined in clause I.2.2.2.2, steps 3 to 5 shall be skipped. The UE shall use Onboarding SUPI and Onboarding SUCI as specified in 24.501 [35] for the primary authentication with DCS, where in the procedure defined in clause I.2.2.2.2, the Onboarding SUCI will be used in steps 1, 2, 6, 7 and Onboarding SUPI will be used in steps 9, 10 and 12 respectively.

NOTE x: Since there is no UDM interaction when DCS uses AAA Server for primary authentication, only the null scheme in clause 6.12 can be used for Onboarding SUCI calculation. If SUPI privacy is needed during onboarding, based on default credentials configuration the UE can create an Onboarding SUCI with any of the following as the user name such as (i) Omitting username part, (ii) constant string ‘anonymous’ or (iii) a ‘digital identifier’ which can be random digits for anonymity and privacy protection.

The choice of primary authentication method used between the UE and the DCS is left to the decision of the DCS.

When the primary authentication is performed between the UE and the DCS via the AUSF using EAP-TTLS, Annex U can be used.

## \*\*\*\*\*\*\* END OF CHANGES \*\*\*\*\*\*\*\*\*\*\*\*