**3GPP TSG-SA3 Meeting #100e *S3-201867-r1***

**e-meeting, 17 -28 August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.501** | **CR** | **0920** | **rev** |  | **Current version:** | **15.9.0** |  |
|  | | | | | | | | |
| *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:*** | Clarification on AMF reallocation with direct NAS reroute | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Hisilicon | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GS\_Ph1-SEC | | | | |  | ***Date:*** | | | 2020-07-16 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-15 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Current description in clause 6.9.6 states that the target AMF shall use the received security context if target AMF does not receive the indication keyAmfHDerivationInd.  Although it may not necessarily create confusion to the SA3 group, it is unclear to non SA3 where target AMF gets the security context and keyAmfHDerivationInd. This contribution adds here brief description on how the target AMF gets the security context and keyAmfHDerivationInd based on 6.9.3 in 33.501. | | | | | | | | |
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| ***Summary of change:*** | | Adding brief description on how target AMF gets security context and the indication keyAmfHDerivationInd. | | | | | | | | |
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| ***Consequences if not approved:*** | | Unclear specification for non SA3 group to follow | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.9.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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### 6.9.6 Security handling in registration with AMF reallocation via direct NAS reroute

In registration with AMF reallocation via direct NAS reroute, the initial AMF shall use its local policy to determine whether to perform horizontal KAMF derivation on current KAMF. As described in Clause 6.9.3, if the initial AMF decides not to change KAMF, the initial AMF shall send the current security context to the target AMF; otherwise, the initial AMF shall derive new security context and send to the target AMF the derived security context and the indication of horizontal KAMF derivation (i.e., keyAmfHDerivationInd).

If the target AMF receives the indication of horizontal KAMF derivation (i.e., keyAmfHDerivationInd) from the initial AMF, it shall initiate NAS SMC. If the target AMF does not receive keyAmfHDerivationInd, the target AMF shall use the received security context and send protected NAS message including protected authentication request message if the target AMF decides to perform authentication.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of Change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*