**3GPP TSG-CT WG1 Meeting #136-eC1-22XXXX**

**E-Meeting, 12th – 20th May 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.501** | **CR** | **4278** | **rev** | **1** | **Current version:** | **17.6.1** |  |
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| *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 | **x** | Radio Access Network |  | Core Network | **x** |

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| ***Title:***  | Payload type in general 5GSM service-level AA procedure |
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| ***Source to WG:*** | Huawei, HiSilicon, Qualcomm Incorporated |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | ID\_UAS |  | ***Date:*** | 2022-05-05 |
|  |  |  |  |  |
| ***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 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:*** | About adding the service-level-AA payload type information in the general 5GSM service-level AA procedure, the disc paper C1-223483 has provided following observations:**Observation #1. To introduce the service-level-AA payload type together with the service-level-AA payload in the Service-level-AA container IE is to provide a future-proof mechanism to accommodate future vertical services.****Observation #2. To introduce the service-level-AA payload type together with the service-level-AA payload in the Service-level-AA container IE is applicable to all 5GSM procedures including the general 5GSM service-level AA procedure.****Observation #3. In multiple valid scenarios (including the first AA purpose during the PDU session establishment, re-AA after a PDU session established, single service-level AA procedure initiated for one service or two service-level AA procedures initiated for two services), both the SMF and the UE cannot know the ongoing service-level AA procedure(s) is for which services and then how to forward the received service-level-AA payload.****Observation #4. There is no forward compatability issue for the SMF to set the service-level-AA payload type information together with its associated service-level-AA payload information in the 5GSM service-level AA procedure.**Based on the discussion and above observations, following proposals were provided:**Proposal #1: It proposes to provide the service-level-AA payload type information together with its associated service-level-AA payload information during the 5GSM service-level AA procedure as other 5GSM procedures done.****Proposal #2: It proposes the SMF and the UE NAS to set the service-level-AA payload type information for its associated service-level-AA payload information during the 5GSM service-level AA procedure as other 5GSM procedures done.** |
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| ***Summary of change:*** | It proposes to specify that in case of UUAA, the network and the UE may also set the service-level-AA payload type information duing the 5GSM service-level AA procedure. |
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| ***Consequences if not approved:*** | In case of UUAA, the service-level-AA payload type information is missing in the 5GSM service-level AA procedure. |
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| ***Clauses affected:*** | 6.3.1A.2, 6.3.1A.3 |
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|  | **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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

#### 6.3.1A.2 Service-level authentication and authorization procedure initiation

In order to initiate the service-level authentication and authorization procedure, the SMF shall create a SERVICE-LEVEL AUTHENTICATION COMMAND message.

The SMF shall set the PTI IE of the SERVICE-LEVEL AUTHENTICATION COMMAND message to "No procedure transaction identity assigned".

The SMF shall set the Service-level-AA payload IE in the Service-level-AA container IE of the SERVICE-LEVEL AUTHENTICATION COMMAND message to the service-level-AA payload provided by the DN via the NEF. In case of UUAA, the SMF may also set the service-level-AA payload type in the Service-level-AA container IE of the SERVICE-LEVEL AUTHENTICATION COMMAND message to "UUAA payload".

NOTE : In case of UUAA, the service-level-AA payload is provided by the DN via the UAS-NF.

The SMF shall send the SERVICE-LEVEL AUTHENTICATION COMMAND message, and the SMF shall start timer T3xyz (see example in figure 6.3.1A.1-1).

Editor's Note: T3xyz will be further specified.

Upon receipt of a SERVICE-LEVEL AUTHENTICATION COMMAND message and a PDU session ID, using the NAS transport procedure as specified in subclause 5.4.5, the UE passes to the upper layers the service-level-AA container contents of the Service-level-AA container IE of the SERVICE-LEVEL AUTHENTICATION COMMAND message. Apart from this action, the service-level authentication and authorization procedure initiated by the DN is transparent to the 5GSM layer of the UE.

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

#### 6.3.1A.3 Service-level authentication and authorization procedure accepted by the UE

When the upper layers provide a service-level-AA payload, the UE shall create a SERVICE-LEVEL AUTHENTICATION COMPLETE message and set the Service-level-AA payload IE of the Service-level-AA container IE to the service-level-AA payload received from the upper layers. In case of UUAA, the UE may also set the service-level-AA payload type in the Service-level-AA container IE of the SERVICE-LEVEL AUTHENTICATION COMPLETE message to "UUAA payload".

The UE shall transport the SERVICE-LEVEL AUTHENTICATION COMPLETE message and the PDU session ID, using the NAS transport procedure as specified in subclause 5.4.5. Apart from this action, the service-level authentication and authorization procedure initiated by the DN is transparent to the 5GSM layer of the UE.

Upon receipt of a SERVICE-LEVEL AUTHENTICATION COMPLETE message, the SMF shall stop timer T3xyz and provides the service-level-AA payload received in the Service-level-AA container IE of the SERVICE-LEVEL AUTHENTICATION COMPLETE message to the DN.

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