**3GPP TSG-SA3 Meeting #100e *S3-201799-r1***

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

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.501** | **CR** | **0904** | **rev** | **1** | **Current version:** | **16.3.0** |  |
|  | | | | | | | | |
| *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 | **x** |

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|  | | | | | | | | | | |
| ***Title:*** | Overview clause on communication models and related security | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_eSBA | | | | |  | ***Date:*** | | | 7.8.2020 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | The clause provides many options and refers to the different communication models. An introductionary overview clause is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding an introductionary clause and related figure reflecting the security related authroization part. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Complex clause that is difficult to read. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | Annex X (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:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\* START OF CHANGES

Annex X (informative):  
Authorization security aspects in communication models for NF/NF services interaction

TS 23.501 [2], Annex E, summarizes the different communication models that NF and NF services can use to interact with each other. For authorization, the security between NFs (model A), between NF and NRF (model B), i.e. the use case for direct communication with direct token request to the NRF, and last no least, with involvement of SCP for indirect communication (model C and D) need to be addressed. In model C, the SCP is optionally used to select a specific NF instance from a NF Set, while the discovery of the service to be routed via SCP is directly between NF and NRF. In model D, discovery and associated selection is delegated to the SCP.

Figure Y-1 provides an overview of the authorization aspects in the different models, as described in detail in clause 13.

Consumer

Producer

Service Request

Service Response

Implicit trust established either via TLS or NDS/IP or Physical Security

Consumer

Producer

NRF

Discovery

NF Profile(s)

Request Token

Authorize and Grant Access Token

Service Request

Service Response

Subsequent Request

Consumer

Producer

NRF

Discovery

NF Profile(s)

Request Token

Authorize and Grant Access Token

SCP

Service Request (with Access Token and \*CCA)

Service Request (with Access Token and \*CCA)

Response

Subsequent Request

Discovery (Optional)

Response

Consumer

Producer

NRF

SCP

Service Request (including \*CCA)

Service Request (with Access Token and \*CCA)

Response

Subsequent Request

Discovery

NF Profile(s)

Request Token

Authorizes and Grants Access Token

Response

Model A

Model B

Model C

Model D

**Figure Y-1: Illustration of authorization security aspects per deployment model**

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