**3GPP TSG-SA3 Meeting #103-e *S3-211757***

**e-meeting, 17 - 28 May 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2021-05-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Define a static local configuration process for OAuth2 client registration process.  Please check S3-211752 DP for more information. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update the clause 13.4.1.1.1 by defining a static local configuration process for the definition of the OAuth2 client registration process. | | | | | | | | |
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| ***Consequences if not approved:*** | | Inconsistent implementation and may cause interoperation problem. | | | | | | | | |
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| ***Clauses affected:*** | | 13.4.1.1.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

### \*\*\* BEGIN CHANGES \*\*\*

##### 13.4.1.1.1 OAuth 2.0 roles

OAuth 2.0 roles, as defined in clause 1.1 of RFC 6749 [43], are as follows:

a. The Network Repository Function (NRF) shall be the OAuth 2.0 Authorization server.

b. The NF Service Consumer shall be the OAuth 2.0 client.

c. The NF Service Producer shall be the OAuth 2.0 resource server.

**OAuth 2.0 client (NF Service Consumer) registration with the OAuth 2.0 authorization server (NRF)**

The NF Service registration procedure, as defined in clause 4.17.1 of TS 23.502 [8], and/or local configuration at the NRF may be used to register the OAuth 2.0 client (NF Service Consumer) with the OAuth 2.0 Authorization server (NRF). If the OAuth 2.0 client has not registered using the NF Service registration procedure, the OAuth 2.0 client shall be registered by local configuration at the NRF. The client id, used during OAuth 2.0 registration, shall be the NF Instance Id of the NF.

**OAuth 2.0 resource server (NF Service Producer) registration with the OAuth 2.0 authorization server (NRF)**

The NF Service registration procedure, as defined in clause 4.17.1 of TS 23.502 [8], shall be used to register the OAuth 2.0 resource server (NF Service Producer) with the OAuth 2.0 Authorization server (NRF). The NF Service Producer, as part of its NF profile, may include "additional scope" information related to the allowed service operations and resources per NF Service Consumer type.



Figure 13.4.1.1-1b NF Service Producer registers in NRF

1) The NF Service Producer registers as OAuth 2.0 resource server in the NRF. The NF profile configuration data of the NF Service Producer may include the "additional scope". The "additional scope" information indicates the resources and the actions (service operations) that are allowed on these resources for the NF Service Consumer. These resources may be per NF type of the NF Service Consumer or per NF instance ID of the NF Service Consumer.

2-3) After storing the NF Profile, NRF responds successfully.

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