**3GPP TSG-SA3 Meeting #103-e *S3-211753***

**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:*** |  |  | ***Release:*** |  |
|  | *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:*** | Misalignment on access token request requirement between TS 29.510 and 33.501.Please check S3-211752 DP for more information. |
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| ***Summary of change:*** | The NOTE in clause 13.3.1 is removed. Add normative text to clarify that the usage of Oauth2 in the NRF APIs (NFManagement and NFDiscovery) is optional. |
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| ***Consequences if not approved:*** | Inconsistent implementation and may cause interoperation problem. |
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| ***Clauses affected:*** | 13.3.1 |
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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 ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

### 13.3.1 Authentication and authorization between network functions and the NRF

NRF and NF shall authenticate each other during discovery, registration, and access token request. If the PLMN uses protection at the transport layer as described in clause 13.1, authentication provided by the transport layer protection solution shall be used for mutual authentication of the NRF and NF.

If the PLMN does not use protection at the transport layer, mutual authentication of NRF and NF may be implicit by NDS/IP or physical security (see clause 13.1).

When NRF receives message from unauthenticated NF, NRF shall support error handling, and may send back an error message. The same procedure shall be applied vice versa.

After successful authentication between NRF and NF, the NRF shall decide whether the NF is authorized to perform discovery and registration.

In the non-roaming scenario, the NRF authorizes the Nnrf\_NFDiscovery\_Request based on the profile of the expected NF/NF service and the type of the NF Service Consumer, as described in clause 4.17.4 of TS 23.502 [8].In the roaming scenario, the NRF of the NF Service Producer shall authorize the Nnrf\_NFDiscovery\_Request based on the profile of the expected NF/NF Service, the type of the NF Service Consumer and the serving network ID.

If the NRF finds NF Service Consumer is not allowed to discover the expected NF instances(s) as described in clause 4.17.4 of TS 23.502[8], NRF shall support error handling, and may send back an error message.

For authorization of the NF for the NFDiscovery and NFManagement services, use of OAuth 2.0 access token as described in clause 13.4.1 is not needed.

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