**3GPP TSG-SA3 Meeting #123** **draft\_S3-252940-r1**

Goteborg, Sweden, 25 – 29 August 2025 *revision of S3-252876*

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0115**  | **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 |
| ***Source to TSG:*** | S3 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2025-08-18 |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** | Rel-19 |
|  | *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)* |
|  |  |
| ***Reason for change:*** | Finer level granular authorization has been specified but it has not been reflected in token and token request profiles in Annex C. |
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| ***Summary of change:*** | Updating tables for token claims and access token request  |
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| ***Consequences if not approved:*** | Ambiguity in the specification about finer level granularity.  |
|  |  |
| ***Clauses affected:*** | Annex C.2.2, Annex C.3.2 |
|  |  |
|  | **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:*** |  |

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

## C.2.2 Token claims

The CAPIF ‘Method–3 - TLS with OAuth token’ access token or an access token used in RNAA shall convey the following claims as defined in IETF RFC 7519 [6] and IETF RFC 6749 [4].

Table C.2.2-1: Access token standard claims

|  |  |
| --- | --- |
| Parameter | Description |
| exp | REQUIRED. The expiration time of the access token. Implementers MAY provide for some small leeway, usually no more than a few minutes, to account for clock skew (not to exceed 30 seconds). |
| client\_id | REQUIRED. The identifier of the API Invoker making the API request as previously established with the CAPIF Core Function through onboarding. |
| scope | REQUIRED. A string containing a space-delimited list, comprising of the following as scopes associated with this token:- List of Services with the related service operation(s) and/or resource(s) per AEF as described in clause 6.12. |

The CAPIF OAuth 2.0 access token shall additionally convey the following claim for RNAA.

Table C.2.2-1: Access token customized claims

|  |  |
| --- | --- |
| Parameter | Description |
| resOwnerId  | OPTIONAL. Resource owner ID. |

The ‘exp’and ‘scope’ parameters of the access token shall be determined by the CAPIF core function based upon the client\_id of the API Invoker provided in the Access Token Request message.

The scope parameter ‘List of Services per AEF’ shall contain a full or partial list of services which the API Invoker is permitted to access at each AEF.

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

## C.3.2 Access token request

To obtain an access token, the API Invoker makes a request to the CAPIF Core Function by sending an Access Token Request message with the following parameters using the "application/x-www-form-urlencoded" format, with a character encoding of UTF-8 in the HTTP request entity-body. The access token request parameters are shown in table C.3.2-1.

Table C.3.2-1: Access token request message parameters

|  |  |
| --- | --- |
| Parameter | Values |
| grant\_type | REQUIRED. The value shall be set to "client\_credentials or “authorization\_code”". |
| client\_id | REQUIRED. The identifier of the API Invoker making the request. It shall match the value that was assigned to the API Invoker during the onboarding process. |
| client\_cred | OPTIONAL. The client credential that was provided to the API Invoker during the onboarding process. |
| Redirect\_uri | OPTIONAL. The value shall be identical with the value in authorization request once authorization code grant or PKCE is used. |
| code | OPTIONAL. The authorization code received from the CCF for RNAA once authorization code grant or PKCE is used. |
| code\_verifier | OPTIONAL. If the authorization code grant with PKCE flow is selected, the code verifier is used by the CCF to check the code\_challenge according to IETF RFC 7636 [11] once PKCE is used. |
| scope | OPTIONAL. A string containing a space-delimited list, comprising of the following as scopes associated with this token:- List of Services with the related service operation(s) and/or resource(s) per AEF as described in clause 6.12. |

If the token is used for RNAA (see clause 6.5.3), the parameter resOwnerID is used for the resource owner ID.

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| --- | --- |
| resOwnerID | OPTIONAL. Resource owner ID |

\* \* \* End of Changes \* \* \* \*