**3GPP TSG-SA3 Meeting #120 *S3-******xxxx***

**Athens, Greece 17 – 21 February 2025**

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| *CR-Form-v12.1* | | | | | | | | |
| **DRAFT CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **2** | **CR** | ***draft*** | **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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Resource owner authorization management for CAPIF\_Ph3\_Sec | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | China Telecom | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | CAPIF\_Ph3\_Sec | | | | |  | ***Date:*** | | | 2025-3-31 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***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 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:*** | | This draft CR propose to specify the Resource owner authorization revocation procedure in TS 33.122 based on the conclusion of KI #1.2 in TR 33.700-22. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Capture the security procedures for resource owner authorization revocation. | | | | | | | | |
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| ***Consequences if not approved:*** | | New CAPIF phase 3 features resource owner authorization will be unworkable. | | | | | | | | |
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| ***Clauses affected:*** | | 6.5.3.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 Change

#### 6.5.3.4 Revocation

Figure 6.5.3.4-1 illustrates the procedure for revoking API invoker authorization initiated by resource owner in RNAA scenarios.

Pre-conditions:

1. The API invoker is authenticated and authorized to use the service API.

2. The AEF in the CAPIF is configured with the access policy to be applied to the service API invocation corresponding to the API invoker and the service API.

API invoker

Resource owner function

CAPIF Core function

AEF

0. Mutual authentication have been completed.

1. Resource owner authorization revocation request

2. Identify the RNAA-related revoked token.

3. Revoke API invoker authorization request

4. Invalidate the authorization of API invoker for service API and resource

5. Revoke API invoker authorization response

6. Invalidate the authorization of API invoker for service API and resource

7b. Revoke API invoker authorization notify

7a. Resource owner authorization revocation respond

Figure 6.5.3.4-1: Procedure for revoking API invoker authorization initiated by resource owner

1. Mutual authentication between the authorization server and the resource owner is completed.
2. The resource owner function/UE sends resource owner authorization revocation request to the CCF. The resource owner authorization revocation information in request message includes the Resource Owner ID (e.g., GPSI), description about service API (e.g., service API name, location, QoS, list of services per AEF) and API invoker ID. It is assumed that resource owner/ROF/UE knows the API invoker ID.
3. The CCF determine the details of the resource owner ID, API invoker ID and the service API in the scope of the token based on the received resource owner authorization revocation information. The CCF uses the details (i.e., the resource owner ID, the API invoker ID, and the service API) to identify the RNAA-related token to be revoked.
4. The CCF can sends the resource owner Authorization Revocation Request message to the AEF as defined in clause 8.23.4 of TS 23.222 [3] with the RNAA-related token as identified in step 2.

NOTE: Token can be sent as described in RFC 7009.

1. AEF, storing the resource owner authorization revocation information about the RNAA-related revoked token, shall invalidates the API invoker authorization corresponding to the RNAA-related revoked token. The AEF shall check whether the token presented by an API invoker is revoked or not, before responding to the API invoker’s invocation request. The AEF may additionally determine whether to update the resource due to revocation, e.g., the API invoker is using the resource (i.e., QoS) that should be revoked after token revocation for the QoS service API, the AEF may inform PCF/SMF to modify the QoS level of corresponding PDU sessions after revocation.
2. The AEF sends a revoke API invoker authorization response to the CAPIF core function.
3. The CAPIF core function invalidates the API invoker authorization for the resource owner/UE corresponding to the service API and the Resource Owner ID (e.g., GPSI).

7a. The CCF sends a resource owner authorization revocation response as an acknowledgement to the ROF that the resource owner authorization has been revoked.

7b. The CCF provided notification message to the API invoker shall include the information to identify the RNAA-related revoked token.

End of Changes