**3GPP TSG-SA WG6 Meeting #46-e S6-212637**

**e-meeting, 15th – 23rd November 2021 (revision of S6-212413)**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **23.558** | **CR** | **0056** | **rev** | **2** | **Current version:** | **17.1.0** |  |
|  |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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|  |
| ***Title:***  | Adding DNN/S-NSSAI information in EAS profile |
|  |  |
| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | S6 |
|  |  |
| ***Work item code:*** | EDGEAPP |  | ***Date:*** | 2021-11-05 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-17 |
|  | *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:*** | Currently the specification only captured how to estabilish the connection with the EES. however there is no way for UE to establish the connection with the EAS. |
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| ***Summary of change:*** | Adding NOTE: UE use DNN/APN and S-NSSAI information to establish the connection with the EAS. |
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| ***Consequences if not approved:*** | In current specification there is no way to understand how UE can establish connection to EAS. |
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| ***Clauses affected:*** | 7.2.4 |
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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:*** |  |

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

##### 8.3.3.2.2 Request-response model

Figure 8.3.3.2.2-1 illustrates service provisioning procedure based on request/response model.

Pre-conditions:

1. The EEC has been pre-configured or has discovered the address (e.g. URI) of the ECS;

2. The EEC has been authorized to communicate with the ECS;

3. The UE Identifier is either preconfigured or resulted from a successful authorization; and

4. The ECS is configured with ECSP's policy for service provisioning.

NOTE 1: Details of ECSP's policy are out of scope.



Figure 8.3.3.2.2-1: Service provisioning – Request/Response

1. The EEC sends a service provisioning request to the ECS. The service provisioning request includes the security credentials of the EEC received during EEC authorization procedure and may include the UE identifier such as GPSI, connectivity information, UE location and AC profile(s) information.

2. Upon receiving the request, the ECS performs an authorization check to verify whether the EEC has authorization to perform the operation. The ECS may utilize the capabilities (e.g. UE location) of the 3GPP core network as specified in clause 8.10.2. If AC profile(s) are provided by the EEC, the ECS identifies the EES(s) based on the provided AC profile(s) and the UE location. When AC profiles(s) are not provided, then:

- if available, the ECS identifies the EES(s) based on the UE-specific service information at the ECS and the UE location;

- ECS identifies the EES(s) by applying the ECSP policy (e.g. based only on the UE location);

NOTE 2: Details of the UE-specific service information and how it is available at the ECS is out of scope.

NOTE 3: Both steps are evaluated prior to sending a response.

The ECS also determines other information that needs to be provisioned, e.g. identification of the EDN, EDN service area, EES endpoints.

3. If the processing of the request was successful, the ECS responds to the EEC's request with a service provisioning response which includes a list of EDN configuration information, e.g. identification of the EDN, EDN service area, and the required information (e.g. URI, IP address) for establishing a connection to the EES. . The EDN configuration information may be used for establishing a connection to EAS(s) discovered via EAS discovery procedure.

If the ECS is not provisioned with any EDN configuration information or is unable to determine the EES information using the inputs in service provisioning request, UE-specific service information at the ECS or the ECSP's policy, the ECS shall reject the service provisioning request and respond with an appropriate failure cause.

If the EDN configuration information includes an LADN DNN as an identifier for the EDN, the EEC considers the LADN as the EDN. Therefore, the service area of EDN is the LADN Service Area which can be discovered using the UE Registration Procedure.

The EEC may cache the service provisioning information (e.g. EES endpoint) for subsequent use and avoid the need to repeat step 1. If the Lifetime IE is included in the Service provisioning response, then the EEC may cache and reuse the Service provisioning information only for the duration specified by the Lifetime IE, without the need to repeat step 1.

If the ECS provided information regarding the service continuity support of individual EESs, the EEC may take this information into account when selecting an EES for EEC registration, EAS discovery or T-EAS discovery, respectively.

NOTE 4: If the service provisioning request fails, the EEC can resend the service provisioning request again, taking into account the received failure cause.

NOTE 5: Even after the EEC establishes a connection to the EES using information received in step 3, the EES can issue AF request to influence traffic routing from EEC to EES as specified in 3GPP TS 23.501 [2] clause 5.6.7.

\* \* \* End of Change \* \* \* \*