**3GPP SA3LI#91 *s3i230590***

**24-27 October 2023, Sydney (Australia)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** | **1** | **rev** | **1** | **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:*** | APN unavailability in SCEFUnsuccessfulProcedure record | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3-LI (Ericsson, Ministère Economie et Finances) | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 3 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***Release:*** | | | 8 |
|  | *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-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) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The SCEFUnsuccessfulProcedure record requires the APN as mandatory parameter. However, in some unsuccessful scenarios, e.g. in case the EPS Bearer Identity is invalid, SCEF can’t get any connection information/APN. | | | | | | | | |
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| ***Summary of change:*** | | In order to preserve backward compatibility, it is specified that If the APN is not available, the placeholder value ".unknown." shall be used. | | | | | | | | |
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| ***Consequences if not approved:*** | | In the mentioned case, it would not be possible to correctly report the related (x)IRI. | | | | | | | | |
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| ***Clauses affected:*** | | 7.8.2.1.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | s3i230517 | | | | | | | | |

\*\*\* FIRST MAIN DOCUMENT CHANGE \*\*\*

##### 7.8.2.1.5 Unsuccessful procedure

The IRI-POI in the SCEF/IWK-SCEF shall generate an xIRI containing an SCEFUnsuccessfulProcedure record when the IRI-POI present in the SCEF/IWK-SCEF detects an unsuccessful procedure or error condition for a target UE matching one of the target identifiers provided via LI\_X1.

Accordingly, the IRI-POI in the SCEF/IWK-SCEF generates the xIRI when any of the following events is detected (see TS 29.128 [62] clause 6.3.3 and TS 24.250 [61] clause 5.4.2.6):

- SCEF sends a T6a Connection Management Answer with Experimental-Result AVP set to DIAMETER\_ERROR\_USER\_UNKNOWN.

- SCEF sends a T6a Connection Management Answer with Experimental-Result AVP set to DIAMETER\_ERROR\_OPERATION\_NOT\_ALLOWED when Action AVP of the T6a Connection Management Request received by the SCEF is not set to CONNECTION\_ESTABLISHMENT, CONNECTION\_UPDATE or CONNECTION\_ RELEASE.

- SCEF sends a T6a Connection Management Answer with Experimental-Result AVP set to DIAMETER\_ERROR\_NIDD\_CONFIGURATION\_NOT\_AVAILABLE when Action AVP of the T6a Connection Management Request received by the SCEF is set to CONNECTION\_ESTABLISHMENT and the NIDD configuration for the target UE does not exist or fails at SCEF.

- SCEF sends a T6a Connection Management Answer with Experimental-Result AVP set to DIAMETER\_ERROR\_INVALID\_EPS\_BEARER when Action AVP of the T6a Connection Management Request received by the SCEF is set to CONNECTION\_UPDATE or CONNECTION\_RELEASE and the EPS Bearer Identity does not exist.

- SCEF returns a RDS MANAGE PORT Response to a UE with a "Status" field set to "Port not free" in response to a RDS MANAGE PORT command sent by UE with an "Action" field set to "Reserve port".

- SCEF receives a RDS MANAGE PORT Response from a UE with a "Status" field set to "Port not free" in response to a RDS MANAGE PORT command sent by SCEF with an "Action" field set to "Reserve port".

- SCEF returns a RDS MANAGE PORT Response to a UE with a "Status" field set to "Port not associated with specified application" in response to a RDS MANAGE PORT command sent by UE with an "Action" field set to "Release port".

- SCEF receives a RDS MANAGE PORT Response from a UE with a "Status" field set to "Port not associated with specified application" in response to a RDS MANAGE PORT command sent by SCEF with an "Action" field set to "Release port".

Table 7.8.2-4: SCEFUnsuccessfulProcedure record

|  |  |  |
| --- | --- | --- |
| Field name | Value | M/C/O |
| failureCause | Cause of unsuccessful procedure. | M |
| iMSI | IMSI associated with the Non-IP PDN Connection of the target UE (e.g. as provided by the MME in the associated Connection Management Request). | C |
| mSISDN | MSISDN associated with the PDN Connection if available. | C |
| iMEI | IMEI associated to the device if available. | C |
| externalIdentifier | External Identifier associated with the PDN Connection if available, defined as NAI in ASN.1. | C |
| ePSBearerID | Identity of the EPS bearer that MME allocated to the Non-IP PDN connection. | M |
| aPN | Access Point Name associated with the target traffic. Shall be given in dotted-label presentation format as described in TS 23.003 [19] clause 9.1 (see NOTE). | M |
| rDSDestionationPortNumber | RDS destination port number. | C |
| applicationID | Application identifier associated with the RDS port number. | C |
| sCSASID | SCS/AS Identifier. If the SCS/AS Idenitifer is not available, the placeholder value "Unknown" shall be used. | C |
| NOTE: If the APN is not available, the placeholder value ".unknown." shall be used. | | |

\*\*\* END OF MAIN DOCUMENT CHANGE \*\*\*