**3GPP SA3LI#91 *s3i230588***

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

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **9** | **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:***  | Missing PDU session ID/EPS bearer ID in xIRIs generated at the NEF/SCEF |
|  |  |
| ***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 canbe 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:*** | pDUSessionID parameter is missing in NEFPDUSessionModification record;ePSBearerID parameter is missing in SCEFPDNConnectionUpdate record. |
|  |  |
| ***Summary of change:*** | The parameters are added to the relevant (x)IRIs definition. |
|  |  |
| ***Consequences if not approved:*** | Missing relevant information to correctly recover session information at the MDF/LEMF.  |
|  |  |
| ***Clauses affected:*** | 7.7.2.1.3, 7.8.2.1.3, Annex A |
|  |  |
|  | **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:*** | Merge Request: [!210](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/210)Commit Hash:[97dc7779f7c899e78d69fd33b18d621c24792b15](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/210/diffs?commit_id=97dc7779f7c899e78d69fd33b18d621c24792b15) |
|  |  |
| ***This CR's revision history:*** | s3i230515 |

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

##### 7.7.2.1.3 PDU session modification

The IRI-POI in the NEF shall generate an xIRI containing an NEFPDUSessionModification record when the IRI-POI present in the NEF detects that an unstructured PDU session using NEF has been modified for the target UE. The IRI-POI present in the NEF shall generate the xIRI for the following events:

- NEF returns Nnef\_SMContext\_Update Response to SMF to confirm the modification of the connection between SMF and NEF (see TS 29.541 [57] clause 5.2.2.5).

- NEF returns a RDS MANAGE PORT Response to a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by UE with an "Action" field set to "Reserve port" to confirm the reservation of a combination of source and destination port numbers for use for a traffic to be sent by the UE to a specific application on an AF (see TS 24.250 [61] clause 5.4.2.6.2).

- NEF receives a RDS MANAGE PORT Response from a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by the NEF with an "Action" field set to "Reserve port” to confirm the reservation of a combination of source and destination port numbers for use for a traffic to be sent by an AF to a specific application on the UE (see TS 24.250 [61] clause 5.4.2.6.2).

- NEF returns a RDS MANAGE PORT Response to a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by UE with an "Action" field set to "Release port" to confirm the release of a combination of source and destination port numbers for an application on an AF (see TS 24.250 [61] clause 5.4.2.6.3).

- NEF receives a RDS MANAGE PORT Response from a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by the NEF with an "Action" field set to "Release port" to confirm the release of a combination of source and destination port numbers for an application on the UE (see TS 24.250 [61] clause 5.4.2.6.3).

Table 7.7.2-2: NEFPDUSessionModification record

|  |  |  |
| --- | --- | --- |
| Field name | Value | M/C/O |
| sUPI | SUPI associated with the PDU session | M |
| gPSI | GPSI associated with the PDU session | M |
| sNSSAI | Slice identifier associated with the PDU session | M |
| Initiator | Initiator of the modification of the PDU session, UE, SMF or NEF | M |
| rDSSourcePortNumber | RDS source port number | C |
| rDSDestinationPortNumber | RDS destination port number | C |
| applicationID | Application identifier on the UE or on the AF if RDS is used | C |
| aFID | Identifier of the AF if RDS is used | C |
| rDSAction | Action if RDS is used. Possible values: "ReservePort", "ReleasePort" | C |
| serializationFormat | Data format exchanged between UE and AF if RDS is used | C |
| pDUSessionID | PDU Session ID (see NOTE below) | M |
| NOTE: For the backward compatibility purposes the parameter is coded as OPTIONAL in the ASN.1 schema (Annex A). |

\*\*\* NEXT MAIN DOCUMENT CHANGE \*\*\*

##### 7.8.2.1.3 PDN connection update

The IRI-POI in the SCEF/IWK-SCEF shall generate an xIRI containing an SCEFPDNConnectionUpdate record when the IRI-POI present in the SCEF/IWK-SCF detects that a Non-IP PDN Connection has been updated for the target UE. The IRI-POI present in the SCEF/IWK-SCEF shall generate the xIRI for the following events:

- SCEF/IWK-SCEF sends a T6a/T6ai Connection Management Answer to confirm the T6a/T6ai Connection Management Request received with User-Identifier AVP including the set of identities of the UE, i.e. IMSI/MSISDN/External Identifier matching the target Identifier and with Connection-Action AVP set to CONNECTION\_UPDATE as described in TS 29.128 [62] clause 5.7.

- SCEF/IWK-SCEF receives a T6a/T6ai Connection Management Answer from MME which confirms the T6a/T6ai Connection Management Request sent by SCEF/IWK-SCEF with User-Identifier AVP including the set of identities of the UE, i.e. IMSI/MSISDN/External Identifier matching the target Identifier and with Connection-Action AVP set to CONNECTION\_UPDATE as described in TS 29.128 [62] clause 5.8.

- in roaming situation SCEF sends a T7 Connection Management Answer to IWK-SCEF to confirm the T7 Connection Management Request received with User-Identifier AVP including the set of identities of the UE, i.e. IMSI/MSISDN/External Identifier matching the target Identifier and with Connection-Action AVP set to CONNECTION\_UPDATE as described in TS 29.128 [62] clause 5.7.

- in roaming situation SCEF receives a T7 Connection Management Answer from IWK-SCEF which confirms the T7 Connection Management Request with User-Identifier AVP including the set of identities of the UE, i.e. IMSI/MSISDN/External Identifier matching the target Identifier and with Connection-Action AVP set to CONNECTION\_UPDATE as described in TS 29.128 [62] clause 5.8.

- SCEF returns a RDS MANAGE PORT Response to a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by UE with an "Action" field set to "Reserve port" to confirm the reservation of a combination of source and destination port numbers for use for a traffic to be sent by the UE to a specific application on an SCS/AS (see TS 24.250 [61] clause 5.4.2.6.2).

- SCEF receives a RDS MANAGE PORT Response from a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by the SCEF with an "Action" field set to "Reserve port" to confirm the reservation of a combination of source and destination port numbers for use for a traffic to be sent by an SCS/AS to a specific application on the UE (see TS 24.250 [61] clause 5.4.2.6.2).

- SCEF returns a RDS MANAGE PORT Response to a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by UE with an "Action" field set to "Release port" to confirm the release of a combination of source and destination port numbers for an application on an SCS/AS (see TS 24.250 [61] clause 5.4.2.6.3).

- SCEF receives a RDS MANAGE PORT Response from a UE with a "Status" field set to "Success" in response to a RDS MANAGE PORT command sent by the SCEF with an "Action" field set to "Release port" to confirm the release of a combination of source and destination port numbers for an application on the UE (see TS 24.250 [61] clause 5.4.2.6.3).

Table 7.8.2-2: SCEFPDNConnectionUpdate record

|  |  |  |
| --- | --- | --- |
| Field name | Value | M/C/O |
| 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 |
| externalIdentifier | External Identifier associated with the PDN Connection if available, defined as NAI in ASN.1. | C |
| initiator | Initiator of the modification of the PDN Connection, UE, MME or SCEF. | M |
| rDSSourcePortNumber | RDS source port number. | C |
| rDSDestinationPortNumber | RDS destination port number. | C |
| applicationID | Application identifier on the UE or on the SCS/AS if RDS is used. | C |
| sCSASID | Identifier of the SCS/AS if RDS is used. | C |
| rDSAction | Action if RDS is used. Possible values: “ReservePort”, “ReleasePort”. | C |
| serializationFormat | Data format exchanged between UE and SCS/AS if RDS is used. | C |
| ePSBearerID | Identity of the EPS bearer that MME allocated to the Non-IP PDN connection (see NOTE below). | M |
| NOTE: For the backward compatibility purposes the parameter is coded as OPTIONAL in the ASN.1 schema (Annex A). |

\*\*\* END OF MAIN DOCUMENT CHANGES \*\*\*

\*\*\* FIRST ATTACHMENT CHANGE \*\*\*

 START OF CHANGE 1

---a/33128/r18/TS33128Payloads.asn
+++b/33128/r18/TS33128Payloads.asn

@@ -618,7 +618,8 @@ NEFPDUSessionModification ::= SEQUENCE

618 618 applicationID [7] ApplicationID OPTIONAL,

619 619 aFID [8] AFID OPTIONAL,

620 620 rDSAction [9] RDSAction OPTIONAL,

621 - serializationFormat [10] SerializationFormat OPTIONAL

 621 + serializationFormat [10] SerializationFormat OPTIONAL,

 622 + pDUSessionID [11] PDUSessionID OPTIONAL

622 623 }

623 624

624 625 -- See clause 7.7.2.1.4 for details of this structure

@@ -948,7 +949,8 @@ SCEFPDNConnectionUpdate ::= SEQUENCE

948 949 applicationID [7] ApplicationID OPTIONAL,

949 950 sCSASID [8] SCSASID OPTIONAL,

950 951 rDSAction [9] RDSAction OPTIONAL,

951 - serializationFormat [10] SerializationFormat OPTIONAL

 952 + serializationFormat [10] SerializationFormat OPTIONAL,

 953 + ePSBearerID [11] EPSBearerID OPTIONAL

952 954 }

953 955

954 956 -- See clause 7.8.2.1.4 for details of this structure

 END OF CHANGE 1

\*\*\* END OF ATTACHMENT CHANGE \*\*\*

\*\*\* END OF CHANGES \*\*\*