**3GPP SA3LI#92 S3i240072**

**Seville; January 30-February 2, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.127** | **CR** | **0232** | **rev** | **1** | **Current version:** | **18.6.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | STIR/SHAKEN – intra-CSP session and CSP choice of Telephony AS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3-LI (Nokia, Nokia Shanghai Bell) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI17 | | | | |  | ***Date:*** | | | 2024-01-22 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | ***A*** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | When signing/verification of intra-CSP sessions is not required, and when the CSP choice for interacting with the Signing AS and Verification AS is Telephony AS for inter-CSP session signing/verification, the current tables within the specifications say that intra-CSP session is not applicable. However, TS fails to consider the situation where the Telephony AS may not know the session is intra-CSP. In that case, the requirement is not clear. | | | | | | | | |
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| ***Summary of change:*** | | NOTEs are provided to add the clarity. | | | | | | | | |
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| ***Consequences if not approved:*** | | Incorrect implementation of LI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.14.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | S3i240053 | | | | | | | | |

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

### 7.14.2 Architecture

The IMS Signaling Function that interacts with the AS for verification or the LMISF-IRI (inbound roaming with HR) or P-CSCF (inbound roaming with LBO) shall provide the IRI-POI functions for STIR/SHAKEN and RCDeCNAM. In addition, at the originating side of the session, the IMS Signaling Function that interacts with the AS for signing shall provide the IRI-POI functions for STIR/SHAKEN and RCD. In some redirection cases, the IMS Signaling Function, even if not interacting with the AS of verification, may have to provide the IRI-POI functions for STIR/SHAKEN and RCD/eCNAM (see TS 33.128 [15] clause 7.11.2.3).

Depending on the deployment, the IMS signaling function that interacts with the AS for signing is either the Telephony AS or the Egress IBCF (see figure E.2.1-1). Similarly, depending on the deployment, the IMS signaling function that interacts with the AS for verification is either the Telephony AS or the Ingress IBCF (see figure E.2.1-1).

Accordingly, the table 7.14.2-1 identifies the IRI-POIs for STIR/SHAKEN and RCD while table 7.14.2-2 identifies the IRI-POIs for eCNAM.

In the tables option 1 and option 2 indicate the deployment options of IMS Signaling Function that interacts with the AS for signing or AS for verification. Such deployment options can be mutually independent in the originating CSP or the terminating CSP. For emergency sessions, Egress IBCF interacts with the AS for signing.

Table 7.14.2-1: IMS Network Functions providing the IRI-POI functions for STIR/SHAKEN and RCD

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Target/session scenarios | | Originating end | | Terminating end | |
| Option 1 | Option 2 | Option 1 | Option 2 |
| UE is the target | Non-roaming UE/outbound roaming UE | See table 7.14.2-3 | See table 7.14.2-3 | See table 7.14.2-4 | See table 7.14.2-4 |
| Inbound roaming UE (HR) | n/a | n/a | LMISF-IRI | LMISF-IRI |
| Inbound roaming UE (LBO) | n/a | n/a | P-CSCF | P-CSCF |
| Emergency session | Egress IBCF | Egress IBCF | n/a | n/a |
| From target non-local ID | Non-roaming UE/Outbound roaming UE | n/a | n/a | See table 7.14.2-4 | See table 7.14.2-4 |
| Inbound roaming UE (HR) | n/a | n/a | LMISF-IRI | LMISF-IRI |
| Inbound roaming UE (LBO) | n/a | n/a | P-CSCF | P-CSCF |
| To target non-local ID | Non-roaming UE/Outbound roaming UE | See table 7.14.2-3 | See table 7.14.2-3 | n/a | n/a |
| Inbound roaming UE (HR) | n/a | n/a | n/a | n/a |
| Inbound roaming UE (LBO) | n/a | n/a | n/a | n/a |

Table 7.14.2-2: IMS Network Functions providing the IRI-POI functions for eCNAM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Target/session scenarios | | Originating end | | Terminating end | |
| Option 1 | Option 2 | Option 1 | Option 2 |
| UE is the target | Non-roaming UE | n/a | n/a | See table 7.14.2-4 | See table 7.14.2-4 |
| Inbound roaming UE (HR) | n/a | n/a | LMISF-IRI | LMISF-IRI |
| Inbound roaming UE (LBO) | n/a | n/a | P-CSCF | P-CSCF |
| Emergency session | n/a | n/a | n/a | n/a |
| From target non-local ID | Non-roaming UE | n/a | n/a | See table 7.14.2-4 | See table 7.14.2-4 |
| Inbound roaming UE (HR) | n/a | n/a | LMISF-IRI | LMISF-IRI |
| Inbound roaming UE (LBO) | n/a | n/a | P-CSCF | P-CSCF |
| To target non-local ID | Non-roaming UE | n/a | n/a | n/a | n/a |
| Inbound roaming UE (HR) | n/a | n/a | n/a | n/a |
| Inbound roaming UE (LBO) | n/a | n/a | n/a | n/a |

Table 7.14.2-3: IMS Network Functions providing the IRI-POI functions when UE is not roaming (originating end)

|  |  |  |
| --- | --- | --- |
| Scenario | Option 1 | Option 2 |
| RCD is present | Telephony AS | Telephony AS |
| Intra-CSP session signing/verification is required | Telephony AS | Telephony AS |
| Intra-CSP session signing/verification is not required (intra-CSP session) | Telephony AS, see NOTE 1 | n/a |
| Intra-CSP session signing/verification is not required (inter-CSP session) | Telephony AS | IBCF |

NOTE 1: With the option 1 (CSP choice is Telephony AS), even though no signing is required for intra-CSP sessions, a Telephony AS may still interact with the Signing AS, if it cannot determine that the current session is an intra-CSP session.

Table 7.14.2-4: IMS Network Functions providing the IRI-POI functions when UE is not roaming (terminating end)

|  |  |  |
| --- | --- | --- |
| Scenario | Option 1 | Option 2 |
| RCD is present | Telephony AS | IBCF |
| Intra-CSP session signing/verification is required | Telephony AS | Telephony AS |
| Intra-CSP session signing/verification is not required (intra-CSP session) | Telephony AS, see NOTE 2 | n/a |
| Intra-CSP session signing/verification is not required (inter-CSP session) | Telephony AS | IBCF |
| Special case of redirection | Telephony AS | Telephony AS |
|  | | |

NOTE 2: With the option 1 (CSP choice is Telephony AS), since signing is not done for intra-CSP session, a verification is not applicable for that intra-CSP session. However, as per the NOTE 1, if a signing is in fact done, then the Telephony AS upon seeing the PASSporTs will interact with the Verification AS to validate the received PASSporTs.

### \*\* End of all Changes \*\*