**3GPP TSG-SA3 Meeting #**

**, - March 2024** Revision of S3-*240736*

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26** | **CR** | **092** | **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 |  |

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|  | | | | | | | | | | |
| ***Title:*** | specific to SMSF | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SCAS\_5G\_SMSF | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | A new clause in annexure with aspects specific to network product class SMSF | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | A clause on threat related to SMSF data protection over SGd Diameter interface is added | | | | | | | | |
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| ***Consequences if not approved:*** | | Legacy interfaces assests if not protected, could lead to security breach and network attacks | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | x.z.2(new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Agreed Content in S3-240121 Online Meeting TSG-SA3 Meeting #114e | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of the Change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## x.z.2 Threats related to SMSF data

### x.z.2.1 SMSF control data and user data protection on SGd Diameter Interface

***-*** *Threat name:*  Diameter protection

***-*** *Threat Category:* Tampering,Information Disclosure.

***-*** *Threat Description:* SMS related traffic is transported between the SMSF and the IP-SM-GW/SMS-GMSC/SMS-Router on SGd Diameter interface. In roaming scenario, transportation is via Diameter Edge Agent (DEA) node on SGd interface. If the SMS data transported over the interface is not confidentiality protected, it can be subject to eavesdropping, and information leakage to unauthorized parties. If the SMS traffic is not integrity protected, the SMS traffic can be tampered with.

If the protection of the SGd interface is done using wrong security profiles, i.e., weak security algorithms or protocol versions with known vulnerabilities, then overall security of the data transported over SGd is compromised.

***-*** *Threatened Asset:* Network function and data.

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