**3GPP TSG-SA5 Meeting #142-e *S5-222227rev3***

**e-meeting, 4th –12th April 2022** Revision of S5-222227

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.240** | **CR** | **0** | **rev** | **1** | **Current version:** | **17.5.0** |  |
|  |
| *For* [***HELP***](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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Addition of the architecture for 5G LAN charging |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | 5GLAN\_CH |  | ***Date:*** | 2022-04-08 |
|  |  |  |  |  |
| ***Category:*** | B |  | ***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)* |
|  |  |
| ***Reason for change:*** | For the support of 5G LAN service charging, the general description about 5G VN group management and communication charging is introduced. The detailed 5G LAN service membership charging is required. |
|  |  |
| ***Summary of change:*** | Add the description for the support of 5G LAN service membership charging |
|  |  |
| ***Consequences if not approved:*** | The support of the 5G LAN is incomplete. |
|  |  |
| ***Clauses affected:*** | 6.2.1 |
|  |  |
|  | **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** |

### 6.2.1 General

The 5G LAN-type service charging specified in the clause 5.34.10 of TS 23.501[215], including the 5G VN group management and 5G VN group communication.

The 5G VN group configuration is either provided by OA&M or provided by an AF to the NEF.

The 5G VN group management charging is applicable for the 5G VN group addition/deletion/modification (i.e.5G VN members), including the following two optional architecture sepcifed in TS 32.254 [14]. which optional charging architecture to be used is depended on the operator’s decision.

- CEF based charging: obtains the 5G VN group information from UDM by CEF, and reports to CHF.

- NEF based charging: reports the 5G VN group charging information by NEF based on the API invocation from AF. NEF exposure function Northbound Application Program Interfaces (APIs) charging, using the NEF embedding the CTF.

The 5G VN group communication includes one to one communication and one to many communications. The 5G VN group communication charging is applicable for traffic forwarding via PDU session of 5G VN group members.which covered by 5G data connectivity domain converged charging architecture specified in TS 32.255 [15], using the SMF embedding the CTF.

|  |
| --- |
| **End of change** |