**3GPP TSG-SA5 Meeting #141-e *S5-221100***

**e-meeting, 17 - 26 January 2022** Revision of S5-20xxxx

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.255** | **CR** | **0354** | **rev** | **1** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Clarification on the 5G LAN type service charging | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GLAN\_CH | | | | |  | ***Date:*** | | | 2022-01-23 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | For the support of 5G LAN service charging, the general description about 5G LAN VN group management and communication charging is introduced. The principle of 5G VN group communication charging is required. | | | | | | | | |
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| ***Summary of change:*** | | Add the for the support of 5G VN group communication charging.  Change the "5G LAN VN Group" to " 5G VN group". | | | | | | | | |
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| ***Consequences if not approved:*** | | The support of the 5G LAN is incomplete. | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.15.1, 5.1.15.2(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:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **First change** |

#### 5.1.15.1 General

The SMF may support PDU Sessions for a 5G VN group which offers a virtual data network capable of supporting 5G LAN-type service over the 5G system, which specified in the TS 23.501[200].

The SMF embedding the CTF generates 5G VN group communication charging information towards the CHF based on the user plane architecture with the additional following options decribed in the clause 4.4.6 of TS 23.501[200] to support 5G LAN-type service.

- Figure 4.4.6.1-1 depicts the non-roaming user plane architecture to support 5G LAN-type service using local switch.

- Figure 4.4.6.1-2 depicts the non-roaming user plane architecture to support 5G LAN-type service using N19 tunnel.

- Figure 4.1.1 depicts the non-roaming user plane architecture to support 5G LAN-type service using N6 tunnel.

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| **Next Change** |

#### 5.1.15.2 Support 5G VN group communication

In order to support the 5G VN group communication, the following principles are used:

- In includes the internal group identifier of 5G VN group, which is used to indicate the 5G VN group and associate charging information for 5G VN group communication.

- The uplink and downlink data volumes of 5G VN group communiucation traffic usage are reported separately.

- The 5G VN group communication using N19 tunnel is measured based on the PDU session charging.

- The reporting of traffic forwarding way information corresponding to the 5G VN group communication is controlled by the SMF.

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| **End of change** |