**3GPP TSG-CT WG3 Meeting #130 *C3-234340***

**Xiamen, China, 9 - 13 October, 2023**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.512** | **CR** | **1151** | **rev** | **-** | **Current version:** | **18.3.0** |  |
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| *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:***  | Editor note removal on SMF DNN configuration |
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| ***Source to WG:*** | Nokia, Nokia Shanghai Bell, Ericsson |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | ATSSS\_Ph3 |  | ***Date:*** | 29-9-2023 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | As per TS 23.501, clause 5.32.2, TS 29.512 already covers all the possible ATSSS capabilities supported for the PDU session that the SMF may provide based on the ATSSS capabilities provided by the UE and supported by the DNN. The related editor's note in 29.512, 4.2.2.17,can be removed  |
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| ***Summary of change:*** | Editor note related to SMF DNN configuration is removed |
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| ***Consequences if not approved:*** | There is a mismatch between stage 2 and stage 3 document w.r.t SMF DNN configuration for ATSSS. |
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| ***Clauses affected:*** | 4.2.2.17 |
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|  | **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 ...  |
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| ***Other comments:*** | This CR does not impact the OpenAPI descriptions defined in this specification. |
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| ***This CR's revision history:*** |  |

\* \* \* \* Start of changes \* \* \* \*

#### 4.2.2.17 Access traffic steering, switching and splitting support

If the SMF supports the "ATSSS" feature defined in clause 5.8, the SMF shall within the SmPolicyContextData data structure include the ATSSS capability within the "atsssCapab" attribute and the MA PDU session Indication within the "maPduInd" attribute as defined in clause 4.2.2.2.

The SMF determines the ATSSS capability supported for the MA PDU Session based on the ATSSS capabilities provided by the UE and per DNN configuration on SMF, as follows:

a. If the SMF receives the UE's ATSSS capabilities "MPTCP functionality with any steering mode and ATSSS-LL functionality with only Active-Standby steering mode" and;

i. if the DNN configuration allows both MPTCP and ATSSS-LL with any steering mode, including RTT measurement without using PMF protocol, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_ATSSS\_LL\_WITH\_ASMODE\_UL", or;

ii. if the DNN configuration allows both MPTCP and ATSSS-LL with any steering mode, including RTT measurement without using PMF protocol, but the UPF does not support the RTT measurement without using PMF protocol, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_ATSSS\_LL\_WITH\_EXSDMODE\_DL\_ASMODE\_UL".

iii. if the DNN configuration allows MPTCP with any steering mode and ATSSS-LL with only Active-Standby steering mode, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_ATSSS\_LL\_WITH\_ASMODE\_DLUL".

b. If the SMF receives the UE's ATSSS capabilities "ATSSS-LL functionality with any steering mode" and the DNN configuration allows ATSSS-LL with any steering mode, the SMF shall set the "atsssCapab" attribute to the value "ATSSS\_LL".

c. If the SMF receives the UE's ATSSS capabilities "MPTCP functionality with any steering mode and ATSSS-LL functionality with any steering mode", and the DNN configuration allows both MPTCP and ATSSS-LL with any steering mode, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_ATSSS\_LL".

If the SMF supports the "EnATSSS\_v2" feature defined in clause 5.8

a. If the SMF receives the UE's ATSSS capabilities "MPQUIC functionality with any steering mode and ATSSS-LL functionality with only Active-Standby steering mode" and;

i. if the DNN configuration allows both MPQUIC and ATSSS-LL with any steering mode, including RTT measurement without using PMF protocol, the SMF shall set the "atsssCapab" attribute to the value "MPQUIC\_ATSSS\_LL\_WITH\_ASMODE\_UL";

ii. if the DNN configuration allows both MPQUIC and ATSSS-LL with any steering mode, including RTT measurement without using PMF protocol, but the UPF does not support the RTT measurement without using PMF protocol, the SMF shall set the "atsssCapab" attribute to the value "MPQUIC\_ATSSS\_LL\_WITH\_EXSDMODE\_DL\_ASMODE\_UL"; or

iii. if the DNN configuration allows MPQUIC with any steering mode and ATSSS-LL with only Active-Standby steering mode, the SMF shall set the "atsssCapab" attribute to the value "MPQUIC\_ATSSS\_LL\_WITH\_ASMODE\_DLUL".

b. If the SMF receives the UE's ATSSS capabilities "MPQUIC functionality with any steering mode and ATSSS-LL functionality with any steering mode", and the DNN configuration allows both MPQUIC and ATSSS-LL with any steering mode, the SMF shall set the "atsssCapab" attribute to the value "MPQUIC\_ATSSS\_LL".

c. If the SMF receives the UE's ATSSS capabilities " MPTCP functionality with any steering mode, MPQUIC functionality with any steering mode and ATSSS-LL functionality with only Active-Standby steering mode" and;

i. if the DNN configuration allows MPTCP, MPQUIC and ATSSS-LL with any steering mode, including RTT measurement without using PMF protocol, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_MPQUIC\_ATSSS\_LL\_WITH\_ASMODE\_UL";

ii. if the DNN configuration allows MPTCP, MPQUIC and ATSSS-LL with any steering mode, including RTT measurement without using PMF protocol, but the UPF does not support the RTT measurement without using PMF protocol, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_MPQUIC\_ATSSS\_LL\_WITH\_EXSDMODE\_DL\_ASMODE\_UL"; or

iii. if the DNN configuration allows MPTCP and MPQUIC with any steering mode and ATSSS-LL with only Active-Standby steering mode, the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_MPQUIC\_ATSSS\_LL\_WITH\_ASMODE\_DLUL".

d. If the SMF receives the UE's ATSSS capabilities "MPTCP functionality with any steering mode, MPQUIC functionality with any steering mode and ATSSS-LL functionality with any steering mode", and the DNN configuration allows MPTCP, MPQUIC and ATSSS-LL with any steering mode , the SMF shall set the "atsssCapab" attribute to the value "MPTCP\_MPQUIC\_ATSSS\_LL".

If the SMF receives the MA PDU Request Indication from the UE and the SMF determines that the MA PDU session is allowed based on the Session Management subscription data retrieved from the UDM and the operator policy, the SMF shall include the "MA\_PDU\_REQUEST" within the "maPduInd" attribute; otherwise if the SMF receives the MA PDU Network-Upgrade Allowed indication from the UE and the SMF determines that the MA PDU session is allowed based on the Session Management subscription data retrieved from the UDM and the operator policy, the SMF shall include the "MA\_PDU\_NETWORK\_UPGRADE\_ALLOWED" within the "maPduInd" attribute.

If the PCF supports the "ATSSS" feature, the PCF may provide PCC rules and/or session rules of ATSSS policy for the MA PDU session as defined in clause 4.2.6.2.17 and clause 4.2.6.3.4; otherwise the PCF shall not provide any PCC rules and/or session rules of ATSSS policy.

\* \* \* \* End of changes \* \* \* \*