**3GPP TSG-CT WG3 Meeting #127eC3-231268**

**E-meeting, 17th – 21st, April, 2023 (revision of C3-231xxx)**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.513** | **CR** | **0453** | **rev** | **-** | **Current version:** | **18.1.0** |  |
|  |
| *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)*.* |
|  |

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

|  |
| --- |
|  |
| ***Title:***  | Correction to AF influence on Service Function Chaining |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | SFC |  | ***Date:*** | 2023-03-15 |
|  |  |  |  |  |
| ***Category:*** | **D** |  | ***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)* |
|  |  |
| ***Reason for change:*** | The clause number of reference is not specified. |
|  |  |
| ***Summary of change:*** | Add the clause number of the reference. |
|  |  |
| ***Consequences if not approved:*** | SFC is not fully supported. |
|  |  |
| ***Clauses affected:*** | 3.2, 5.5.3.1 |
|  |  |
|  | **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:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

## 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

5GC 5G Core Network

5G DDNMF 5G Direct Discovery Name Management Function

5QI 5G QoS Identifier

5G VN 5G Virtual Network

AF Application Function

AMBR Aggregate Maximum Bit Rate

AMF Access and Mobility Management Function

ARP Allocation and Retention Priority

AW Average Window

BDT Background Data Transfer

BSF Binding Support Function

CHEM Coverage and Handoff Enhancements using Multimedia error robustness feature

CHF Charging Function

DetNet Deterministic Networking

DSCP Differentiated Services Code Point

DN-AAA Data Network Authentication, Authorization and Accounting

DTS Data Transport Service

LBO Local Breakout

MBR Maximum Bitrate

MBS Multicast/Broadcast Service

MBSF Multicast/Broadcast Service Function

MB-SMF Multicast/Broadcast Session Management Function

MCS Mission Critical Service

MPD Media Presentation Description

MPS Multimedia Priority Service

MTU Maximum Transmission Unit

NEF Network Exposure Function

NID Network Identifier

NPLI Network Provided Location Information

NRF Network Repository Function

NSSAI Network Slice Selection Assistance Information

NWDAF Network Data Analytics Function

ON-SNPN Onboarding Standalone Non-Public Network

PCC Policy and Charging Control

PCF Policy Control Function

PDB Packet Delay Budget

PER Packet Error Rate

PDUID ProSe Discovery UE ID

PFD Packet Flow Description

PFDF Packet Flow Description Function

PMIC Port Management Information Container

PL Priority Level

ProSe Proximity Services

ProSeP 5G ProSe Policy

PSA PDU Session Anchor

PSAP Public Safety Access Point

P-CSCF Proxy Call Session Control Function

QFI QoS Flow Identifier

QNC QoS Notification Control

QoS Quality of Service

SCP Service Communication Proxy

SDP Session Description Protocol

SEPP Security Edge Protection Proxy

SFC Service Function Chaining

SMF Session Management Function

S-NSSAI Single Network Slice Selection Assistance Information

SNPN Stand-alone Non-Public Network

SPI Security Parameter Index

TA Tracking Area

TSC Time Sensitive Communication

TSCAI Time Sensitive Communication Assistance Information

TSN Time Sensitive Networking

UDR Unified Data Repository

UL CL UpLink CLassifier

UMIC User plane node Management Information Container

UPF User Plane Function

UPSI UE policy section identifier

URSP UE Route Selection Policy

V2X Vehicle-to-Everything

V2XP Vehicle-to-Everything Policy

\*\*\* Next Change \*\*\*

#### 5.5.3.1 General

As described in 3GPP TS 23.501 [2] clause 5.6.7 and clause  5.6.16, an AF may send requests to influence SMF routing decisions and influence on N6-LAN traffic steering respectively for User Plane traffic of PDU Sessions. The AF may also provide in its request subscriptions to SMF events (e.g. UP path change).

The following cases are included in this clause:

 AF requests targeting an individual UE address: such requests are routed (by the AF or by the NEF) to an individual PCF using the BSF or by configuration as described in clause 5.5.3.2.

NOTE 1: Such requests target an on-going PDU Session. Whether the AF needs to use the NEF or not depends on local deployment.

 AF requests targeting PDU Sessions that are not identified by an UE address: For such requests the AF shall contact the NEF and the NEF stores the AF request information in the UDR. PCF(s) that have subscribed to the modification of the AF request information receive a corresponding notification from the UDR. This is described in clause 5.5.3.3.

NOTE 2: Such requests can target on-going or future PDU Sessions.

NOTE 3: The 5GC functions used in the procedures to influence SMF routing decisions are assumed to all belong to the same PLMN (HPLMN in non-roaming case or VPLMN in the case of a PDU Session in LBO mode) or to the same SNPN. The 5GC functions used in the procedures to influence on N6-LAN traffic steering are assumed to belong to the Home PLMN or Home SNPN (the AF can have an agreement with the Home PLMN), i.e. this case applies to non-roaming and Home Routed roaming scenarios.

NOTE 4: The roaming scenarios for SNPNs are not supported in this Release.

NOTE 5: AF requests invoked from an AF located in the HPLMN for home routed roaming scenario are not supported.

NOTE 6: For details of Nnef\_TrafficInfluence\_Create/Update/Delete/AppRelocationInfo service operations refer to 3GPP TS 29.522 [24].

NOTE 7: For details of the Nudr\_DataRepository\_Create/Update/Delete service operations refer to 3GPP TS 29.519 [12] and 3GPP TS 29.504 [27].

NOTE 8: For details of the Nsmf\_EventExposure\_Notify/AppRelocationInfo service operations refer to 3GPP TS 29.508 [8].

NOTE 9: For details of the Npcf\_PolicyAuthorization\_Create/Update/Delete service operations refer to 3GPP TS 29.514 [10].

NOTE 10: For details of the Npcf\_SMPolicyControl\_UpdateNotify service operation refer to 3GPP TS 29.512 [9].

NOTE 11: For details of the Nbsf\_Management\_Discovery service operation refer to 3GPP TS 29.521 [22].

\*\*\* End of Changes \*\*\*