**3GPP TSG-CT3 Meeting #125 C3-225327**

**Toulouse, France, 14th - 18th, November, 2022**

**Source: Huawei**

**Title: New WID on Rel-18 enhancements of session management policy control**

**Document for: Agreement**

**Agenda Item: 18.1.1**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

# Title: Rel-18 enhancements of session management policy control

## Acronym: SMPC18

## Unique identifier: to be assigned

Potential target Release: Rel-18

## 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affects:** | UICC apps | ME | AN | CN | Others (specify) |
| **Yes** |  |  |  | X |  |
| **No** | X | X | X |  | X |
| **Don't know** |  |  |  |  |  |

## 2 Classification of the Work Item and linked work items

### 2.1 Primary classification

|  |  |
| --- | --- |
| X | Feature |
|  | Building Block |
|  | *Work Task* |
|  | Study Item |

### 2.2 Parent Work Item

Not applicable.

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work Items (if any) |
| Unique ID | Title | Nature of relationship |
| [720005](http://www.3gpp.org/DynaReport/WiVsSpec--720005.htm) | New Services and Markets Technology Enablers | Stage 1 requirements |
| [700017](http://www.3gpp.org/DynaReport/WiVsSpec--700017.htm) | Study on Architecture and Security for next Generation System | Stage 2 architectural requirements conclusion, TR 23.799 |
| 750025 | CT aspects on 5G System - Phase 1 | Stage 3, Phase 1. |
| 840063 | SBA aspects of enhanced IMS to 5GC integration | Stage 3 |
| 910011 | N7 Interfaces Enhancements to Support GERAN and UTRAN | Stage 3 |
| 910059 | Support of Enhanced Industrial IIoT | Stage 3 |
| 829912 | CT aspects on wireless and wireline convergence for the 5G system architecture | Stage 3 |

## 3 Justification

The Session Management Policy Control services and service procedures have been specified during the previous 3GPP releases.

During development of the above services, it has been identified that there is a need to apply technical improvements and enhancements (e.g. support the missed requirement in the previous releases, improve the signaling and processing efficiency, increase the flexibility, enhance the reliability, improve specification clarity, etc.), e.g., in the following areas:

- Completion of the specified text for:

a. The handling of packet filters provided to the UE by SMF for the default QoS flow

b. QoS flow binding, to cover interaction with the UPF and UE, and for EPC interworking scenarios, bearer binding

c. Wireless and wireline convergence, to complete feature limitation for functionality previously specified, e.g. specification of the DDN\_DELIVERY\_STATUS\_CANCELLATION

- Specification of Usage monitoring with monitoring time when only one threshold is provided.

- Specification of the QoS mapping for Rel-99 QoS parameters and the EPS ones for the support of GERAN/UTRAN access by SMF+PGW-C

- Specification of the handling of RAN/NAS release cause values by the P-CSCF.

- Corrections and/or updates to session management policy control missed in the previous 3GPP Releases, which are not covered by the other dedicated Rel-18 work items

## 4 Objective

The objective of this work item is to specify the stage 3 procedures related to the technical improvements identified for the following areas:

- Specify the behaviour of the SMF to provide the packet filter to the UE for the default QoS flow according to clause 6.1.3.9 of TS 23.503.

- Complete QoS flow binding descriptions to cover the QoS flow binding indication to UE/UPF and the bearer binding performed by the SMF+PGW-C in the 5GC and EPC interworking scenario (references to the related TSs).

- Make a clarification of the usage monitoring with monitoring time and one instance of the thresholds provided.

- Specify the mapping of QoS parameters between Rel-99 QoS parameters and 5G QoS parameters when N7 interface is used (reference to the related TSs).

- Complete the annex for wireless and wireline convergence with missing feature limitation for already specified functionality (e.g. DDN\_DELIVERY\_STATUS\_CANCELLATION addition to the list of not supported Policy Control Request Triggers).

- Add the Handling of RAN/NAS release cause values for the P-CSCF.

- Correct and update descriptions of session management policy control missed in the previous 3GPP Releases, which are not covered by the other dedicated Rel-18 work items.

## 5 Expected Output and Time scale

|  |
| --- |
| **New specifications** *{One line per specification. Create/delete lines as needed}* |
| Type  | TS/TR number | Title | For info at TSG#  | For approval at TSG# | Rapporteur |
|  |  |  |  |  |  |

|  |
| --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| 29.512 | Clarify the behaviour of the SMF to provide the packet filter to the UE, mapping of QoS parameters between Rel-99 QoS parameters and 5G QoS parameters when N7 interface, usage Monitoring with monitoring time, and wireless and wireline convergence completion of feature limitation. | CT#102 (Dec. 2023) | CT3 |
| 29.513 | Technical enhancements due to SM Policy Control enhancements, to complete QoS flow binding descriptions  | CT#102 (Dec. 2023) | CT3 |
| 29.514 | Technical enhancements due to SM Policy Control enhancements, to add the Handling of RAN/NAS release cause values for the P-CSCF and PCF. | CT#102 (Dec. 2023) | CT3 |

## 6 Work item Rapporteur(s)

Xiaoyun Zhou, Huawei, zhouxiaoyun8@huawei.com

## 7 Work item leadership

CT3

## 8 Aspects that involve other WGs

None

## 9 Supporting Individual Members

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| --- |
| Supporting IM name |
| China Mobile |
| China Telecom |
| Huawei |
| ZTE |
| Nokia |
| Nokia Shanghai Bell |
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