**3GPP TSG-CT WG1 Meeting #123-eC1-202844**

**Electronic meeting, 16-24 April 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.587** | **CR** | **0037** | **rev** | **1** | **Current version:** | **16.0.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Packet filter for PC5 QoS flows | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eV2XARC | | | | |  | ***Date:*** | | | 2020-03-28 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The specification contains one editor’s notes on the content of the set of packet filters under subclause 6.1.3.2.1.2, quote:  *d) if in the context for the destination layer-2 ID, there is no existing PC5 QoS flow context, which corresponds to the V2X service identifier and the PC5 QoS parameters, then:*  *1) self-assign a new PFI;*  *2) build a new PC5 QoS flow context and include the V2X service identifier and the PC5 QoS parameters;*  *3) set up a new PC5 QoS rule, the PC5 QoS rule contains:*  *i) a PC5 QoS rule identifier;*  *ii) the PFI;*  *iii) a set of packet filters; and*  *Editor’s notes: The exact content of the set of packet filters is for further study.*  *iv) a precedence value.*  The undefined content of the set of packet filters originates from 3GPP TS 23.287 subaclause 5.4.1.1.4, quote:  *The V2X Packet Filter Set shall support Packet Filters based on at least any combination of:*  *- V2X Service type (e.g. PSID or ITS-AID);*  *- Source/Destination Layer-2 ID;*  *- Application Layer ID (e.g. Station ID);*  *- Extension parameters.*  *Editor's note: Stage 3 can determine the Extension parameters to support, for example, input parameters from upper layer protocols or extension header fields (e.g. the TC field of GeoNetworking Common header, WAVE Information Element Extension, etc.).*  Besides, some minor changes need to be applied to the wording. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. The exact content of the set of packet filters when setting up a PC5 QoS rule; 2. Some wording corrections. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The exact content of the set of packet filters when setting up a PC5 QoS rule is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.1.3.2.1.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

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

6.1.3.2.1.2 PC5 QoS flow match and establishment

When determining if any existing PC5 QoS flow match the request from upper layers, UE shall proceeds as follows:

a) according to the PC5 QoS mapping rules specified in clause 5.2.3, the UE shall use the PC5 QoS parameters corresponding to the V2X service identifier and optionally V2X application requirements;

b) according to the V2X service identifier to destination layer-2 ID for broadcast mapping rules specified in clause 5.2.3, the UE shall use the destination layer-2 ID corresponding to the V2X service identifier;

c) if there is no existing context for the destination layer-2 ID, then:

1) build a new context for the destination layer-2 ID;

2) self-assign a new source layer-2 ID; and

3) pass the source layer-2 ID and the destiantion layer-2 ID to lower layers.

d) if in the context for the destination layer-2 ID, there is no existing PC5 QoS flow context, which corresponds to the V2X service identifier and the PC5 QoS parameters, then:

1) self-assign a new PFI;

2) build a new PC5 QoS flow context and include the V2X service identifier and the PC5 QoS parameters;

3) set up a new PC5 QoS rule, the PC5 QoS rule contains:

i) a PC5 QoS rule identifier;

ii) the PQFI;

iii) a set of packet filters; and

iv) a precedence value.

4) pass the following parameters to lower layers:

i) the PQFI;

ii) the PC5 QoS parameters; and

iii) the source layer-2 ID and the destination layer-2 ID. and

e) perform transmission of V2X communication over PC5 as specified in clause 6.1.3.2.2.

Two types of packet filters are supported for V2X communication over PC5, i.e. the IP packet filter set and the V2X packet filter set. A PC5 QoS Rule contains either the IP packet filter set or the V2X packet filter set.

The IP packet filter set is defined as content of the packet filter contents field specified in 3GPP TS 24.501 [6] figure 9.11.4.13.4 and table 9.11.4.13.1.

The V2X packet filter set shall support packet filters based on at least any combination of:

- V2X Service type (e.g. PSID or ITS-AID);

- the source layer-2 ID and the destination layer-2 ID; and

- Application Layer ID (e.g. Station ID);

\* \* \* End of Change \* \* \* \*