**3GPP TSG-CT WG1 Meeting #125-eC1-205xxx**

**Electronic meeting, 20-28 August 2020 was C1-205059**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.588** | **CR** | **0019** | **rev** | **1** | **Current version:** | **16.1.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Adding the flag indicating the optional PPPP to PDB mapping rules | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT, Erricsson | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eV2XARC | | | | |  | ***Date:*** | | | 2020-07-31 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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)* | |
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| ***Reason for change:*** | | PPPP to PDB mapping rules reflects the mapping relationship between packet latency and packet priority in PC5 interface in the LTE V2X. PPPP to PDB mapping rules is an optional management object in 4G V2X, which shows in TS 24.385 v16.1.0 as follows:  “ 5.5.24 *<X>*/V2XoverPC5/PPPPtoPDBMappingRule The PPPPtoPDBMappingRule node contains the mapping rules between the ProSe Per-Packet Priority (PPPP) and Packet Delay Budget (PDB) for V2X communication over the PC5.  - Occurrence: ZeroOrOne  - Format: node  - Access Types: Get, Replace  - Values: N/A  ”  The PPPP to PDB mapping rules should be optional. It may be up to implmentation on how to map a V2X PDU to appropriate packet priority, such as based on service type. It should not be included mandatorily. | | | | | | | | |
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| ***Summary of change:*** | | Add a flag to indicate PPPP to PDB mapping rules is optional in V2X UE policy. | | | | | | | | |
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| ***Consequences if not approved:*** | | Unnecessary V2X UE policy is included. | | | | | | | | |
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| ***Clauses affected:*** | | 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 ... | | |
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| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\*\*\*Next change \*\*\*\*\*

### 5.3.1 General

\*\*\*\*\*\*Skipped for clarity\*\*\*\*\*\*

Table 5.3.1.18: Geographical areas

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| Geographical area:  The geographical area field is coded according to figure 5.3.1.9 and table 5.3.1.9. |
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| 8 | | 7 | | 6 | | 5 | | 4 | | 3 | | 2 | | 1 | |  | |
| Length of V2X communication over PC5 in E-UTRA-PC5 contents | | | | | | | | | | | | | | | | octet o4+1  octet o4+2 | |
| DDL2II | | VSIEFMRI | | VSAPI | | PPMR | | 0  Spare | | 0  Spare | | 0  Spare | | 0  Spare | | octet o4+3 | |
| V2X service identifier to destination layer-2 ID mapping rules | | | | | | | | | | | | | | | | octet o4+4  octet o26 | |
| PPPP to PDB mapping rules | | | | | | | | | | | | | | | | octet (o26+1)\*  octet o27\* | |
| V2X service identifier to V2X E-UTRA frequency mapping rules | | | | | | | | | | | | | | | | octet o120\*  (see NOTE)  octet o28\* | |
| V2X services authorized for PPPR | | | | | | | | | | | | | | | | octet (o28+1)\*  octet o29\* | |
| Default destination layer-2 ID | | | | | | | | | | | | | | | | octet (o29+1)\*  octet (o29+3)\* = octet o5\* | |

NOTE: The field is placed immediately after the last present preceding field.

Figure 5.3.1.19: V2X communication over PC5 in E-UTRA-PC5

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| Default destination layer-2 ID indicator (DDL2II):  The DDL2II bit indicates presence of the default destination layer-2 ID field.  Bit  **8**  0 Default destination layer-2 ID field is absent  1 Default destination layer-2 ID field is present |
|  |
| V2X service identifier to V2X E-UTRA frequency mapping rules indicator (VSIEFMRI):  The VSIEFMRI bit indicates presence of the V2X service identifier to V2X E-UTRA frequency mapping rules field.  Bit  **7**  0 V2X service identifier to V2X E-UTRA frequency mapping rules field is absent  1 V2X service identifier to V2X E-UTRA frequency mapping rules field is present |
|  |
| V2X services authorized for PPPR indicator (VSAPI):  The VSAPI bit indicates presence of the V2X services authorized for PPPR field.  Bit  **6**  0 V2X services authorized for PPPR field is absent  1 V2X services authorized for PPPR field is present |
| PPPP to PDB mapping rules indicator (PPMRI):  The PPMRI bit indicates presence of the PPPP to PDB mapping rules filed.  Bit  **5**  0 PPPP to PDB mapping rules field is absent  1 PPPP to PDB mapping rules field is present |
| V2X service identifier to destination layer-2 ID mapping rules:  The V2X service identifier to destination layer-2 ID mapping rules field is coded according to figure 5.3.1.20 and table 5.3.1.20. |
|  |
| PPPP to PDB mapping rules:  The PPPP to PDB mapping rules field is coded according to figure 5.3.1.22 and table 5.3.1.22. |
|  |
| V2X service identifier to V2X E-UTRA frequency mapping rules:  The V2X service identifier to V2X E-UTRA frequency mapping rules field is coded according to figure 5.3.1.24 and table 5.3.1.24. |
|  |
| V2X services authorized for PPPR:  The V2X services authorized for PPPR field is coded according to figure 5.3.1.29 and table 5.3.1.29. |
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| Default destination layer-2 ID:  The default destination layer-2 ID field is a binary coded layer 2 identifier. |
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| If the length of V2X communication over PC5 in E-UTRA-PC5 contents field indicates a length bigger than indicated in figure 5.3.1.19, receiving entity shall ignore any superfluous octets located at the end of the V2X communication over PC5 in E-UTRA-PC5contents. |
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\*\*\*\*\*\*Skipped for clarity\*\*\*\*\*\*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  | |
| Length of V2X service identifier to V2X E-UTRA frequency mapping rules contents | | | | | | | | | octet o120\*  octet (o120+2)\* | |
| V2X service identifier to V2X E-UTRA frequency mapping rule 1 | | | | | | | | | octet (o120+3)\*  octet o33\* | |
| V2X service identifier to V2X E-UTRA frequency mapping rule 2 | | | | | | | | | octet (o33+1)\*  octet o34\* | |
| ... | | | | | | | | | octet (o34+1)\*  octet o35\* | |
| V2X service identifier to V2X E-UTRA frequency mapping rule n | | | | | | | | | octet (o35+1)\*  octet o28\* | |

Figure 5.3.1.24: V2X service identifier to V2X E-UTRA frequency mapping rules

\*\*\*\*\*\*Skipped for clarity\*\*\*\*\*\*

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