**3GPP TSG-CT WG6 Meeting #119C6-2402XX**

**Hyderabad, India, May - May, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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 | **X** | ME | **X** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Support for A2X MBS and A2X AS MBS configuration policies for Uu. | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated, THALES | | | | | | | | | |
| ***Source to TSG:*** | CT6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | UAS\_Ph2 | | | | |  | ***Date:*** | | | 2024-05-08 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***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 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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | With C1-242757, support for Uu MBS configuration and AS MBS   configuration policies for A2X services was added in 3GPP TS 24.578   during CT1#148, April 2024 meeting. Relevant updates are required in   3GPP TS 31.102 clause 4.6.6.7 for EFA2XP\_Uu (A2X policy data over Uu).  There are legacy inconsistencies in the references of PLMN Infos coding of   EFA2XP\_Uu and EFV2XP\_Uu. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The existing A2X data policy over Uu data file (i.e., EFA2XP\_Uu) is updated in order to include MBS configuration and AS MBS configuration policies for A2X services.  Corrected the references of PLMN Infos coding of EFA2XP\_Uu and EFV2XP\_Uu. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Misalignment with the policies over Uu interface as defined in TS 24.578. MBS configuration and AS MBS configuration policies for A2X services over Uu interface cannot be provided by the USIM. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.6.5.5, 4.6.6.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 24.578 CR 0003 Rev 1  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:*** | | C6-240258 | | | | | | | | |

\*\*\*\*\* First change \*\*\*\*\*

#### 4.6.5.5 EFV2XP\_Uu (V2X data policy over Uu)

If service n°3 is "available" in EFVST, this file shall be present. This EF contains V2X in 5GS UE policies over Uu. The format of the V2X in 5GS UE policies over Uu are specified in 3GPP TS 24.588 [113].

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Identifier: '4F04' | | Structure: Transparent | | | Optional | |
| SFI: Optional | | |  | | | |
| File size: X bytes bytes, (X ≥ 3) | | | Update activity: low | | | |
| Access Conditions:  READ PIN  UPDATE ADM  DEACTIVATE ADM  ACTIVATE ADM | | | | | | |
| Bytes | Description | | | M/O | | Length |
| 1 to X | V2X data policy over Uu TLV objects | | | M | | X bytes |

The V2X in 5GS UE policies over Uu data object parameters tags:

|  |  |
| --- | --- |
| Description | Tag Value |
| V2X data policy over Uu Tag | 'A0' |
| V2X service identifier to PDU session parameters mapping rules Tag | '80' |
| PLMN infos Tag | '81' |

The V2X in 5GS UE policies over Uu contents:

|  |  |  |  |
| --- | --- | --- | --- |
| Description | Value | M/O | Length (bytes) |
| V2X data policy over Uu Tag | 'A0' | M | 1 |
| Length | Note 1 | M | Note 2 |
| Validity timer | -- | M | X1 |
| Indicator bits | -- | M | 1 |
| V2X service identifier to PDU session parameters mapping rules Tag | '80' | M | 1 |
| Length | X2 | M | Note 2 |
| V2X service identifier to PDU session parameters mapping rules information | -- | M | X2 |
| PLMN infos Tag | '81' | O | 1 |
| Length | X3 | O | Note 2 |
| PLMN infos information | -- | O | X3 |

- Validity timer

Contents:

‑ The validity timer contains the timer for controlling the validity of 5GS UE policies for V2X communication over PC5.

Contents:

‑ The validity timer is encoded as shown in figure 5.4.1.1 and table 5.4.1.1 of 3GPP TS 24.588 [113].

- Indicator bits

Contents:

‑ The indicator bits contains bit indications about 5GS UE policies for V2X communication over PC5.

Contents:

‑ The indicator bits are encoded as shown in figure 5.4.1.1 and table 5.4.1.1 of 3GPP TS 24.588 [113].

- V2X service identifier to PDU session parameters mapping rules Tag '80'

Contents:

‑ The V2X service identifier to PDU session parameters mapping rules contains configuration parameters for V2X service identifier to PDU session parameters mapping rules.

Contents:

‑ The V2X service identifier to PDU session parameters mapping rules is encoded as shown in figures 5.4.1.17 to 5.4.1.18 and tables 5.4.1.17 to 5.4.1.18 of 3GPP TS 24.588 [113].

- PLMN infos Tag '81'

Contents:

‑ The PLMN infos a list of PLMNs in which the UE is configured to use V2X communication over Uu.

Contents:

‑ The PLMN Infos is encoded as shown in figures 5.4.1.2 to 5.4.1.20 and tables 5.4.1.2 to 5.4.1.18 of 3GPP TS 24.588 [113]. The V2X MBS configuration and the V2X AS MBS configuration are encoded as shown in figures 5.4.1.8A to 5.4.1.8E and tables 5.4.1.8A to 5.4.1.8E of 3GPP TS 24.588 [113].

V2X in 5GS UE policies over Uu data policy object tag:

|  |  |  |
| --- | --- | --- |
| V2X in 5GS UE policies over Uu data policy | Tag Values | Condition |
| V2X data policy over Uu | 'A0' | Shall be present if service n°3 is "available" in the V2X service table |

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

4.6.6.7 EFA2XP\_Uu (A2X policy data over Uu)

If service n°5 is "available" in EFAST, this file shall be present. This EF contains A2X in 5GS UE policies over Uu. The format of the A2X in 5GS UE policies over Uu are specified in 3GPP TS 24.578 [123].

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Identifier: '4F06' | | Structure: Transparent | | | Optional | |
| SFI: '06' | | |  | | | |
| File size: X bytes, (X ≥ 12) | | | Update activity: low | | | |
| Access Conditions:  READ PIN  UPDATE ADM  DEACTIVATE ADM  ACTIVATE ADM | | | | | | |
| Bytes | Description | | | M/O | | Length |
| 1 to X | A2X data policy over Uu data objects | | | M | | X bytes |

The A2X in 5GS UE policies over Uu data object parameters tags:

|  |  |
| --- | --- |
| **Description** | **Tag Value** |
| A2X data policy over Uu Tag | 'A0' |
| A2X service identifier to PDU session parameters  mapping rules Tag | '80' |
| PLMN infos Tag | '81' |

The A2X in 5GS UE policies over Uu data object contents:

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Value** | **M/O** | **Length (bytes)** |
| A2X data policy over Uu Tag | 'A0' | M | 1 |
| Length | Note 1 | M | Note 2 |
| Validity timer | -- | M | 5 |
| Indicator bits | -- | M | 1 |
| A2X service identifier to PDU session parameters mapping rules Tag | '80' | M | 1 |
| Length | X2 | M | Note 2 |
| A2X service identifier to PDU session parameters mapping rules information | -- | M | X2 |
| PLMN infos Tag | '81' | O | 1 |
| Length | X3 | O | Note 2 |
| PLMN infos information | -- | O | X3 |
| Note 1: This is the total size of the constructed TLV object.  Note 2: The length is coded according to ISO/IEC 8825-1 [35]. | | | |

- Validity timer

Contents:

‑ The validity timer contains the timer for controlling the validity of 5GS UE policies for A2X communication over PC5.

Coding:

‑ The validity timer is encoded as shown in figure 5.7.2.1 and table 5.7.2.1 of 3GPP TS 24.578 [123].

- Indicator bits

Contents:

‑ The indicator bits contains bit indications about 5GS UE policies for A2X communication over PC5.

Coding:

‑ The indicator bits are encoded as shown in figure 5.7.2.1 and table 5.7.2.1 of 3GPP TS 24.578 [123].

- A2X service identifier to PDU session parameters mapping rules Tag '80'

Contents:

‑ The A2X service identifier to PDU session parameters mapping rules contains configuration parameters for A2X service identifier to PDU session parameters mapping rules.

Coding:

‑ The A2X service identifier to PDU session parameters mapping rules is encoded as shown in figures 5.7.2.17 to 5.7.2.20 and tables 5.7.2.17 to 5.7.2.18 of 3GPP TS 24.578 [123].

- PLMN infos Tag '81'

Contents:

‑ The PLMN infos a list of PLMNs in which the UE is configured to use A2X communication over Uu.

Coding:

‑ The PLMN Infos is encoded as shown in figures 5.7.2.2 to 5.7.2.20 and tables 5.7.2.2 to 5.7.2.18 of 3GPP TS 24.578 [123]. The A2X MBS configuration and the A2X AS MBS configuration are encoded as shown in figures 5.7.2.3A to 5.7.2.8E and tables 5.7.2.3A to 5.7.2.8E of 3GPP TS 24.578 [123].

A2X in 5GS UE policies over Uu data policy object tag:

|  |  |  |
| --- | --- | --- |
| **A2X in 5GS UE policies over Uu data policy** | **Tag Values** | **Condition** |
| A2X data policy over Uu | 'A0' | Shall be present if service n°5 is "available" in the A2X service table |

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