**3GPP TSG-CT WG1 Meeting #141eC1-23xxxx**

**Online 17– 21 April 2023**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **24.385** | **CR** | **0029** | **rev** | **1** | **Current version:** | **17.2.0** |  |
|  |
| *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 |  |

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| --- |
|  |
| ***Title:***  | MOs for V2X over PC5 when served by NR and not served by NR |
|  |  |
| ***Source to WG:*** | ZTE |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | TEI18, eV2XARC |  | ***Date:*** | 2023-04-18 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***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:*** | According to TS 23.287, the V2X communication provisioning MO in 5GS includes the cases when the UE is served by NR or by E-UTRA, and when the UE is not served by either NR or E-UTRA.However, "served by NR" and not "served by NR" are not reflected in the MO for UE V2X services. |
|  |  |
| ***Summary of change:*** | Add the MO and definition on "served by NR" for V2X over PC5.Update the definition of the MO "<X>/V2XoverPC5/NotServedByEUTRAN" to cover "not served by NR" as well as "not served by E-UTRA".Please note that keeping to use the MO naming "<X>/V2XoverPC5/NotServedByEUTRAN" is due to backward compatibility consideration. |
|  |  |
| ***Consequences if not approved:*** | MOs on "served by NR" and "served not by NR" for V2X over PC5 are not supported to configure the UE for V2X services. |
|  |  |
| ***Clauses affected:*** | 4.1, 5.5.6A (new), 5.5.6B (new), 5.5.6C (new) 5.5.6D (new), 5.5.7, 5.5.8, 5.5.9, 5.5.10, Annex A |
|  |  |
|  | **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 \* \* \* \*

## 4.1 Overview

The V2X communication provisioning MO is used to manage the V2X configuration parameters in a UE supporting 3GPP TS 24.386 [4].

The MO identifier is: urn:oma:mo:ext-3gpp-V2X-communication-provisioning:1.0.

The OMA DM access control list (ACL) property mechanism (see OMA-ERELD-DM-V1\_2 [3]) can be used to grant or deny access rights to OMA DM servers in order to modify nodes of the V2X communication provisioning MO.

In order to request provisioning of the V2X communication provisioning MO, the UE includes in the Package 1 (see OMA-TS-DM\_Protocol-V1\_2 [5]) a Generic Alert message (along with other commands):

- with the "Type" element set to "urn:oma:mo:ext-3gpp-V2X-communication-provisioning:1.0";

- with the "LocURI" element (inside the "Source" element) set to the address of the V2X communication provisioning MO as specified by OMA-TS-DM\_Protocol-V1\_2 [5]; and

- without the "Data" element.

The V2X communication provisioning MO consists of the nodes described in figure 4.1-1.

NOTE: In this release of the document, charging configuration parameters in the V2X communication provisioning MO are not specified.



Figure 4.1-1: The V2X communication provisioning MO (part 1)



Figure 4.1-2: The V2X communication provisioning MO (part 2)



Figure 4.1-3: The V2X communication provisioning MO (part 3)



Figure 4.1-4: The V2X communication provisioning MO (part 4)



Figure 4.1-5: The V2X communication provisioning MO (part 5)



Figure 4.1-6: The V2X communication provisioning MO (part 6)



Figure 4.1-7: The V2X communication provisioning MO (part 7)



Figure 4.1-8: The V2X communication provisioning MO (part 8)



Figure 4.1-9: The V2X communication provisioning MO (part 9)



Figure 4.1-10: The V2X communication provisioning MO (part 10)



Figure 4.1-11: The V2X communication provisioning MO (part 11)

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

### 5.5.6A <X>/V2XoverPC5/ServedByNR

The ServedByNR node contains the configuration parameters for V2X communication over PC5 when the UE is served by NR for V2X communication.

- Occurrence: One

- Format: node

- Access Types: Get, Replace

- Values: N/A

### 5.5.6B <X>/V2XoverPC5/ServedByNR/AuthorizedPLMNs

The AuthorizedPLMNs node contains a list of PLMNs in which the UE is authorized to use V2X communication over PC5 when the UE is served by NR for V2X communication.

- Occurrence: One

- Format: node

- Access Types: Get, Replace

- Values: N/A

### 5.5.6C <X>/V2XoverPC5/ServedByNR/AuthorizedPLMNs/<X>

This node acts as a placeholder for a PLMN in which the UE is authorized to use V2X communication over PC5 when the UE is served by NR for V2X communication.

- Occurrence: ZeroOrMore

- Format: node

- Access Types: Get, Replace

- Values: N/A

### 5.5.6D <X>/V2XoverPC5/ServedByNR/AuthorizedPLMNs/<X>/PLMN

The PLMN leaf indicates a PLMN code of a PLMN in which the UE is authorized to use V2X communication over PC5 when the UE is served by NR for V2X communication.

- Occurrence: One

- Format: chr

- Access Types: Get, Replace

- Values: <PLMN code>

The format of the PLMN code is defined by 3GPP TS 23.003 [7].

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

### 5.5.7 <X>/V2XoverPC5/NotServedByEUTRAN

The NotServedByEUTRAN node contains the configuration parameters for V2X communication over PC5 when the UE is not served by E-UTRAN and not served by NR for V2X communication.

- Occurrence: One

- Format: node

- Access Types: Get, Replace

- Values: N/A

### 5.5.8 <X>/V2XoverPC5/NotServedByEUTRAN/Authorized

The Authorized leaf indicates whether the UE is authorized to use V2X communication over PC5 when the UE is not served by E-UTRAN and not served by NR for V2X communication.

- Occurrence: One

- Format: bool

- Access Types: Get, Replace

- Values: 0, 1

0 Indicates that the UE is not authorized to use V2X communication over PC5 when the UE is not served by E-UTRAN and not served by NR for V2X communication.

1 Indicates that the UE is authorized to use V2X communication over PC5 when the UE is not served by E-UTRAN and not served by NR for V2X communication.

### 5.5.9 <X>/V2XoverPC5/NotServedByEUTRAN/RadioParameters

The RadioParameters node contains sets of radio parameters for V2X communication over PC5 applicable when the UE is not served by E-UTRAN and not served by NR for V2X communication and is located in a geographical area.

- Occurrence: ZeroOrOne

- Format: node

- Access Types: Get, Replace

- Values: N/A

### 5.5.10 <X>/V2XoverPC5/NotServedByEUTRAN/RadioParameters/<X>

This node acts as a placeholder for one set of radio parameters for V2X communication over PC5 applicable when the UE is not served by E-UTRAN and not served by NR for V2X communication and is located in a given geographical area.

- Occurrence: OneOrMore

- Format: node

- Access Types: Get, Replace

- Values: N/A

The radio parameters indicated in the RadioParametersContents child node apply for V2X communication over PC5 when the UE is not served by E-UTRAN and not served by NR for V2X communicationand is located in geographical area indicated by the GeographicalArea child node.

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

Annex A (informative):
V2X Communication Provisioning MO DDF

This DDF is the standardized minimal set. A vendor can define its own DDF for the complete device. This DDF can include more features than this minimal standardized version.

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE MgmtTree PUBLIC "-//OMA//DTD-DM-DDF 1.2//EN"

"http://www.openmobilealliance.org/tech/DTD/dm\_ddf-v1\_2.dtd">

<MgmtTree>

 <VerDTD>1.2</VerDTD>

 <Man>--The device manufacturer--</Man>

 <Mod>--The device model--</Mod>

**...Skipped for clarity...**

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 <!-- The V2XoverPC5 node starts here. -->

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 </Occurrence>

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**...Skipped for clarity...**

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