**3GPP TSG-CT WG1 Meeting #130-eC1-213abc**

**E-meeting, 20-28 May 2021**

**Source: Huawei, HiSilicon, LG Electronics**

**Title: New WID on CT aspects of architecture enhancements for 3GPP support of advanced V2X services - Phase 2**

**Document for: Agreement**

**Agenda Item: 17.1.1**

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: CT aspects of Architecture enhancements for 3GPP support of advanced V2X services - Phase 2

## Acronym: eV2XARC\_Ph2

## Unique identifier: TBD

Potential target Release: Rel-17

## 1 Impacts

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

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

### 2.1 Primary classification

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

### 2.2 Parent Work Item

|  |  |  |  |
| --- | --- | --- | --- |
| Parent Work / Study Items | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| eV2XARC\_Ph2 | SA2 | 910021 | Architecture enhancements for 3GPP support of advanced V2X services - Phase 2 |

### 2.3 Other related Work Items and dependencies

|  |  |  |  |
| --- | --- | --- | --- |
| Other related Work Items (if any) | | | |
| Unique ID | Title | Nature of relationship |
| 860042 | NR Sidelink enhancement (NR\_SL\_enh) | Rel-17 RAN work item |

**Dependency on non-3GPP (draft) specification**: none

## 3 Justification

Architecture enhancements for 3GPP support of advanced V2X services Phase 2 is a Rel-17 SA2 WG work which impacts the CT WGs (see WID in SP-210090). The work is to provide enhancements of work developed in Rel-16 for the 5G System to support advanced V2X services.

## 4 Objective

The objective of this building block is to specify the CT aspects of advanced V2X services Phase 2 in order to enhance the CT WGs specifications based on the stage 2 requirements developed by the SA2 WG. The stage-3 work shall be started only after the applicable normative stage-2 requirements are available. Normative work to be developed by RAN WGs which impacts CT WGs will be considered as soon as becomes available if aligned with stage 2 requirements.

For CT1, the expected work includes:

* update to V2X procedures and message(s) for providing support of PC5 DRX configuration for V2X services to achieve power efficiency;
* potential updates to UE policies for V2X services in 5GS for support of PC5 DRX configuration;

For CT3, the expected work includes:

* potential impacts to the PCC framework for V2X services in 5GS with regards to apply PC5 DRX configuration for V2X services;
* potential impact to the NEF northbound interface to support PC5 DRX configuration for V2X services;

For CT6, the expected work includes:

* support of NR PC5 power efficiency and PC5 DRX configuration for V2X services by means of using the USIM.

## 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 |
| 24.587 | Updates to V2X procedures and message(s) for providing support of PC5 DRX configuration for V2X services | TSG CT #95 (March 2022) | CT1 responsibility |
| 24.588 | Possible updates to UE policies for V2X services in 5GS for support of PC5 DRX configuration | TSG CT #95 (March 2022) | CT1 responsibility |
| 29.513 | Possible updates to support PC5 DRX configuration for V2X services in signalling flows | TSG CT #95 (March 2022) | CT3 responsibility |
| 29.519 | Possible updates to the policy data in order to support PC5 DRX configuration for V2X services | TSG CT #95 (March 2022) | CT3 responsibility |
| 29.525 | Possible updates to policy control service in order to support PC5 DRX configuration for V2X services | TSG CT #95 (March 2022) | CT3 responsibility |
| 29.522 | Potential updates to the NEF northbound interface to support PC5 DRX configuration for V2X services | TSG CT #95 (March 2022) | CT3 responsibility |
| 31.102 | Update to add support for NR PC5 power efficiency and PC5 DRX configuration for V2X services | TSG CT #95 (March 2022) | CT6 responsibility |

## Work item Rapporteur(s)

Herrero Veron, Christian (Huawei)

Christian.Herrero at huawei.com

## 7 Work item leadership

CT1

## 8 Aspects that involve other WGs

SA1 for the requirements aspects, SA2 for the architectural aspects and RAN WGs for the radio aspects.

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Huawei |
| HiSilicon |
| LG Electronics |
| LG Uplus |
| Nokia |
| Nokia Shanghai Bell |
| Qualcomm |
| OPPO |
| CATT |