**3GPP WG-SA6 Meeting #45-BISe S6-21XXXX**

**e-meeting, 11th to 20th October 2021**

**Source: SA6**

**Title: New WID Mission Critical Services over 5GProSe**

**Document for: Approval**

**Agenda Item: 6.5**

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: Mission Critical Services over 5GProSe

## Acronym: MCOver5GProSe

## Unique identifier: xxx

Potential target Release: Rel-18

## 1 Impacts

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

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

### 2.1 Primary classification

This work item is a

|  |  |
| --- | --- |
| X | Feature |
|  | 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) |
| FS\_MCOver5GS | SA6 | 800023 | Study on Mission Critical services support over 5G System |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work Items (if any) |
| Unique ID | Title | Nature of relationship |
| 900007 | Stage 2 for Proximity based Services in 5GS | 5G ProSe architecture of 5GC |
| 911105 | Core part: NR Sidelink Relay | RAN related WID for supporting UE to network relay |
| 860142 | Core part: NR Sidelink enhancement | RAN-related WID to standardize the RAN basic functions for sidelink connection for ProSe service |

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

## 3 Justification

The FS\_MCOver5GS study (3GPP TR 23.783) examines all possible applications of MC services in which the 5GS will be used in the future. These can be categorized to three main focus areas:

* Unicast communication (on-network);
* Multicast and broadcast communications (on-network);
* Off-network communication and their interaction with on-network.

The categories Multicast and Off-network have dependencies on the outcomes of SA2 and RAN WGs, for which results are anticipated towards the end of Rel-17.

In order to make MC Services available over 5GS as quickly as possible, the normative work will be organized as follows:

* Focus area 1: On-network - unicast communication for Mission Critical Services;
* Focus area 2: On-network – multicast and broadcast communications for Mission Critical Services;
* Focus area 3: Off-network communication and On-network communication of Mission Critical Services (encompassing UE-to-network relay support);

3GPP TR 23.783 MCOver5GS provides solutions that are beneficial for focus area 1, focus area 2 and focus 3.

Normative work for focus area 1 is completed as available in TS 23.289. WID for Normative work for focus area 2 is already established. Normative work for focus area 3 is to be started.

## 4 Objective

The present work item will address the necessary normative subjects required for the support of MC Services over 5GS to cover focus area 3: Off-network communication and On-network communication of Mission Critical Services (encompassing UE-to-network relay support) with the following objectives:

1.) Functional model

- To address necessary updates on MC common functional model and MC service functional models in correspondence to the 5G ProSe architectural model for supporting Off-network communication and On-network communication of Mission Critical Services over UE-to-Network relay.

2.) Identification

- To address differences in the use of 5G ProSe identifiers.

3.) Off-network communication and On-network communication of Mission Critical Services over UE-to-Network relay signalling procedure aspects:

- To address group member discovery via 5G ProSe for off-network private communication and group communication.

- To address required configuration in the use of 5G ProSe.

- To address usage of layer-2 based UE-to-network relay or/and layer-3 based UE-to-network relay

## 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** |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| *23.289* | *Updates related to usage of 5G sidelink and UE to network relay for mission critical services* | *SA#95* |  |

## 6 Work item Rapporteur(s)

Yanmei YANG, Huawei, yangyanmei@huawei.com

## 7 Work item leadership

SA6

## 8 Aspects that involve other WGs

SA2 for ProSe aspects, SA3 for security aspects, RAN for NR sidelink radio aspects.

## 9 Supporting Individual Members

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| --- |
| Supporting IM name |
| Huawei |
| TD tech? |
| CBN? |
| CMCC? |
| ZTE? |
| Samsung? |
| UIC? |
| Nokia? |
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