**3GPP TSG-SA3 Meeting #105-e *S3-213903***

e-meeting, 8 - 19 November 2021 (revision of S3-yyxxxx)

Source: Motorola Solutions

Title: New WID on mission critical security enhancements for release 18

Document for: Approval

Agenda Item: 4.25

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: New WID on mission critical security enhancements for release 18

Acronym: MCXSec3

Unique identifier: <TBD>

Potential target Release: *Rel-18*

# 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  |  |  | X | X (mission critical application) |
| 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) |
| [MCImp-MCCoRe](https://www.3gpp.org/DynaReport/WiSpec--700028.htm) | SA1 | 700028 | [Mission Critical Services Common Requirements](https://www.3gpp.org/DynaReport/WiCr--700028.htm) |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work /Study Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 870016 | [Enhanced Mission Critical Push-to-talk architecture phase 3](https://www.3gpp.org/DynaReport/WiCr--870016.htm) | Stage 2 WID |
| 860007 | Mission Critical Data | Stage 2 WID |
| 760049 | MC system migration and interconnection | Stage 2 WID |
| 760050 | MC communication interworking between LTE and non-LTE systems | Stage 2 WID |
| 840037 | [Enhancements to Application Architecture for the Mobile Communication System for Railways Phase 2](https://www.3gpp.org/DynaReport/WiCr--840037.htm) | Stage 2 WID |
| 890027 | Mission Critical services over 5G System; Stage 2 | Stage 2 WID |

# 3 Justification

As the mission critical architecture continues to evolve, the mission critical security architecture must maintain alignment. Rel-18 Stage 2 MC architecture work continues in SA6 based on the following SA6 documents, which provide the architecture foundation for mission critical security:

* TS 23.379 "Functional architecture and information flows to support mission critical communication services"
* TS 23.280 "Common functional architecture to support mission critical services"
* TS 23.281 "Functional architecture and information flows for mission critical video"
* TS 23.282 "Functional architecture and information flows to support Mission Critical Data (MCData)"
* TS 23.283 “Mission Critical Communication Interworking with Land Mobile Radio Systems”
* TS 23.289 “Mission Critical services over 5G System”

# Objective

This work item will address the Rel-18 SA3 normative work for the mission critical security architecture based on normative output of SA6 enhancements, modifications, and/or corrections of the mission critical voice (MCPTT), mission critical data (MCData), and mission critical video (MCVideo) functional architecture and information flows.

SA3 normative security work for Rel-18 includes:

* Discreet listening and logging;
* User login/logout;
* Temporary user identities;
* Off network enhancements (such as ProSe);
* Interworking between LMR and 3GPP;
* Railway;
* Functional aliases;
* MC gateways and relays;
* MC over 5G;
* ETSI plugtest and field test related issues, and
* Unplanned MC security architecture corrections and/or clarifications.

NOTE: Additional objectives to be considered based on approved SA6 Rel-18 WIDs on MCx.

The Stage 2 MC security architecture defined in Release 17 shall form the basis of the Release 18 architecture to maintain cohesion, integration, and backward compatibility across Mission Critical services.

# 5 Expected Output and Time scale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| New specifications | | | | | |
| Type | TS/TR number | Title | For info  at TSG# | For approval at TSG# | Rapporteur |
| NONE |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Impacted existing TS/TR | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| TS 33.180 | Rel-18 enhancements to the mission critical security based on evolution of the mission critical architecture as defined by SA1 and SA6. | TSG#99  (Mar 2023) |  |

# 6 Work item Rapporteur(s)

Woodward, Tim, Motorola Solutions, Inc., [*tim.woodward@motorolasolutions.com*](mailto:tim.woodward@motorolasolutions.com)

# 7 Work item leadership

SA3

# 8 Aspects that involve other WGs

SA6 shall define the stage 2 architecture(s)

CT1 shall define the stage 3 work

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Motorola Solutions, Inc |
| FirstNet |
| UK Home Office |
| NCSC |
| Nokia |
| Nokia Shanghai Bell |
| Ericsson |
| NIST |
| Samsung |