**3GPP SA WG2 Meeting #153E S2-2208819r01**

**Electronic meeting, 10 – 14 Oct 2022 (Revision of S2-220xxxx)**

**Source: ZTE, LG Electronics**

**Title: New WID: Enhancement of Network Slicing Phase 3**

**Document for: Approval**

**Agenda Item: 9.1**

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: Stage 2 of Network Slicing Phase 3

## Acronym: eNS\_Ph3

## Unique identifier: *{A number to be provided by MCC at the plenary}*

Potential target Release: Rel-18

## 1 Impacts

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

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

### 2.1 Primary classification

|  |  |
| --- | --- |
| 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\_eNS\_Ph3 | SA2 | 940063 | Study on Network Slicing Phase 3 |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 910032 | Enhanced Access to and Support of Network Slice | Stage 1 requirements |
|  |  |  |
|  |  |  |

## 3 Justification

This work item aims at specifying system enhancements on network slicing as concluded within TR 23.700-41.

## 4 Objective

The objective is to specify the following enhancements to 5GS as per conclusions reached within TR 23.700-41 for the following aspects:

For key issue #2

- Support of slice based SoR mechanism by referencing to TS 23.122.

For key issue #3

- Enhance the Number of UEs per network slice availability check and update procedure to convey the Service Area and PLMN ID to NSACF

For key issue #4

- Define a Primary NSACF to handle overall NSAC for an S-NSSAI at the global level, and enhance the NSACF to support interaction with Primary NSACF for UE admission quota-based control, or UE admission threshold based control.

For key issue #5

- Enhance the system to provide information related to the supported or not supported TA(s) regarding a rejected S-NSSAI to the UE in the Registration Procedure and UE Configuration Update Procedure.

For key issue #6

- Enhance the system to provide information related to the supported or not supported TA(s) regarding some S-NSSAIs which are partially/conditionally allowed in the RA.

- Enhance the system to configure and handle the slice specific policy related to S-NSSAIs subject to network control in the network and in the supporting UE.

## 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 |
| N/A | N/A | N/A | N/A | N/A | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| 23.501 | Architectural enhancements to support the stated objectives | SA#99 (March 2023) |  |
| 23.502 | Procedural enhancements to support the stated objectives | SA#99 (March 2023) |  |
| 23.503 | Procedural enhancements to support the stated objectives | SA#99 (March 2023) |  |
|  |  |  |  |

## 6 Work item Rapporteur(s)

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## 7 Work item leadership

SA2

## 8 Aspects that involve other WGs

SA5 for management and charging aspects.

SA3 for security aspects

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Alibaba ? |
| Apple ? |
| AT&T ? |
| CATT ? |
| China Mobile ? |
| China Telecom ? |
| China Unicom ? |
| Convida Wireless LLC ? |
| Deutsche Telekom AG ? |
| DISH Network ? |
| Ericsson ? |
| Huawei ? |
| Intel ? |
| InterDigital ? |
| KDDI ? |
| KPN ? |
| KT Corp. ? |
| Lenovo ? |
| LG Electronics |
| LG Uplus ? |
| MATRIXX Software |
| MITRE ? |
| Motorola Mobility ? |
| NEC ? |
| Nokia ? |
| Nokia Shanghai Bell ? |
| NTT Docomo ? |
| OPPO ? |
| Oracle ? |
| Orange ? |
| Qualcomm ? |
| Samsung ? |
| Sanechips ? |
| Sharp ? |
| SK Telecom ? |
| T-Mobile USA ? |
| Spreadtrum ? |
| Tencent ? |
| TELUS ? |
| Verizon UK Ltd ? |
| Xiaomi ? |
| ZTE |