**3GPP TSG-CT WG1 Meeting #136-eC1-224044**

**E-Meeting, 12th – 20th May 2022**

(revision of C1-223496)

**3GPP TSG-CT WG4 Meeting #110-eC4-223396**

**E-Meeting, 12th – 20th May 2022**

(revision of C4-223203)

**Source: China Mobile, Nokia, Nokia Shanghai Bell, China Southern Power Grid Co.**

**Title: New WID on CT aspects of enhancement of RAN Slicing for NR**

**Document for: Approval**

**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 enhancement of RAN Slicing for NR

## Acronym: NRslice

## Unique identifier: TBD

Potential target Release: Rel-17

## 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

|  |  |
| --- | --- |
|  | 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) |
| NR\_Slice-Core | RAN2 | 911107 | Core part: Enhancement of RAN slicing for NR |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 860039 | Study on enhancement of RAN slicing for NR | RAN work item |

## 3 Justification

RAN2 carried out a Rel-17 work item on the enhancement of RAN Slicing for NR. And the LSs from RAN2 to CT1 (R2-2108928 and R2-2203807) pointed out the solution agreed in RAN2 for the normative phase has impacts on protocols and interfaces under CT WGs' responsibilities. Furthermore, the LS from SA2 (S2-2203597) and the attached agreed CRs on normative stage 2 work stated the requirements to enhance the NAS protocol.

This WID aims at carrying out the related work in CT WGs to complete the feature end to end.

## 4 Objective

The objective of the work item is to develop the specifications according to RAN Slicing for NR requirements from RAN WGs work item NR\_Slice-Core. CT WGs will support and align to normative stage 2 updates in the technical specifications under SA2 responsibility for “RAN Slicing for NR” introduced under corresponding RAN WI code. Stage 3 work on the enhancement of the NAS protocol and the NF services shall be started only after the applicable normative stage 2 work is available. The following areas of work are expected to be covered (non-exhaustive):

**CT1**

Enhancement of the NAS to support signalling of network slice AS group information.

**CT4**

1. Enhancement of NSSF services to support the network slice AS group management.
2. Potential definition of common date type to support the feature in NR\_Slice\_Core.

## 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 |
| 24.501 | Enhancement of the NAS to support signalling of network slice AS group information. | TSG#96 (June 2022) | CT1 |
| 29.531 | Enhancement of NSSF services to support the network slice AS group management. | TSG#96 (June 2022) | CT4 |
| 29.571 | Potential definition of common date type to support the feature in NR\_Slice\_Core. | TSG#96 (June 2022) | CT4 |

## 6 Work item Rapporteur(s)

Chen Xu, China Mobile, chenxu@chinamobile.com

## 7 Work item leadership

CT1

## 8 Aspects that involve other WGs

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| China Mobile |
| ZTE |
| Huawei |
| HiSilicon |
| vivo |
| CATT |
| China Telecom |
| OPPO |
| Xiaomi |
| Ericsson |
| China Unicom |
| Nokia |
| Nokia Shanghai Bell |
| China Southern Power Grid Co. |
| LG Electronics |