**3GPP TSG RAN WG5 Meeting #90-e R5-211303**

**Electronic Meeting, February 22 – March 5, 2021**

**3GPP TSG RAN Meeting #91-e RP-21xxxx**

**Electronic Meeting, March 22 - 26, 2021**

**Source: China Mobile, China Telecom, China Unicom**

**Title: New WID on UE Conformance Test Aspects for Enhancement of Network Slicing**

**Document for: Approval**

**Agenda Item: 7.4.1**

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: UE Conformance Test Aspects for Enhancement of Network Slicing

## Acronym:eNS-UEConTest

## Unique identifier:

|  |  |
| --- | --- |
| **This WID includes a Testing part** | **X** |
| **and it addresses the following 3GPP work area:** | **Radio Access** |  |
| **Core Network** | **X** |
| **Services** |  |

Potential target Release: Rel-16.

## 1 Impacts

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

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

### 2.1 Primary classification

This work item is a

|  |  |
| --- | --- |
|  | 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) |
| eNS | SA WG2 | 820023 | Enhancement of Network Slicing |
| eNS | CT1 | 830052 | CT1 Aspect of eNS |
| eNS\_SEC | SA WG3 | 850022 | Security aspects of Enhanced Network Slicing |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work Items (if any) |
| Unique ID | Title | Nature of relationship |
|  |  |  |

## 3 Justification

5G Network Slicing is one of the most distinctive features provided by 5G NR and is key to meet diversified services requirements in 5G era. With the introduction of 5G network slicing technology, operators will be able to provide network capabilities with different functional characteristics, which will provide "exclusive" network for users with different KPI requirements to ensure a high-quality of service and meet differentiated scenario requirements. Users can enjoy more amazing application products, which will further stimulate the development of new industry applications as well as personal applications. Besides, 5G network slicing can help to achieve the goal of improving the efficiency of network resource utilization, optimizing the network construction investment of operators, and building a flexible and agile 5G network.

The user experience of 5G network slicing is critical for commercial success, and testing is the key guarantee. Enhancement for Network Slicing currently is not covered by 3GPP RAN5 conformance test specifications.

The Rel-16 CT WI eNS has been 100% completed at CT#88 (December 2019). It is justified now to start the specification of the corresponding UE conformance test for 5G NR UE supporting Enhanced Network Slicing to meet the market requirements in time.

## 4 Objective

The objective of the proposed Work Item is to define UE conformance requirements corresponding to WID on CT aspect of eNS. This work item will define protocol conformance test cases for “Network Slicing interworking support from EPC to 5GC” and “Network Slicing based authentication and authorization”.

## 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# | Remarks |
|  |  |  |  |  |  |

|  |
| --- |
| **Impacted existing TS/TR** |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| TS 38.508-1 | Definition of common environment for Rel-16 NR Enhancements to Network Slicing | TSG RAN#94(Dec-21) |  |
| TS 38.508-2 | Introduction of common implementation conformance statements for Rel-16 NR Enhancements to Network Slicing | TSG RAN#94(Dec-21) |  |
| TS 38.509 | Introduction of common implementation conformance statements for Rel-16 NR Enhancements to Network Slicing | TSG RAN#94(Dec-21) |  |
| TS 38.523-1 | Introduction of the SIG test cases for Rel-16 NR Enhancements to Network Slicing | TSG RAN#94(Dec-21) |  |
| TS 38.523-2 | Introduction of test applicability for SIG test cases impacted by Rel-16 NR Enhancements to Network Slicing | TSG RAN#94(Dec-21) |  |
| TS 38.523-3 | Introduction of test model Rel-16 NR Enhancements to Network Slicing | TSG RAN#94(Dec-21) | Note: Progress of TTCN development is tracked in MCC TF160 reports to RAN5/RAN. |

## 6 Work item Rapporteur(s)

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## 7 Work item leadership

RAN5

## 8 Aspects that involve other WGs

None

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Anritsu |
| AT&T |
| China Mobile |
| China Telecom |
| China Unicom |
| CATT |
| DISH |
| DT Link Tester |
| Ericsson |
| Huawei |
| Hisilicon |
| Keysight |
| Lenovo |
| MediaTek |
| Motorola Mobility |
| NTT Docomo |
| Orange |
| OPPO |
| R&S |
| Samsung |
| Star Point |
| Telecom Italia |
| UNISOC |
| Verizon |
| ZTE |
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