**3GPP TSG-RAN5 Meeting #96-e** **R5-224098**

**Electronic Meeting, 15 Aug – 26 Aug 2022**

**3GPP TSG RAN Meeting #97-e RP-22xxxx**

**Electronic Meeting, 12 Sep – 16 Sep 2022** (revision of RP-2xxxx)

**Source: China Telecom, CATT, ZTE**

**Title:** **New WID on UE Conformance Test Aspects– Access Traffic Steering, Switch and Splitting support in 5G system**

**Document for: Endorsement**

**Agenda Item: 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 - Access Traffic Steering, Switch and Splitting support in 5G system

## Acronym: ATSSS-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** |  |  |  |  |  |
| **No** | X | 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) |
| ATSSS | CT | 830016 | CT aspects of ATSSS |
| ATSSS | CT1 | 830057 | CT1 aspects of ATSSS |
|  |  |  |  |

### 2.3 Other related Work Items and dependencies

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

## 3 Justification

Today, non-3GPP access is a vital companion access infrastructure for mobile networks that can help mobile operators deal with the explosive rate of growth in network traffic. Non-3GPP access such as Wi-Fi can relieve the pressure on the mobile network and can offer fast indoor data connections.

Increasingly, many operators are seeking ways to balance data traffic between mobile networks and non-3GPP access in a way that is transparent to users and reduces mobile network congestion. This can be achieved by not only steering traffic from the mobile network onto non-3GPP access, but also to switch or split traffic in a managed way between the two types of accesses in order to deliver the best customer experience.

For UEs that can be simultaneously connected to both 3GPP access and non-3GPP access, the 5G system is able to take advantage of these multiple accesses in a way that improves the user experience, optimizes the traffic distribution across various accesses, enables the provision of new high-data-rate services and achieve seamless handover between different accesses, etc.

3GPP had initiated the Access Traffic Steering, Switch and Splitting (ATSSS) standardization work from 2019, defined Multi Access-PDU (MA-PDU) session over one 3GPP access and one non-3GPP access and the related NAS ATSSS rule, the Stage 2 of ATSSS had been completed in Sep 2019, and the CT1 aspects of ATSSS had been finished in June,2020. More and more operators are interested in the [commercial](javascript:;) of ATSSS to enhance their customers experience, so it’s the proper time for RAN5 to start the R16 protocol conformance test for ATSSS at this time.

## 4 Objective

### 4.1 Objective of SI or Core part WI or Testing part WI

The objective of this work item is to define the UE conformance requirements corresponding to the R16 WI on devices that support ATSSS. This work item will cover NAS Protocol conformance test specifications with Rel-16 ATSSS features.

## 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** *{One line per specification. Create/delete lines as needed}* | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| TS 38.508-1 | Definition of common test environment for the Rel-16 ATSSS configurations in 5G system. | TSG RAN#102  (Dec-23) |  |
| TS 38.508-2 | Introduction of common implementation conformance statement (ICS) for Rel-16 ATSSS in 5G system. | TSG RAN#102  (Dec-23) |  |
| TS 38.523-1 | Introduction of the SIG test cases for Rel-16 ATSSS in 5G system. | TSG RAN#102  (Dec-23) |  |
| TS 38.523-2 | Introduction of test applicability for SIG test cases impacted by Rel-16 ATSSS in 5G system | TSG RAN#102  (Dec-23) |  |
| TS 38.523-3 | Introduction of test model for Rel-16 ATSSS requirements in 5G system. | TSG RAN#102  (Dec-23) | Progress of TTCN development of the new protocol test cases is tracked in MCC TF160 reports to RAN5/RAN. |

## 6 Work item Rapporteur(s)

Jing Zhao(China Telecom)

[Zhaoj16@chinatelecom.cn](mailto:Zhaoj16@chinatelecom.cn)

Xiaozhong Chen (CATT)

[chenxiaozhong@CATT.CN](mailto:chenxiaozhong@CATT.CN)

Ma Wei(ZTE)

ma.wei4@zte.com.cn

## 7 Work item leadership

RAN5

## 8 Aspects that involve other WGs

None

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| China Telecom |
| CATT |
| ZTE |
| Huawei |
| Hisilicon |
| Lenovo |
| Motorola Mobility |
|  |