**3GPP TSG-RAN5 Meeting #94-e *R5-221385***

**Electronic Meeting, 21st Feb – 04th Mar. 2022**

**3GPP TSG RAN Meeting #95e RP-22xxxx**

**Electronic Meeting, March. 14 - 17, 2022**

**Source: Huawei, HiSilicon**

**Title: New WID on** **UE Conformance - Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n257 and n258**

**Document for: Approval**

**Agenda Item: 13.1**

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 - Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n257 and n258

## Acronym: NR\_FR2\_FWA\_Bn257\_Bn258-UEConTest

## Unique identifier:

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

Potential target Release: Rel-17.

## 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affects:** | UICC apps | ME | AN | CN | Others (specify) |
| **Yes** |  |  |  |  |  |
| **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) |
| NR\_FR2\_FWA\_Bn257\_Bn258-Core | R4 | 870164 | Core part: Introduction of FR2 FWA (Fixed Wireless Access) UE with maximum TRP (Total Radiated Power) of 23dBm for band n257 and n258 |
| NR\_FR2\_FWA\_Bn257\_Bn258-Perf | R4 | 870264 | Perf. Part: Introduction of FR2 FWA (Fixed Wireless Access) UE with maximum TRP (Total Radiated Power) of 23dBm for band n257 and n258 |

### 2.3 Other related Work Items and dependencies

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

## 3 Justification

In RAN#87 meeting, a new RAN4 Rel-17 WI was approved which introduced a new FR2 FWA UE with max EIRP of 43dBm and max TRP of 23dBm for band n257 and n258. A new power class (PC5) definition was introduced. The corresponding RF, RRM and Performance requirements are specified. This RAN4 WI has been 100% completed at RAN#91e meeting. There is a need to introduce a related RAN5 work item to enable corresponding UE conformance testing for FWA UE supporting PC5 in Rel-17.

## 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 WID on Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n257 and n258 with Unique Identifier 870064, analysing the test case impact, applicability, test environment, and updating the relevant conformance specifications for the work item in Rel-17.

## 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 |
|  |  |  |  |
| 38.508-1 | Definition of common environment and signalling for new FR2 FWA UE with maximum TRP of 23dBm for bands n257 and n258. | TSG RAN#102(Dec-23) |  |
| 38.508-2 | Introduction of physical implementation capabilities for PC5 RF requirements for band n257 and n258. | TSG RAN#102(Dec-23) |  |
| 38.521-2 | Introduction of SA RF requirements for new FR2 FWA UE with maximum TRP of 23dBm for n257 and n258  | TSG RAN#102(Dec-23) |  |
| 38.521-4 | Introduction of Performance requirements for new FR2 FWA UE with maximum TRP of 23dBm for n257 and n258 | TSG RAN#102(Dec-23) |  |
| 38.522 | Introduction of test applicability for new FR2 FWA UE with maximum TRP of 23dBm for n257 and n258. | TSG RAN#102(Dec-23) |  |
| 38.533 | Introduction of RRM requirements for new FR2 FWA UE with maximum TRP of 23dBm for n257 and n258 | TSG RAN#102(Dec-23) |  |
| 38.903 | Derivation of test tolerances and measurement uncertainty for User Equipment (UE) conformance test cases for new FR2 FWA UE with maximum TRP of 23dBm for n257 and n258. | TSG RAN#102(Dec-23) |  |
| 38.905 | Derivation of test points for R16 RF requirements for new FR2 FWA UE with maximum TRP of 23dBm for n257 and n258 in radio transmission and reception User Equipment (UE) conformance test cases. | TSG RAN#102(Dec-23) |  |

## 6 Work item Rapporteur(s)

Yuxin Hao (Huawei)

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## 7 Work item leadership

RAN5

## 8 Aspects that involve other WGs

None

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## 9 Supporting Individual Members

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| --- |
| Supporting IM name |
| Huawei |
| HiSilicon |
| Softbank |
| Ericsson |
| Telecom Italia |