**3GPP TSG WG RAN5 Meeting #105 R5-247519**

**Orlando, US, November 18-22, 2024**

**3GPP TSG RAN Meeting #106 RP-24xxxx**

**Madrid, Spain, December 9-12, 2024** (revision of RP-yyxxxx)

**Source: Huawei, HiSilicon, CMCC**

**Title: New WID on UE Conformance - Rel-19 NR CA and DC; and NR and LTE DC Configurations**

**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 – Rel-19 NR CA and DC; and NR and LTE DC Configurations

Acronym: NR\_CADC\_NR\_LTE\_DC\_R19-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-19

# 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 description is a

|  |  |
| --- | --- |
| Normative Work Item:  *tick applicable boxes below* | |
|  | Stage 1 |
|  | Stage 2 |
|  | Stage 3 |
| X | Other (e.g. testing) |

### 2.2 Parent Work Item

|  |  |  |  |
| --- | --- | --- | --- |
| Parent Work / Study Items | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| DC\_R19\_xBLTE\_yBNR | R4 | 1040119 | Rel-19 DC of x LTE band(s), y NR band(s) (x<=6) and single or two NR SUL bands |
| DC\_R19\_xBLTE\_yBNR-Core | R4 | 1041119 | Core part: Rel-19 Dual connectivity (DC) of x LTE band(s), y NR band(s) (1<=x<6, 1<=y<6, x+y<=6) and single or two NR Supplementary Uplink (SUL) bands |
| NR\_CADC\_SUL\_R19 | R4 | 1040120 | Rel-19 NR CA/DC for x bands DL with y bands UL (x<7, y<3) and SUL/CA band combinations with a single SUL or two SUL cells |
| NR\_CADC\_SUL\_R19-Core | R4 | 1041120 | Core part: Rel-19 NR Carrier Aggregation (CA)/Dual Connectivity (DC) for x bands DL with y bands UL (x<7, y<3) and Supplementary Uplink (SUL) band combinations/CA band combinations with a single SUL or two SUL cells |

### 2.3 Other related Work Items and dependencies

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

# 3 Justification

3GPP TSG RAN WG4 has created the spectrum related WIs for introducing the Rel-19 DC and NR CA/DC configurations. There are quite a few configurations completed by RAN4. Therefore, it’s time for 3GPP TSG RAN WG5 to create the Rel-19 NR CA/DC basket WI for introducing configurations to the 3GPP UE test specifications.

# 4 Objective

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

The objective of the present work item is to develop RF, RRM and protocol test cases for Rel-19 NR CA/DC configurations. The scope of this work item is conformance testing of all Rel-19 CA/DC configurations including at least 1 NR component carrier specified by 3GPP TSG RAN WG4. The introduction of the CA/DC configurations into the 3GPP TSG RAN WG5 test specification is dependent on the progress of the associated core and performance work items in 3GPP TSG RAN WG4.

# 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 NR Rel-19  CA and DC configurations. | TSG RAN#114 (Dec-26) |  |
| TS 38.508-2 | Introduction of common implementation conformance statement (ICS) for new NR Rel-19 CA and DC configurations | TSG RAN#114 (Dec-26) |  |
| TS 38.521-1 | Introduction of new NR Rel-19 CA and DC configurations specific RF requirements for Range 1 Standalone | TSG RAN#114 (Dec-26) |  |
| TS 38.521-2 | Introduction of new NR Rel-19 CA and DC configurations specific RF requirements for Range 2 Standalone | TSG RAN#114 (Dec-26) |  |
| TS 38.521-3 | Introduction of new NR Rel-19 CA and DC configurations specific RF requirements for Range 1 and Range 2 Interworking operation with other radios | TSG RAN#114 (Dec-26) |  |
| TS 38.521-4 | Introduction of new NR Rel-19 CA and DC configurations specific performance requirements | TSG RAN#114 (Dec-26) |  |
| TS 38.522 | Applicability statements of the new NR Rel-19 CA and DC configurations for the RF & RRM test cases | TSG RAN#114 (Dec-26) |  |
| TS 38.523-1 | Introduction of new NR Rel-19 CA and DC configurations specific Protocol requirements | TSG RAN#114 (Dec-26) |  |
| TS 38.523-2 | Applicability statements of the new NR Rel-19 CA and DC configurations for the Protocol test cases | TSG RAN#114 (Dec-26) |  |
| TS 38.523-3 | Introduction of test model for NR Rel-19 CA and DC configurations | TSG RAN#114 (Dec-26) | Note: Progress of TTCN development of the new protocol test cases is tracked in MCC TF160 reports to RAN5/RAN |
| TS 38.533 | Introduction of new NR Rel-19 CA and DC configurations specific RRM requirements | TSG RAN#114 (Dec-26) |  |
| TR 38.903 | Documentation of test tolerances for NR Rel-19 CA and DC configurations RF and RRM test cases | TSG RAN#114 (Dec-26) |  |
| TR 38.905 | Documentation of test points for NR Rel-19 CA and DC RF test cases | TSG RAN#114 (Dec-26) |  |

# 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 |
| Huawei |
| HiSilicon |
| CMCC |
| Verizon |
| AT&T |
| Nokia |
| NTT DOCOMO |
| ZTE |