**3GPP TSG-RAN5 Meeting #100 draft\_R5-235340r2**

**Toulouse, France, 21st August 2023 – 25th August 2023**

**Title:** LS on CG-SDT RRM test procedure

**Response to:** NA

**Release:** Rel-17

**Work Item:** NR\_SmallData\_INACTIVE-UEConTest

**Source:** TSG RAN WG5

**To:** TSG RAN WG4

**Cc:** -

**Contact Person:**

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**Attachments:** R5-234674

**1. Overall Description:**

RAN5 discussed implementation of the CG-SDT RRM test procedure for 38.133 test A.6.2.1 and A.7.2.1.1. The test case definition is currently combining a positive (UE initiates CG-SDT operation) and a negative (UE does not initiate CG-SDT operation) check into a single test iteration.

RAN5 explored triggering 2 separate MO transmissions without the need for UE to return to RRC\_CONNECTED and concluded that the simplest way to test the RAN4 requirement for positive and negative check mentioned above is by splitting the test into 2 subtests, each starting in TA and ending in TH with different power levels such that subtest 2 is only tested if subtest 1 passes. Each sub-test will start in connected mode and then enter to in-active mode individually.

More details are shared in the attached discussion paper [1]. Other options to implement were discussed and found to be quite invasive requiring creation of a test loop function which is costly to implement in the UE.

The proposed approach of splitting the test into 2 subtests although results in a slight increase in test time and implicitly cannot verify both positive and negative TA validation in a single RRC\_INACTIVE session, is RAN5 preferred approach after careful consideration of alternate solutions.

If RAN4 agrees with the above assessment, RAN5 would like to kindly request RAN4 to split the test into 2 subtests as specified in [1]

**2. Actions:**

**To RAN4 group.**

**ACTION:**

RAN5 respectfully asks RAN4 to consider the observations shared in this LS and re-define the TS 38.133 test case A.6.2.1 and A.7.2.1.1 as per our suggested approach.

**3. Date of Next TSG-RAN WG5 Meetings:**

TSG-RAN5 Meeting#101 13th – 17th November 2023 Chicago, Illinois, United States of America

TSG-RAN5 Meeting#102 26th February – 1st March 2024 Athens, Greece

**4. Reference:**

[1] R5-234674: “Discussion on CG-SDT test procedure”, Qualcomm.

[2] R5-234257: “Current issues in conformance testing of CG-SDT feature in RRC INACTIVE state”, Nokia.

[3] R5-232446: “Discussion on sending/receiving test mode commands/acknowledgement in RRC INACTIVE state”, Nokia.

[4] 3GPP TS 38.133: "NR; Requirements for support of radio resource management".

[5] 3GPP TS 38.533: "NR; User Equipment (UE) conformance specification; Radio Resource Management (RRM)".