**3GPP TSG-RAN5 Meeting #94-e *R5-22XXXX***

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

**Title:** LS on SCell Dropping in FR2 RF UL-CA tests

**Response to:**

**Release:** Release 16

**Work Item:** NR\_RF\_FR2\_req\_enh-UEConTest

**Source:** TSG RAN WG5

**To:** TSG RAN WG4

**Cc:** N/A

**Contact Person:**

**Name:** Ashwin Mohan

**E-mail Address:** ashwin\_mohan@apple.com

**Send any reply LS to: 3GPP Liaisons Coordinator,** **3GPPLiaison@etsi.org**

**Attachments:**

**1. Overall Description:**

RAN5 has been discussing the issue seen in FR2 RF UL-CA conformance test cases wherein UEs stop transmitting UL signals of FR2 NR SCC (Scell Drop) when set to transmit at maximum power, as described in [3], [4] and [6].

RAN4 provided information to RAN5 via [1] on aspects to consider when defining FR2 UL-CA conformance test cases. In addition, RAN1 acknowledged via [5] that SCell drop due to priority rules can occur and that RAN1 has not identified any issue with the priority rules in TS 38.213.

RAN5 is considering the usage of a conformance-only test function to test FR2 RF UL-CA conformance tests, for 3GPP Release 16 and forward. Such a conformance-only test function approach includes usage of a parameter that defines the power back-off needed to be applied to the PCell to potentially avoid SCell drop in FR2 UL-CA conformance test cases. RAN5 will further define the test procedures to accomplish the FR2 UL-CA conformance test.

RAN5 requests RAN4 for responses to the following questions:

1. Whether RAN4 sees a need to define within TS 38.101-2, the aforementioned power backoff parameter which will be used by conformance-only test function?
2. Whether RAN4 can share guidance on any impact on absolute and relative power tolerance accuracy that needs to be factored because of usage of such a conformance-only test function to apply power limits/back-off?

**2. Actions:**

**To RAN4 group.**

**ACTION:** RAN5 respectfully requesting RAN4 group to provide feedback on the questions raised above.

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

TSG-RAN5 Meeting#95e 16rd – 27th May 2022 Electronic Meeting

TSG-RAN5 Meeting#96 22nd – 26th August 2022 Toulouse, FR

References

1. R4-2103410, LS to RAN5 on SCell dropping, Oppo, RAN4#98e
2. R4-2114950, LS to RAN1 on Scell dropping issue of CA, Huawei, RAN4#100e
3. R5-221346, Avoiding Scell Drop in FR2 RF UL-CA tests, Apple Portugal, RAN5#94e
4. R5-218400, Avoiding Scell Drop in FR2 RF UL-CA tests, Apple Portugal, RAN5#93e
5. R1-2110698, Reply LS to RAN4 on SCell dropping issue of CA, Huawei, RAN1#106-bise
6. R4-2009656, NR SCC UL power drop behaviour with EN-DC UE in FR2, Anritsu, RAN4#96e