**3GPP TSG RAN WG1 #118 R1-2407504**

**Maastricht, NL, August 19th – 23rd, 2024**

**Title: [Draft]** ReplyLS on UL Tx switching

**Response to:** R1-2400007 (R2-2313959)

**Release:** Rel-18

**Work Items:** NR\_MC\_enh-Core

**Source:** NTT DOCOMO, INC. [RAN WG1]

**To:** RAN WG2

**CC:** RAN WG4

**Contact Person:**

**Name:** Hiroki Harada

**E-mail Address:** hiroki.harada.sv@nttdocomo.com

**Attachment:**

**1. Overall Description:**

RAN1 would like to thank again RAN2 for the LS R1-2400007/R2-2313959.

In previous RAN1 reply LS R1-2401776, RAN1 confirmed that the first RAN2 agreement in the LS R1-2400007/R2-2313959 has no issue from RAN1 perspective, except for a case where Rel-18 UL Tx switching is configured with band combination {A, B} to a UE reporting support of UL Tx switching for band combination {A, B, C} /{A, B, C, D} and no UL-MIMO on band A nor band B.

For the case concerned in R1-2401776, RAN1 made following agreements at RAN1#118 meeting.

Agreement

* Agree the CR in R1-2406993.
* Introduce following capability for the support of fallback to 1T-1T UL Tx switching when just 2 bands configured.
  + FG name
    - Support of 2-band configuration of 1T-1T UL Tx switching by using Rel-18 UL Tx switching configurations
  + Component
    - Support of 2-band configuration of 1T-1T UL Tx switching by using Rel-18 UL Tx switching configurations
  + Prerequisite
    - “switchedUL” is reported via uplinkTxSwitchingOptionForBandPair
  + Consequence if the feature is not supported by the UE
    - UE is not expected to be configured with 1T-1T UL Tx switching when just 2 bands configured (band A and B) by using Rel-18 UL Tx switching configurations
  + Type
    - Per band pair per BC
  + Note
    - The new capability is only needed for a band pair where the UE reports no UL-MIMO on both bands.
    - For a band pair for which the UE separately indicated UL CA support without UL Tx switching, the new capability is not expected to be reported as supported.
  + Mandatory or optional
    - Optional with capability signaling

Agreement

* Send LS to inform RAN2 about the above agreement.

**2. Actions:**

**To RAN WG2**

**ACTION:** RAN1 respectfully asks RAN2 to take above into account and to introduce corresponding capability signalling in Rel-18.

**3. Date of Next RAN WG1 Meetings:**

TSG-RAN WG1 Meeting #118bis October 14 to 18, 2024 Hefei, China

TSG-RAN WG1 Meeting #119 November 18 to 22, 2024 Orlando, US