**3GPP TSG-RAN WG2 Meeting #121bis-e R2-230xxxx**

Online, 17 - 26 April, 2023

**Title: [Draft]** LS on carrier mapping for unicast SL CA

**Response to:**

**Release:** Rel-18

**Work Item:** NR\_SL\_enh2

**Source:** Apple **[To be RAN2]**

**To:** SA2

**Cc:** CT1

**Contact person:** Peng Cheng

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

**Attachments:** -

# 1 Overall description

RAN2 discussed NR SL CA in RAN2#121, and agreed that the carrier mapping configured by V2X layer can be used for NR broadcast/groupcast SL CA, as in LTE SL CA.

Agreement:

Proposal 3: For groupcast/broadcast, as in LTE SL CA, the carrier(s) that can be used for transmitting data are configured by V2X layer for the L2 destination. FFS on backwards compatibility issue.

RAN2 also discussed NR unicast SL CA. Based on the observation, as section 6.1.2.12 of TS 24.587-v18.0.0 has captured, that V2X layer can be provisioned with service to frequency mapping for unicast, RAN2 assumes that it is applicable to PC5 unicast SL CA after link has been established. However, RAN2 also identified below 2 questions to ask SA2’s input:

* Question 1: According to TS 24.588, V2X layer is only provisioned with a mapping between service identifier and initial L2 address used for unicast. But service identifier is invisible to AS-layer, and the initial L2 ID will only be used in DCR and be replaced by a self-chosen L2 ID in PC5-S link establishment procedure. Then, after L2 ID changes, whether/how can UE's AS layer obtain the mapping between L2 ID and frequencies?
* Question 2: According to TS 24.587, PC5 unicast allows UEs to add/modify/remove V2X services/PC5 QoS flows to the same L2 ID pair. Then, given service info is invisible to AS layer, how can the UE ensure the modified V2X services to be transmitted only on the corresponding frequencies in the V2X layer?

# 2 Actions

**To SA2:**

**ACTION:** RAN2 respectfully asks SA2 to provide responses on the questions described above.

# 3 Dates of next TSG-RAN WG2 meetings

TSG RAN WG2 Meeting #122 May 22 – May 26, 2023 Incheon, KR

TSG RAN WG2 Meeting #123 August 21 – August 25, 2023 Toulouse, FR