**3GPP TSG-RAN WG4 Meeting # 97-e R4-2016817**

**Electronic Meeting, Nov .2nd – 13th 2020**

**Title: [Draft]LS on DC location reporting f or intra-band UL CA**

**Response to:**

**Release:** Rel-16

**Work Item:** NR\_RF\_FR1-Core

**Source:** RAN4

**To:** RAN2

**Cc:** RAN1

**Contact Person:**

#### Name: Hiromasa Umeda

E-mail Address: hiromasa.umeda at nokia. com

**Attachments:**

**1. Overall Description:**

RAN4 further discussed how to handle TX DC location for intra band UL CA and at least reached the following two consensuses.

First, RAN4 agreed to adopt RRC based solution in Rel16 and discusses further enhancement in Rel17 not restricting prior RRC based solution, if necessary.

Secondary, RAN4 identified at least three advanced RRC based solutions to reduce the amount of signalling overhead are feasible.

1. Combination of setting up the rule for default DC location for the most likely cases(R4-2015212) and other reporting method(s)
	* Set up the rule to for NW to identify DC location for the two most likely cases as default without UE reporting
		+ UE DC location can be considered by default in the center calculated by the lower edge of the lowest CC and the higher edge of the highest CC among all the active CCs
		+ UE DC location can be considered by default in the center of the lower edge of the lowest active BWP and the higher edge of the highest active BWP among all the active CCs by UE with a capability
	* Increase the above capability bit and/or allow UE to report DC location by other reporting solution(s) for the cases not covered by the default rule such as
		+ the lower edge of the lowest configured BWP and the higher edge of the highest configured BWP among all the configured CCs, etc.
2. Network provides a list of likely BWP permutations to UE in advance(R4-2014714)
3. Report possible DC locations for all the 2CCs pairs within the configured CA band combination(R4-2016514)

**2. Actions:**

**To RAN1 and RAN2 group.**

**ACTION:**

RAN4 respectfully asks RAN2 to take into account the above agreements to generate signalling mechanism.

**3. Date of Next TSG–RAN4 Meetings:**

TSG RAN WG4 Meeting #98-e Jan. 25 – Feb.5, 2021 Online