**3GPP TSG-RAN WG2 Meeting #119R2-220**

**Electronic August 2022**

**Title: DRAFT**LS on further questions on feMIMO RRC parameters

**Response to: -**

**Release:** Rel-17

**Work Item:** NR\_feMIMO-Core

**Source:** ERICSSON to be replaced by 3GPP TSG-RAN WG2

**To:** 3GPP TSG-RAN WG1

**Contact Person:**

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**Attachments:** None

**1. Overall Description:**

RAN2 discussed the field description of addtionalPCI in TCI-state. The current field description states:

***additionalPCI***

Indicates that this TCI state refers to an additional PCI different from serving cell PCI, as configured in *ServingCellConfig*.

However, the IE TCI-State includes both qcl-Type1 and qcl-Type2 which then again may include a field “cell” to indicate in which serving cell the QCL reference signals are configured in.

**Question 1**

RAN2 would like to ask RAN1 whether current field description of *additionalPCI*  is correct or whether the additional PCI should refer to the “*cell*” configured in the *QCL-info*. If the latter, would there be need to state that “*cell*” cannot be two different values if *additionalPCI* refers to both of these?

Second part of the question is whether the field description of cell need to be updated or not.

RAN2 also discussed the same matter for the IE *TCI-UL-State* with respect to the need to update field descriptions of *additionalPCI* or the *servingCellId or ul-powerControl*

**Question 2**

RAN2 would like to ask RAN1 whether current field description of *additionalPCI*  in IE *TCI-UL-State* is correct or whether update is needed for that or for the field description of *servingCellId* and *ul-powerControl* in the same IE

**Pending part on offline discussion:**

RAN2 also discussed about the configuration flexibility of the UL powercontrol.

In Rel-17 unified TCI framework, TCI-State (joint type) and TCI-UL-State-r17 (UL-only type) can be optionally configured with a set of power control parameters (ul-powerControl-r17). According to TS 38.331 V17.1.0, there are two possible configuration cases: a) ul-powerControl-r17 is present in BWP-UplinkDedicated and it is absent in all joint TCI states and UL TCI states, b) ul-powerControl-r17 is absent in BWP-UplinkDedicated and it is present in all joint TCI states and UL TCI states.

However, RAN1’s agreements do not exclude the case that ul-powerControl-r17 is present in some TCI states and is absent in other TCI states (case c)). In case c), ul-powerControl-r17 can be configured in both BWP-UplinkDedicated and TCI-State and TCI-UL-State-r17. When the indicated (currently used) TCI state is not configured with ul-powerControl-r17, the UE uses ul-powerControl-r17 in BWP-UplinkDedicated.

**Question 3**

RAN2 would like to ask RAN1 whether current specification is sufficient for UL powercontrol or whether further flexibility can be allowed

**2. Actions:**

**To RAN1 group:**

**ACTION:** RAN2 respectfully asks RAN1 to provide responses to above questions.

**3. Date of Next TSG-RAN WG2 Meetings:**

TSG-RAN WG2 Meeting #119-e October 2022 Electronic

TSG-RAN WG2 Meeting #120 November 2022 Europe