**3GPP TSG-RAN WG2 Meeting #117R2-2xxxxx**

**Electronic February 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:**

#### Name: Helka-Liina Määttänen

E-mail Address: Helka-liina.maattanen@ericsson.com

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

**Attachments:** None

**1. Overall Description:**

[RAN2 agreed question:]

RAN2 has further discussed the implementation of L1 parameters based on R1-2112976. One of the parameters is “*[AdditionalPCIInfo…]* ” (row 53) with description “*to support inter-cell mTRP operation, to associate SSB from the cell having different PCI than serving cell.*” In the RAN2 RRC draft CR, for support of inter-cell mTRP operation, RAN2 has added additional PCI to TCI-State (used for Rel-16 operation). RAN2 wonders whether this additional PCI is also needed in PUCCH-SpatialRelationInfo for inter-cell mTRP operation.

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***Question 1.*** RAN2 would like to ask whether additional PCI is needed in PUCCH-SpatialRelationInfo for inter-cell mTRP operation, or in any other place..

[Other suggested questions:]

RAN2 further discussed row 19 of the excel that advices “PDSCH configuration for each CC/BWP. The reference CC/BWP includes the Rel-17 TCI state pool (a list of TCI states) for PDSCH”. This is understood as signalling optimization for DL or joint TCI state list configuration when UE is configured with unified TCI state operation.

***Question 2.*** RAN2 would like to ask whether the UL BWPconfiguration (in which a Rel-17 UL TCI state list can be configured) can have a similar configuration, i.e. a reference CC/BWP parameter, where the indicated CC/BWP includes the Rel-17 UL TCI state pool (a list of TCI states) for this UL BWP?

RAN2 discussed about BFR and would like to ask the following questions:

Question 3: When a serving cell uses inter-cell mTRP or inter-cell beam management and includes a single BFD RS set, can the BFD RS set include RS of the serving cell and RS associated with an additional PCI?

Question 4: When a serving cell use inter-cell mTRP, can the UE be configured with two BFD RS sets? If yes, please explain if there is any relation between a BFD RS set and a PCI (e.g. one set associated with RS of this serving cell and another associated with RS associated with an additional PCI).

**2. Actions:**

**To RAN1 group:**

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

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

ASN1 review April 2022 Electronic

TSG-RAN WG1 Meeting #118-e 16 – 27 May 2022 Electronic

TSG-RAN WG1 Meeting #119 August 2022 Electronic