**3GPP TSG-RAN WG2 Meeting #113bis-e DRAFT** [**R2-2104351**](file:///C:\Users\terhentt\Documents\Tdocs\RAN2\RAN2_113bis-e\R2-2104351.zip)

**Elbonia, April 12 – April 20, 2021**

**Title: [DRAFT]** LS on NAS-based busy indication

**Response to:** -

**Release:** Release 17

**Work Item:** LTE\_NR\_MUSIM-Core

**Source:** vivo [TSG RAN WG2]

**To:** SA2, CT1, RAN3

**Cc:** SA3

**Contact Person:**

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**Attachments:** -

**1. Overall Description:**

RAN2 has discussed the "busy indication" for multi-SIM, wherein UE operating under network A receives paging from network B and wants to respond to network B to indicate it is "busy" with network A. Most recently RAN2 discussed the matter of how to handle the busy indication for RRC\_INACTIVE, i.e. for RAN paging, and made the following agreement:

Agreements

1 Only support NAS-based busy indication (for IDLE and INACTIVE)

This agreement was made since RAN2 considered that harmonizing the RRC\_INACTIVE mode with RRC\_IDLE would save effort in all WGs. However, after the decision was done, it was raised that this might not be the case and there may be at least the following potential impacts to SA2, CT1 and RAN3:

- **Service Request triggering for RRC\_INACTIVE** busy indication (which NAS does not differentiate from CONNECTED) requires specification changes (SA2, CT1)

- **NAS needs to filter RAN paging** indications to determine whether to trigger busy indication, which may need AS to inform NAS every time RAN paging is received (CT1, RAN2)

- **Sending busy indication to 5GC** causes extra delay if 5GC then need to inform RAN about it (SA2, RAN3)

However, as these were discussed in RAN2 it is not clear whether these are the only impacts, or whether there would be other impacts. Therefore, RAN2 would request the following feedback to understand whether the decision would have issues for other groups:

* **Question 1: Are the impacts identified by RAN2 valid (SA2, CT1, RAN3)?**
* **Question 2: If the ANS to Q1 is yes, would they be realized within Rel-17 timeframe (SA2)?**
* **Question 3: Are there any other impacts beyond those identified by RAN2 (SA2, CT1, RAN3)?**

RAN2 also agrees to revert the agreement on NAS-based busy indication for INACTIVE if SA2/CT1/RAN3 feedback indicates this is not possible.

**2. Actions:**

**To SA2, CT1 and RAN3 groups.**

**ACTION:** RAN2 respectfully asks CT1, RAN3 and SA2 to feedback on aforementioned questions.

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

3GPP RAN2#114-e from 2021-05-19 to 2021-05-27 Electronic Meeting

3GPP RAN2#115-e from 2021-08-16 to 2021-08-27 Electronic Meeting