**3GPP TSG-RAN3 Meeting #122R3-237773**

**Chicago, USA, 13th November – 17th November 2023**

Agenda Item: 21.2

Source: Ericsson (Moderator)

Title: Summary of offline discussion for CB: # eRedCap

Document for: Other

# Introduction

**CB: # eRedCap**

**- Check the open issues above**

**- Provide TPs if agreeable**

(moderator - E///)

Summary of offline disc [R3-237773](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_122%5CInbox%5CR3-237773.zip)

It is proposed to complete the discussion by **17:00 November 15 (Wednesday)**

# For the Chairman’s Notes

Propose the following:

[TBD]

# Discussion

## Topic# 1: F1AP stage 3:

For F1AP, to support eRedCap indication during F1 paging, two options are proposed:

* Option a: reuse the R17 RedCap Indication IE in the UE Paging Capability IE in the PAGING message and add dedicated procedure texts for eRedCap UE. (Huawei)

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| The *RedCap Indication* IE may be included in the *UE Paging Capability* IE in the PAGING message, and if present the gNB-DU shall, if supported, use it for paging of RedCap UEs or eRedCap UEs. |

* Option b: define a new eRedCap Indication in the UE Paging Capability IE (Ericsson, CATT, ZTE)

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| The *eRedCap Indication* IE may be included in the *UE Paging Capability* IE in the PAGING message, and if present the gNB-DU shall, if supported, use it for paging of eRedCap UEs. |

A question that was raised online is why does DU need to differentiate R17 RedCap and R18 eRedCap UEs during paging? A CU that prepares the paging message will know if it is for paging a cell that allows Rel-17 RedCap UE or Rel-18 eRedCap UE. So DU just needs to proceed with paging.

RAN2 also agreed to reuse R17 RedCap specific initial BWP for R18 eRedCap UE.

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| * From RAN2 perspective, there is no need to introduce eRedCap UE specific initial BWP configuration (i.e. no R18 new field and at most one specific initial UL/DL BWP can be configured).
* If the R17 RedCap specific initial BWP is configured, eRedCap UEs always use it as its specific initial BWP (assuming no eRedCap UE specific initial BWP configuration field introduced).
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Another option c can be to clarify in semantics that the existing RedCap Indication is valid for (e)RedCap UE in general, so that to avoid introducing a new IE. (Note that addition of criticality columns is needed to fix tabular).

* Option c: Add semantics descriptions that the RedCap Indication indicates that the paged UE is an (e)RedCap UE

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| 9.3.1.270 UE Paging CapabilityThis IE provides the UE Paging Capability information needed for paging.

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| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| INACTIVE State PO-Determination | O |  | ENUMERATED(supported,…) | Corresponds to the *inactiveStatePO-Determination* IE defined in TS 38.331 [8]. | - |  |
| RedCap Indication | O |  | ENUMERATED(true,…) | Indicates that the paged UE is an (e)RedCap UE | YES | Ignore |

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***Q1: Companies are invited to comment which option is preferred:***

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| **Company** | **Options:** **a, b ,c**  | **Comment** |
| Ericsson | b | We prefer option b as it is clearer. Also it can be a CU-DU network does not support Rel-17 RedCap (same as for eDRX and barring capabilities), then a new separate indication is needed. |
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## Topic# 2: Other topics:

It was agreed online to:

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| **Add procedural text in NGAP on how NG-RAN node should use the CN MT Communication Handling IE when it is included in the Core Network Assistance Information for RRC INACTIVE IE during the INITIAL CONTEXT SETUP REQUEST, UE CONTEXT MODIFICATION REQUEST, HANDOVER REQUEST and PATH SWITCH REQUEST ACKNOWLEDGE messages.**  |

A draft CR to NGAP is uploaded to the inbox for companies’ comments.

**It is proposed to update TS 38.300 BL CR as follows:**

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| Upon receiving the RAN Paging Request message from the AMF while the UE is in RRC\_INACTIVE with eDRX beyond 10.24 seconds, the last serving gNB may page in its cells comprised in the RNA and may send XnAP RAN Paging to neighbour gNB(s) if the RNA includes cells of neighbour gNB(s), in order for the UE to resume connection.  |

***Q2: Companies are invited to comment whether the proposed text change is acceptable:***

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| **Company** | **Y/N**  | **Comment** |
| Ericsson | - | Better to revisit the proposed text change when the support of SDT data size over NGAP becomes fleshed out. |
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**Other miscellaneous (Nokia) proposals:**

1. **move the description of the NR Paging Long eDRX Information for RRC INACTIVE IE together with the description of the HLCom Activate and remove the “if”.**
2. **add a reference to TS 23.501 in the unsuccessful operation of the MT communication handling procedure.**
3. **for MO-SDT the gNB should be able to disable the CN based communication handling. This is gNB implementation triggered. No additional standards impact.**

***Q3: Companies are invited to comment whether the above proposals are acceptable***

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| **Company** | **Comment** |
| Ericsson | A: okB: not needed, error handling is within RAN3 stage3 scopeC: fine, this is anyway already captured in 23.502 |
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**Add eRedCap indication in TS 38.470 (Huawei)**

***Q4: Companies are invited to comment whether the above proposals are acceptable***

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| **Company** | **Comment** |
| Ericsson | This is fine  |
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# Conclusion

Proposed allocated TPs to be agreed:

**F1AP TP: Fix of stage 3 issues (ZTE)**

**NGAP TP: Fix of stage 3 issues (Ericsson)**

**TS 38.470: fox of stage 2 issues (Huawei)**