**3GPP TSG-RAN2 Meeting #121 *R2-2301828***

**Athens, Greece, February 27th –March 3rd, 2023**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.321** | **CR** | **1512** | **rev** | **1** | **Current version:** | **17.3.0** |  |
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| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **X** | Core Network |  |

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| ***Title:***  | Correction to PosMG Activation/Deactivation Request |
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| ***Source to WG:*** | Huawei, HiSilicon, Ericsson, Intel |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | NR\_pos\_enh-Core |  | ***Date:*** | 2023-02-27 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-17 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | UE can request Positioning Measurement Gap Activation/Deactivation Request using MAC CE only if NW Configuration has been configured by RRC layer. However, this condition is missing in MAC specification. |
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| ***Summary of change:*** | Add the condition that UE may trigger MAC CE based request only when upper layers have done the configuration applicable for Positioning Measurement Gap Activation/Deactivation Request MAC CE.**Impact analysis****Impacted functionality:**Positioning Measurement Gap Activation/Deactivation Request**Inter-operability:**If the network is implemented according to the CR and UE is not, the UE may request measurement gap using MAC CE when network is not expecting.If the UE is implemented according to the CR and network is not, no inter-operability issue is seen. It can be assumed that network does not support this functionality or may only support LMF/NRPPa triggered gap request configuration. |
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| ***Consequences if not approved:*** | The condition when UE can send MAC CE for gap activation/deactivation request would be missing which may lead UE to send MAC CE when Network is not expecting, which can lead to packet discard. |
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| ***Clauses affected:*** | 5.25 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.331 CR ... |
| ***affected:*** |  | **X** |  Test specifications | TS 37.355 CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | Ver0 in RAN2#121: R2-2300280Ver1 in RAN2#121: R2-2301828 |

*Beginning of Changes*

## 5.25 Positioning Measurement Gap Activation/Deactivation Request

If the UE is configured with pre-configured measurement gap and the request of the activation/deactivation of the positioning measurement gap by UL MAC CE, the UE may request the network to activate or deactivate the Positioning measurement gap with UL MAC CE for Positioning Measurement Gap Activation/Deactivation Request in clause 6.1.3.40.

The MAC entity shall, when triggered by the upper layer to send Positioning Measurement Gap Activation/Deactivation Request, cancel the triggered Positioning Measurement Gap Activation/Deactivation Request, if any and trigger another Positioning Measurement Gap Activation/Deactivation Request according to the upper layer's request.

The MAC entity shall,

1>if Positioning Measurement Gap Activation/Deactivation Request MAC CE has been triggered, and not cancelled:

2> if indication from upper layer has been received that the triggered Positioning Measurement Gap Activation/Deactivation Request MAC CE should be cancelled; or

2> if the pre-configured measurement gap indicated in the Positioning Measurement Gap Activation/Deactivation Request MAC CE has already been activated/deactivated according to clause 5.18.20:

3> cancel the triggered Positioning Measurement Gap Activation/Deactivation Request MAC CE.

2> if UL-SCH resources are available for a new transmission and these UL-SCH resources can accommodate the Positioning Measurement Gap Activation/Deactivation Request MAC CE plus its subheader as a result of logical channel prioritization:

3> instruct the Multiplexing and Assembly procedure to generate the Positioning Measurement Gap Activation/Deactivation Request MAC CE according to the upper layer's request;

3> cancel triggered Positioning Measurement Gap Activation/Deactivation Request MAC CE.

2> else:

3> trigger a Scheduling Request for Positioning Measurement Gap Activation/Deactivation Request MAC CE.

*End of Changes*