**3GPP TSG-RAN WG2 Meeting #109** **electronic *R2-20xxxxx***

**Elbonia, 24th February – 6th March 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.331** | **CR** | **1454** | **rev** | **1** | **Current version:** | **15.8.0** |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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| ***Title:*** | Corrections to the Location measurement indication procedure | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Lenovo, Motorola Mobility | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core | | | | |  | ***Date:*** | | | 2020-02-27 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-15 |
|  | *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 can be 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In 5.5.6.3 the procedure text for setting the contents of LocationMeasurementIndication message is not aligned with ASN.1 due to the fact that there is no field *locationMeasurementInfo* defined in ASN.1. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | In 5.5.6.3 the references to the non-existing field *locationMeasurementInfo* have been removed.  **Rev1**  Update of the descripion in 5.5.6.3 to better reflect the Setup/Release structure of LocationMeasurementInfo IE.  **Impact analysis**  Impacted 5G architecture option:  NR SA  Impacted functionality:  Location measurement indication procedure  Inter-operability:  There are no interoperability issues since the corrections affect UE only. | | | | | | | | |
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| ***Consequences if not approved:*** | | Misalignment between procedure text and ASN.1 in the Location measurement indication procedure remains. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.5.6.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

*Start of changes*

### 5.5.6 Location measurement indication

#### 5.5.6.1 General



Figure 5.5.5.1-1: Location measurement indication

The purpose of this procedure is to indicate to the network that the UE is going to start/stop location related measurements (*eutra-RSTD*) which require measurement gaps or start/stop subframe and slot timing detection towards E-UTRA (*eutra-FineTimingDetection)* which requires measurement gaps. UE shall initiate this procedure only after successful AS security activation.

NOTE: It is a network decision to configure the measurement gap.

#### 5.5.6.2 Initiation

The UE shall:

1> if and only if upper layers indicate to start performing location measurements or start subframe and slot timing detection towards E-UTRA, and the UE requires measurement gaps for these operations while measurement gaps are either not configured or not sufficient:

2> initiate the procedure to indicate start;

NOTE 1: The UE verifies the measurement gap situation only upon receiving the indication from upper layers. If at this point in time sufficient gaps are available, the UE does not initiate the procedure. Unless it receives a new indication from upper layers, the UE is only allowed to further repeat the procedure in the same PCell once per frequency of the target RAT if the provided measurement gaps are insufficient.

1> if and only if upper layers indicate to stop performing location measurements or stop subframe and slot timing detection towards E-UTRA:

2> initiate the procedure to indicate stop.

NOTE 2: The UE may initiate the procedure to indicate stop even if it did not previously initiate the procedure to indicate start.

#### 5.5.6.3 Actions related to transmission of *LocationMeasurementIndication* message

The UE shall set the contents of *LocationMeasurementIndication* message as follows:

1. if the procedure is initiated to indicate start/stop of location related measurements;

2> set the *measurementIndication* as follows:

3> if the procedure is initiated to indicate start of location related measurements:

4> if the procedure is initiated for RSTD measurements towards E-UTRA:

5> set the *measurementIndication* to the value *setup* with *LocationMeasurementInfo* set to *eutra-RSTD* according to the information received from upper layers;

3> else if the procedure is initiated to indicate stop of location related measurements:

4> set the *measurementIndication* to the value *release*;

1. else if the procedure is initiated to indicate start/stop of subframe and slot timing detection towards E-UTRA:

2> set the *measurementIndication* as follows:

3> if the procedure is initiated to indicate start of subframe and slot timing detection towards E-UTRA:

4> set the *measurementIndication* to the value *setup* with *LocationMeasurementInfo* set to *eutra-FineTimingDetection*;

3> else if the procedure is initiated to indicate stop of subframe and slot timing detection towards E-UTRA:

4> set the *measurementIndication* to the value *release*;

1> submit the *LocationMeasurementIndication* message to lower layers for transmission, upon which the procedure ends.

*End of changes*