**3GPP TSG-SA5 Meeting #155 *S5-243373d1***

**Jeju, South Korea, 27 - 31 May 2024**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.313** | **CR** | **0068** | **rev** | **1** | **Current version:** | **18.0.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **X** | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Rel-19 CR 28.313 Management for LTM | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI19 | | | | |  | ***Date:*** | | | 2024-05-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Lower-layer Triggered Mobility (LTM) is a new mobility mechanism, which lacks configuration and PM support. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add use case and requirements for LTM configuration and performance measurements.  Add abbreviation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Configuration for LTM will not be available, resulting in inability to manage LTM.  PM for LTM will not be available, resulting in lack of observability of LTM. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 3.3, 6.1.1.X (new), 6.4.1.X (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

**First change**

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

ANR Automatic Neighbour Relation

CHO Conditional Handover

DAPS Dual Active Protocol Stack

LTM Lower-layer Triggered Mobility

NCR Neighbour Cell Relation

NG-RAN Next Generation Radio Access Network

**Next change**

#### 6.1.1.X LTM management

**REQ-DLTM-FUN-1** The producer of NF provisioning MnS should have the capability allowing an authorized consumer to enable or disable LTM cell switch from one cell to another cell.

**REQ-DLTM-FUN-2** The producer of NF performance assurance MnS should have the capability to produce measurements related to LTM.

**Next change**

#### 6.4.1.X LTM (Lower-layer Triggered Mobility)

| Use case stage | Evolution/Specification | <<Uses>> Related use |
| --- | --- | --- |
| **Goal** | To configure parameters related to LTM in cells in order to improve LTM performance. |  |
| **Actors and Roles** | D-SON management function to support the LTM function. |  |
| **Telecom resources** | * gNB; * The producer of provisioning MnS. |  |
| **Assumptions** | N/A |  |
| **Pre-conditions** | * 5G NR cells are in operation. * LTM is not in operation from the source cell to the target cell. |  |
| **Begins when** | The D-SON management function intends to enable LTM from the source cell to the target cell. |  |
| **Step 1 (M)** | The D-SON management function requests the producer of NF provisioning MnS to configure parameters for the management of LTM on the source cell. |  |
| **Step 2 (M)** | The D-SON management function requests the producer of provisioning MnS to enable LTM from a source cell to a target cell. |  |
| **Step 3 (M)** | The LTM function detects handover issues (e.g. too late LTM cell switch, too early LTM cell switch and LTM cell switch to a wrong cell) by analysing reports from UEs and network side information, and acts to mitigate the LTM issues by adjusting LTM related RRC parameters sent from the gNB to the UE. |  |
| **Step 4 (M)** | The D-SON management function collects LTM related measurements and analyses them to evaluate the LTM performance. |  |
| **Step 5 (M)** | If the D-SON management function does not find the LTM performance satisfactory, it updates the configuration parameters for the LTM function. |  |
| **Ends when** | All the steps identified above are successfully completed. |  |
| **Exceptions** | One of the steps identified above fails. |  |
| **Post-conditions** | LTM is in operation from the source cell to the target cell. |  |
| **Traceability** | **REQ-DLTM-FUN-1, REQ-DLTM-FUN-2** |  |

**End of changes**