**3GPP TSG-SA5 Meeting #162 *S5-253918d1***

Göteborg, Sweden, 25 - 29 August 2025

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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 |  |

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| ***Title:*** | Rel-19 CR 28.552 Update use case for LTM | | | | | | | | | |
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| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | PM\_KPI\_5G\_Ph4 | | | | |  | ***Date:*** | | | 2025-08-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
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| ***Reason for change:*** | | The use case for LTM cell switches does not reflect RAN2 and RAN3 development of LTM during Rel-19. | | | | | | | | |
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| ***Summary of change:*** | | The Use Case is updated to reflect RAN2 and RAN3 development of Rel-19 LTM. | | | | | | | | |
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| ***Consequences if not approved:*** | | The existing use casewould not support Rel-19 features. | | | | | | | | |
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| ***Clauses affected:*** | | A.141 | | | | | | | | |
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|  | | **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:*** | | S5-253674 | | | | | | | | |

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| **First change** |

A.141 Monitoring of LTM cell switches

In addition to monitoring of handovers, see clause A.17, there is a need to monitor the performance of LTM cell switches, see TS 38.300 [49] clause 9.2.3.5. Like handovers, LTM cell switches are used for mobility of UEs. Failures of LTM cell switches can cause service discontinuation, therefore the performance of LTM cell switches has direct impact on user experience.

The LTM cell switch procedure includes the configuration, and the execution of LTM cell switches.

Non-conditional LTM cell switches are defined for intra-gNB mobility (TS 30.401 [66] cl. 8.2.1.4) and inter-gNB mobility (TS 30.401 [66] cl. 8.2.1.5). Furthermore, conditional intra-gNB LTM mobility (TS 30.401 [66]) is defined. LTM cell switches occur Intra-frequency and Inter-frequency.

As LTM cell switches can be performed between beams, it is important to have information about the beams used in source and target cells, in order to be able to optimise the performance of the beams used.

For LTM cell switch failures, measurements of the failure use cases are required for troubleshooting.

The LTM cell switch parameters setting could be specific for each NCR, and the LTM cell switch performance could vary significantly for different NCRs. Therefore, the performance needs to be measured per NCR to support LTM cell switch parameters optimization when necessary.

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| **End of changes** |