**3GPP TSG-SA5 Meeting #157 *S5-246073***

Hyderabad, India, 14 - 18 October 2024

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.552** | **CR** | **0614** | **rev** | **1** | **Current version:** | **19.1.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Rel-19 CR 28.552 Add LTM use case | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | PM\_KPI\_5G\_Ph4 | | | | |  | ***Date:*** | | | 2024-10-04 |
|  |  | | | |  | |  | | |  |
| ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Use case missing for LTM cell switches. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Addition of use case for LTM cell switch. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Lack of use case risks incomplete set of measurements for LTM cell switch. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | Annex A.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** |

# A.136 Monitoring of Distribution of delay over Uplink air-interface (Uu)

Distribution of delay over Uplink air-interface (Uu) is helpful in Reliability assessment in UL based on a time constraint imposed by URLLC service. It enables operators to track the performance of a URLLC service and for some scenarios, an operator can use the delay value of each packetfor analysing and troubleshooting as it would know it from the bins internally. As the consumers will get more granular performance for each packet delay so it can further pinpoint the issue that is causing delays for certain types of packets and can eventually fix it. In case of a URLLC service, its optimisation can be done, if the SLA is breached.

# A.X 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.

LTM cell switches are defined for intra-gNB mobility only. 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.

|  |
| --- |
| **End of changes** |