**3GPP TSG-RAN WG2 Meeting #131 *R2-250xxxx***

**Bangalore, India, 25th – 29th Aug, 2025**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.306** | **CR** | **-** | **rev** | **-** | **Current version:** | **18.6.0** |  |
|  | | | | | | | | |
| *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 | **x** | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Introduction of AI air UE capability | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Xiaomi, OPPO | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_AIML\_air-Core | | | | |  | ***Date:*** | | | 2025-09-01 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | Introduction of AI/ML for NR Air interface features in Rel-19. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Capture AI/ML for NR air interface UE capbility   * Applicability reporting * logged measurement of data collection for NW-side model | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | AI/ML for NR Air interface feature in Rel-19 will not be captured. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS38.300 CR 1006  TS38.321 CR 2104  TS38.331 CR 5437 | | |
| ***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*

# 4 UE radio access capability parameters

## 4.2 UE Capability Parameters

<Omitted unrelated text>

### 4.2.xx AI/ML features

| Definitions for parameters | Per | M | FDD-TDD DIFF | FR1-FR2 DIFF |
| --- | --- | --- | --- | --- |
| ***applicabilityReportingCSI-r19***  Indicates whether the UE supports applicability reporting and/or its updates (via *RRCReconfigurationComplete* or via *UEAssistanceInformation* message) based on inference configuration provided via *CSI-ReportConfig*, as specified in TS 38.331 [9].  It is mandatory if UE supports at least one of *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and *aiml-CSI-Prediction-r19*. | UE | CY | No | No |
| ***applicabilityReportingOther-r19***  Indicates whether the UE supports applicability reporting and/or its updates (via *RRCReconfigurationComplete* or via *UEAssistanceInformation* message) based on inference configuration provided via *OtherConfig*, as specified in TS 38.331 [9]. The UE also supports providing updates of applicability reporting via UAI.  It is mandatory if UE supports at least one of *aiml-BM-Case1-r19* and *aiml-BM-Case2-r19*. | UE | CY | No | No |
| ***dataThresholdAvailabilityIndication-r19***  Indicates whether the UE supports triggering data availability indication via *UEAssistanceInformation* message when logged data for network data collection reaches a configured threshold.  A UE supporting this feature shall also indicate support of *loggedDataCollection-r19*. | UE | No | No | No |
| ***eventBasedLoggedDataCollection-r19***  Indicates whether the UE supports L3 measurement event-triggered logging of measurements for network data collection, as specified in TS 38.331 [9].  A UE supporting this feature shall also indicate support of *loggedDataCollection-r19* and *dataThresholdAvailabilityIndication-r19*. | UE | No | No | No |
| ***loggedDataCollection-r19***  Indicates whether the UE supports periodical logging of measuements for network data collection, as specified in TS 38.331 [9]. The UE also supports providing full buffer indication and low power indication via *UEAssistanceInformation* message.  The minimum memory size of logged measurement of data collection for NW-side model is 64kB. | UE | No | No | No |

*END OF CHANGES*

# Annex: RAN2 UE capability feature list

According to the following agreements made in RAN2#129bis (R2-2502767), RAN2 determined UE capabilities in the feature list format for TR 38.822 is included.

The 306 CRs shall include an annex containing the RAN2 determined UE capabilities in the feature list format (similar to annex containing RAN2 agreements), for easy compilation into the TR38.822 in the later stage (as agreed in RAN2 #116-e). The annex of RAN2 determined UE capabilities feature list should align with field description.

### 8.2.x NR\_AIML\_air-Core

Table 8.2.x-1: Layer-2 and Layer-3 feature list for NR\_AIML\_air-Core

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Index | Feature group | Components | Prerequisite feature groups | Field name in TS 38.331 [2] | Parent IE in TS 38.331 [2] | Need of FDD/TDD differentiation | Need of FR1/FR2 differentiation | Note | Mandatory/Optional |
| X. NR\_AIML\_air-Core | x-1 | Applicability reporting | Indicates whether the UE supports applicability reporting based on inference configuration provided via *CSI-ReportConfig*, as specified in TS 38.331 [2]. The UE also supports providing updates of applicability reporting via UAI. | at least one of RAN1 FG 58-1-2, 58-1-4, 58-3-1 | *applicabilityReportingCSI-r19* | *AIML-Parameters* | No | No |  | Conditional mandatory with capability signalling |
| Indicates whether the UE supports applicability reporting based on inference configuration provided via *OtherConfig*, as specified in TS 38.331 [2]. The UE also supports providing updates of applicability reporting via UAI. | at least one of RAN1 FG 58-1-2, 58-1-4, 58-3-1 | *applicabilityReportingOther-r19* | *AIML-Parameters* | No | No |  | Conditional mandatory with capability signalling |
| x-2 | network data collection | Indicates whether the UE supports periodical logging of measuements for network data collection, as specified in TS 38.331 [9]. The UE also supports providing full buffer indication and low power indication via *UEAssistanceInformation* message.  The minimum memory size of logged measurement of data collection for NW-side model is 64kB. |  | *loggedDataCollection-r19* | *AIML-Parameters* | No | No |  | optional with capability signalling |
| Indicates whether the UE supports L3 measurement event-triggered logging of measurements for network data collection, as specified in TS 38.331 [9]. | x-2, x-4 | *eventBasedLoggedDataCollection-r19* | *AIML-Parameters* | No | No |  | optional with capability signalling |
| Indicates whether the UE supports triggering data availability indication when logged data for data collection for NW-side model reaches a configured threshold via *UEAssistanceInformation* message.  A UE supporting this feature shall also indicate support of *loggedDataCollection-r19*. | x-2 | *dataThresholdAvailabilityIndication-r19* | *AIML-Parameters* | No | No |  | optional with capability signalling |