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

Bengaluru, India, Aug 25th – 29th, 2025

Source: Xiaomi

Title: Comment for [POST131][043][AI PHY] UE capabilities (Xiaomi)

Document for: Discussion and Decision

# Introduction

* [POST131][043][AI PHY] UE capabilities (Xiaomi)

 Intended outcome: align on remaining open issues and agreable proposals

 Deadline: Sept. 4th

Companies providing input to this email discussion are requested to leave contact information below.

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# Comment

Companies are invited to provide comments **if there’s a change that is not agreeable**. Other comments are welcomed.

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| **Capability IE/FG** | **Specification****(306/331)** | **Comment** | **Proposed Change** |
| ***applicabilityReportingCSI*** | 306 | Combine the “support of updates via UAI” into the first sentence. | “Indicates whether the UE supports reporting of applicability status (via *RRCReconfigurationComplete* or via *UEAssistanceInformation* message) and its updates (via via *UEAssistanceInformation* message) based on inference configuration provided via *CSI-ReportConfig*, as specified in TS 38.331 [9].” |
| ***applicabilityReportingOther-r19*** | 306 | As above | As above |
| ***applicabilityReportingOther-r19*** | 306 | Editorial | “support of at least” |
| ***dataThresholdAvailabilityIndication-r19*** | 306 | Editorial | ***dataThresholdAvailabilityIndication-r19***Indicates whether the UE supports triggering data availability indication when logged data for data collection for NW-side model reaches a configured threshold.A UE supporting this feature shall also indicate support of *loggedDataCollection-r19*. |
| ***eventBasedLoggedDataCollection-r19*** | 306 | Editorial change to simplify the wording and reuse what’s being currently used in RRC specifications. | “event-triggered logging for data collection of NW-side model” 🡪 “event-triggered logging of measurements for network data collection” |
| ***loggedDataCollection-r19*** | 306 | Same as above. Additionally, since logging can be either event based (which is a separate capability) or periodical, the text can be further simplified. | “Indicates whether the UE supports logged measurement of data collection for NW-side model, as specified in TS 38.331 [9].” 🡪 “Indicates whether the UE supports periodical logging of measurements for network data collection”With that change the next sentence can also be modified accordingly:“The UE also supports periodical logging for data collection for NW-side model and providing full buffer indication and/or low power indication. “ 🡪 “This capability also indicates that a UE supports providing full buffer indication and~~/or~~ low power indication.”“Or” should be removed as the UE is expected to support both of these, not only one. |
| NW-side data collection | 38.822 | In general, to align the wording with RRC, “NW-side data collection” should not be used. | Modify the naming and the descriptions to speak of “Network data collection”, instead of “NW-side data collection” or “data collection for NW-side model” |
| ***applicabilityReportingCSI-r19***Indicates whether the UE supports applicability reporting based on inference configuration provided via *CSI-ReportConfig*, as specified in TS 38.331 [9]. The UE also supports providing updates of applicability reporting via UAI. A UE supporting this feature shall also indicate support at least one of *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and *aiml-CSI-Prediction-r19*. | 38.306 | On the CY condition in the field description, we think the way it is written is more for pre-requisite rather than for conditional mandatory. Hence it should be written in a CY manner. I.e. “This feature is mandatory if the UE supports *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and/or *aiml-CSI-Prediction-r19’”* | Propose the following for alignment:“This feature is mandatory if the UE supports *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and/or *aiml-CSI-Prediction-r19’”* |
| ***applicabilityReportingOther-r19***Indicates whether the UE supports applicability reporting 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. A UE supporting this feature shall also indicate support at least one of *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and *aiml-CSI-Prediction-r19*. | 38.306 | Same comment as above. It should be written in a CY manner. I.e. “This feature is mandatory if the UE supports *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and/or *aiml-CSI-Prediction-r19’”* | Propose the following for alignment: “This feature is mandatory if the UE supports *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and/or *aiml-CSI-Prediction-r19’”* |
| ***dataThresholdAvailabilityIndication-r19***Indicates whether the UE supports triggering data availability indication when logged data for data collection for NW-side model reaches a threshold.A UE supporting this feature shall also indicate support of *loggedDataCollection-r19*. | 38.306 | For "data collection for NW-side model", I suggest to align it with 38.331 CR, i.e. In the latest RRC CR R2-2506401, it is using "network data collection". | Use "network data collection" instead of "data collection for NW-side model" across 38.306 CR and 38.331 CR for UE capabilities. |
| Cover page related to Other specs | 38.331 | It should indicate the 38.306 with the corresponding CR | Add TS38.306 CRxxxx |
| Cover page related to Other specs | 38.331 | [Lenovo] Suppose there is no need to include 38.331 again in “Other core specification” | Remove “TS38.331…” in Other core specifications. |
| *AIML-Parameters* | 38.331 | [Lenovo] Editorial | In the description, “AIML-*Parameters*” should be italics “*AIML*-*Parameters*” |
| ***applicabilityReportingOther-r19*** | 38.306 | [Lenovo] “inference configuration provided via *OtherConfig”*Shouldn’t it be inference related parameters configuration instead? For Option B. | “inference related parameters configuration provided via *OtherConfig*” |
| Others (related to 58-1-7) |  | [Apple] We are not sure whether/how to capture below agreement:9      RAN2 will not introduce separate CSI resource capability for logged NW-side data collection. Legacy capability will be used for logged NW-side data collection. Check with RAN1 on whether this assumption is ok. | Maybe it is in another UE capability discussion. But we assume something like below can be captured:In 58-1-7, add “A UE supporting this feature and *loggedDataCollection-r19*shall also support logging of L1 RSRP and beam ID for network data collection.” |
| ***applicabilityReportingOther-r19***Indicates whether the UE supports applicability reporting 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. A UE supporting this feature shall also indicate support at least one of *aiml-BM-Case1-r19*, *aiml-BM-Case2-r19* and *aiml-CSI-Prediction-r19*. | 38.306 | [Nokia] Agree with Lenovo. For option B, it is ‘inference related parameters’ not ‘inference configuration’. We also agreed this in the last RAN2#131 meeting.1 RAN2 confirms that UE receives RRCReconfiguration message including one set or multiple sets of inference related parameters via OtherConfig for option B.2 For Option B for BM Case 1/2, one set or multiple sets of inference related parameters can be configured in OtherConfig, where each set in OtherConfig contains the following parameters according to RAN1#121 agreement:associatedIDforSetA-r19, resourcesForSetA-r19, resourcesForChannelMeasurement, associatedIDforSetB-r19, reportQuantity-r19, reportConfigType, nrofreportedpredictedrs-r19, TimeGap-r19, nroftimeinstance-r19, applicabilityConfigId-r19.3 For Option B for BM Case 1/2, inference related parameter set is configured per serving cell. | In the description field, replace ‘inference configuration’ with ‘inference related parameters’. The description in the Annex should also be updated. |
| ***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*. | 38.306 | [Nokia] On the ‘No’ condition of the ‘M’ field, we think this should be mandatory that is ‘CY’. Because it is mandate if the UE indicates the support of ***eventBasedLoggedDataCollection-r19* .** We agreed in RAN2#131 *‘Event-based logging is an optional per UE capability separate from ‘loggedDataCollection-r19’. UE supporting this feature shall also indicate the support of ‘loggedDataCollection-r19’. If UE supports event-based logging it shall support data threshold-based data availability indication.’* | In the description, to add ‘It is mandate to indicate, if UE indicates the support of *eventBasedLoggedDataCollection-r19*.’In the ‘M’ field, to replace ‘No’ with ‘CY’. |
| UE-NR-Capability-v1900 | 38.331 | [Nokia] nonCriticalExtension is missing | Add ‘nonCriticalExtension SEQUENCE {} OPTIONAL’ in ASN.1  |
| **Annex: RAN2 UE capability feature list** | 38.306, 38.822 | [Nokia] Based on the previous comment and reasoning, Mandatory/optional field for ‘*dataThresholdAvailabilityIndication-r19’* in the Table 8.2.x-1 to be updated with ‘Conditional mandory with capability signaling’  | In the Mandatory/optional field of *dataThresholdAvailabilityIndication-r19* to be replace with ‘Conditional mandatory with capability signalling’ |
| Cover page related to ***Clauses affected*** | 38.306 | [Nokia] The terminology AI/ML needs to be added in Clause 3.3 | Add ‘AI/ML Artificial Intelligence/Machine Learning’ |
| General comment on the terminology of ‘Network data collection’ | 38.306, 38.331, 38.822 | [Nokia] The interpretation of ‘Network data collection’ is misleading as it could mean data collection from the network only. If we use ‘data collection for network-side models’, then the purpose is clear. That is *the data is being collected for the network side models*. | Suggest to use ‘data collection for network-side models’ across all the specifications. |
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