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

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

**Title: draft LS on candidate data collection (and Option B for CSI prediction)**

**Release: Release 19**

**Work Item: NR\_AIML\_air-Core**

**Source: Xiaomi, Ericsson (to be RAN2)**

**To: RAN1**

**Cc: RAN4**

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**Attachments: None**

# Overall description

For AI/ML based beam management and CSI prediction UE-side data collection, before UE is being configured with *CSI-ReportConfig* for UE-side data collection measurement, RAN2 agreed to allow UE indicating its preferred UE-side data collection configuration(s) based on the candidate UE-side data collection configuration(s) provided by network.

RAN2 also agreed that UE is NOT expected to perform measurement(s) solely based on those candidate UE-side data collection configuration(s) and this UE behavior will be captured in RRC specification, i.e., no RAN1 specification impact.

For AI/ML based beam management, according to RAN1 agreement on UE-side data collection, for each candidate UE-side data configuration, RAN2 agreed at least the following IEs are included:

* An identifier of the candidate configuration
* CSI-ResourceConfigId for Set A
* CSI-ResourceConfigId for Set B
* Related associated IDs

In addition, RAN2 agreed the same framework of candidate/preferred UE-side data collection configuration is also applicable to CSI prediction. However, RAN2 wonders what IEs are needed for CSI prediction as part of candidate UE-side data collection configuration.

(In the end, on applicability reporting procedure, RAN2 wonders whether Option B can also be applicable to CSI prediction?)

# Action

**To RAN1**

**ACTION:**

RAN2 respectfully asks RAN1 if there’s any concern on the above agreements and provide the necessary higher layer parameters for candidate UE-side data collection configuration for CSI prediction and for AI/ML beam management if anything is missing (and Option B for CSI prediction if supported).

# Dates of the next TSG RAN WG2 meetings

TSG RAN2 Meeting #131bis 13th – 17th Oct, 2025 Prague, CZ

TSG RAN2 Meeting #132 17th – 21st Nov, 2025 Dallas, US

# Annex of RAN2 agreements on candidate UE-side data collection configuration

**RAN2 #129bis**

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| * The UE can request measurement configuration for data collection of AI/ML based beam management. The request can contain one or more of the following:

• An indication on start/stop of data collection• Preferred configuration from a list of candidate configurations provided by NW. Details of signaling are FFS. It is up to network what it configures at the end.* Introduce UAI message for UE request of data collection measurement configuration. And it is up to UE implementation when to send the request.
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**RAN2 #130**

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| The UE doesn’t need to measure the candidate data collection configuration(s). This will be specified in RAN2 specs. For beam management, candidate data collection configuration includes at least: - CSI-ResourceConfigId of Set A - CSI-ResourceConfigId of Set B - One/two associated IDs (up to whether Set B is equal/subset of Set A or not) according to RAN1 agreements FFS the details of how this is signalled (e.g. CSIReport config or simplified signaling) |

**RAN2 #131**

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| **Agreements on UE candidate data collection**1 Multiple preferred configurations within the list of candidate configurations provided by NW can be indicated by the UE via UAI. 2 No prohibit timer is needed for UE indicating its preferred data collection configuration.3 On stop/start indication1. The UE can send start indication (without a preferred list) to indicate preference to start data collection
2. The UE can send preferred list implying that it would like to start data collection on those configuration
3. The UE can send stop indication for all or a given actual CSI report config ID.
4. Rapporteur will determine best way of signaling. This doesn’t preclude merging 1 and 2.
5. Adopt below text in the field description of dataCollectionCandidateConfig:

*The UE is not expected to perform measurements solely based on the configurations provided by this IE.*1. Adopt the following solution: OtherConfig contains a list of candidate configurations as a list of a new IE, where each candidate configuration contains at least an identifier of the candidate configuration, CSI-ResourceConfigId for Set A, CSI-ResourceConfigId for Set B, and related associated IDs, as agreed in RAN2#130. Each candidate configuration is associated with a cell ID. We will also include individual IEs for CSI prediction case.
2. Ask RAN1 what IEs are needed for CSI prediction and inform them of our agreements on BM and confirm if anything else is needed.
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