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

Prague, Czech Republic, 13th – 17th October, 2025

**Agenda item: 8.1.1**

**Source: Huawei, HiSilicon**

**Title: TS 37320 Open Issues on AI for Air Interface Feature**

**Document for: Discussion and Decision**

# Introduction

The following email discussion is re-triggered to collect open issues on AI for Air Interface Feature TS 37.320 CR:

 [POST131][023][AI PHY] 37.320 (Huawei)

      Intended outcome: Agree to final CR

      Deadline:  Sept. 26th, 10:00 UTC

Companies are invited to provide feedback on open issue list by: **Sept. 26th 00:00 UTC**.

# Open issues

Companies are invited to describe any identified open issues based on latest TS 37320 CR [1].

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| **Issue-num (Company)** | **Identified open issues** | **Suggested change** | **Rapp comment** |
| Issue-01 (Huawei) | The description of issue xxx | This change xxx | Agree, ,,, |
| Issue-01 (Nokia) | Terminology alignment issue in Clause 5.4.1.x for CSI-RS IDs, SSB IDs. Excerpt from R2-2506586  *⁻ Logged L1 radio measurement results: include the beam identifiers associated to CSI-RS resources or SSBs (CSI-RS IDs or SSB IDs) and the corresponding measured L1-RSRPs.*  Other instances of CSI-RS and SSB in the TS 37.320 are using ‘index’ instead of ‘ID’.  Editorial: ‘association to’ to be replaced with ‘association with’ | Proposed change  *⁻ Logged L1 radio measurement results: include the beam identifiers associated with CSI-RS resources or SSBs (CSI-RS indexes or SSB indexes) and the corresponding measured L1-RSRPs.* | Agree with the change |
| Issue-02 (Nokia) | The procedure of handling network-side data collection UE capabilities should be added in MDT relevant UE capabilities within Clause 5.1.4 | Propose to add in Clause 5.1.4   * *The NR UE may indicate a capability bit for support of logging UE radio measurements for network-side data collection in RRC connected state.* | Agree with the change |
| Issue-03 (Nokia) | Update of the text is needed in General principles that define MDT mode in Clause 4.1  1. MDT mode  There are two modes for the MDT measurements: Logged MDT and Immediate MDT. There are also cases of measurement collection not specified as either immediate or logged MDT, such as Accessibility measurements.  [Apple] We support this Noka proposal. Without such clarification, it is not clear what type of MDT that logged radio measurement belongs to. It may further confuse SA5. Thus, we think such clarification is needed.  But there is one issue: current 37.320 specify that immediate MDT follows existing measurement procedure:  5.1.2.1 Measurement configuration  For Immediate MDT, RAN measurements and UE measurements can be configured. The configuration for UE measurements is based on the existing RRC measurement procedures for configuration and reporting with some extensions for location information.  However, logging L1 measurement is actually not existing measurement procedure. So, maybe more specification text change is needed. | Propose to extend as:  1. MDT mode  There are two modes for the MDT measurements: Logged MDT and Immediate MDT. There are also cases of measurement collection not specified as either immediate or logged MDT, such as Accessibility measurements. Additionally, the measurement collection is specified as immediate MDT with logging of UE radio measurements to support network-side data collection. | Agree with the change |
| Issue-04 (Nokia) | Alignment of the text in Clause 5.4.1.x:  The text below needs to be aligned with Issue-03 mentioned above and stage 3 text -- specified in Clause 5.3.5.5.7 or Clause 5.3.5.5.9 in TS 38.331 (“perform logging of measurements for network-side data collection as specified in 5.5x”). Otherwise, it is not clear that extension to Immediate MDT between UE and NGRAN covers the logging of the data for nw-side data collection. It is impossible to differentiate from clause 5.1.2.1 (which is pure Immediate MDT)   ‘For beam prediction, the management based immediate MDT can be used for data collection.’ | Proposed change in 5.4.1.x  For beam prediction, the management based immediate MDT with logging of UE radio measurements can be used for data collection. | Agree with the change |
| Issue – 05 (Nokia) | Align the following text in Clause 5.4.1. x with Stage 3 wording by adding the reference to it.  - Presence of a gap that is longer than the configured logging periodicity in the logged measurements. | Proposed change:  - Presence of a gap that is longer than the configured logging periodicity in the logged measurements as defined in TS 38.331 [15]. | This is relevant to Issue - 06. The change in Issue - 06 can cover other two information elements, so it is preferred. |
| Issue – 06 (Huawei) | For measurement reports, it will be helpful to list the source. | For beam prediction, the management based immediate MDT can be used for data collection. As specified in TS 38.300 [22], the measurement framework is applied between UE and NG-RAN. Measurement reports include (see TS 38.331 [15]):  ⁻ Cell identity: CGI or PCI of the cell to which the measurement results are related to.  ⁻ Logged L1 radio measurement results: include the beam identifiers associated to CSI-RS resources or SSBs (CSI-RS IDs or SSB IDs) and the corresponding measured L1-RSRPs.  - Presence of a gap that is longer than the configured logging periodicity in the logged measurements.  For a UE in NR-DC, the configuration and reporting for data collection can only be performed via the MN, and SN is excluded from the configuration and reporting for data collection. | Agree with the change |
| Issue – 07 (Huawei) | For network-side data collection, one measurement data is the presence of a gap. We observe that a note has been put in section 5.1.2.1, and it is applicapable for immediate MDT. We are not sure whether this is also applicable for network-side data collection (maybe not). So we think companies can double check it.  5.1.2.1 Measurement configuration  For Immediate MDT, RAN measurements and UE measurements can be configured. The configuration for UE measurements is based on the existing RRC measurement procedures for configuration and reporting with some extensions for location information.  NOTE: No extensions related to time stamp are expected for Immediate MDT i.e. time stamp is expected to be provided by eNB/RNC/gNB.  If area scope is included in the MDT configuration provided to the RAN, the UE is configured with respective measurement when the UE is connected to a cell that is part of the configured area scope.  [Apple] Our understanding is that the highlighted text is a clarification for immediate MDT with one-shot RRM measurement (i.e. existing RRC measurement procedures) which gNB can perfectly know the timing information. Thus, this paragraph is not applicable to logged radio measurement (note that the area scope in later description is also not applicable to logged radio measurement.  We think maybe the cleanest way is to add a separate paraph for logging framework. We can provide a text as starting point:  For Immediate MDT without logging of UE radio measurements, RAN measurements and UE measurements can be configured. The configuration for UE measurements is based on the existing RRC measurement procedures for configuration and reporting with some extensions for location information.  NOTE: No extensions related to time stamp are expected for Immediate MDT i.e. time stamp is expected to be provided by eNB/RNC/gNB.  If area scope is included in the MDT configuration provided to the RAN, the UE is configured with respective measurement when the UE is connected to a cell that is  For Network data collection, immediate MDT can be configured with logging of UE radio measurements as defined in TS 38.331 [15]. | No proposal here. Just let companies know about the Note and see if there is any issue. From our point of view, this Note should not be applicable for network-side data collection, as the listed measurement data for network-side data collection has not included this time stample information. | Agree with the change proposed by Apple. |
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Summary:

The changes due to the following issues are agreed:

**Issue-01, Issue-02, Issue-03, Issue-04, Issue-05 (merged into Issue-06), Issue-06, Issue-07 (changes proposed by Apple).**

# Conclusion

In this contribution, we have the following proposals/open issue list:

# Reference

1. R2-2506586, Introduction of AI for Air interface feature in TS 37.320, Huawei, HiSilicon, Ericsson, Nokia, RAN2#131