3GPP TSG RAN meeting #109 RP-252160

Beijing, China, 15 – 18 September 2025

## Status Report to TSG

**Agenda item:** 9.3.2.3

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| --- | --- |
| **WI / SI Name** | XR (eXtended Reality) for NR Phase 3 |
| included in this status report | Study Item: No | Core part: Yes | Performance part:Yes | Testing part:No |
| **Acronym** | NR\_XR\_Ph3 |
| **Unique ID** | 1020098 |
| **TSG TDoc of latest approved WI/SI description (if any)** | RP-250107 |
| **Target Completion Date****(indicate if changed)** | Study Item: N/A | Core part: 2025/09 | Performance part:2026/03 | Testing part: N/A |
| **Overall Completion level** | Study Item: N/A | Core part:100% | Performance Part: TBD% | Testing part: N/A |

**Source:**

|  |  |
| --- | --- |
| **Leading WG** | RAN2 |
| **Rapporteur** | **Name** | Benoist Sébire |
| **Company** | Nokia |
| **Email** | benoist.sebire@nokia.com |

## 1 Work plan related evaluation

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| --- | --- |
| **Do you want to modify the time budget for this WI/SI compared to what was endorsed at the last RAN meeting?** | No |

## 2. Detailed progress in RAN WGs since last TSG meeting (for all involved WGs)

## 2.1 RAN1

### 2.1.1 Discussions and Agreements

#### 2.1.1.1 RAN1#122

During RAN1#121 following agreement was made:

 Agreement:

**The following TP is endorsed for TS 38.213 Clause 10.6.**

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| --- |
| **Change reason:** The definition of the last DCI format determining the applied measurement gap cancellation field for “Option 2” for the value “0” interpretation is not clear. **Change summary:** Modify the text to determine the applied field based on the PDCCH monitoring occasion of the DCI format carrying the indication. **Consequence if not approved:** When multiple DCI formats are received in close PDCCH monitoring occasions, there is a risk of different interpretation of the applied field resulting inconsistent behaviour among UEs.  |
| 10.6 Indication for cancelation of RRM measurement gaps/restrictions < Unchanged parts are omitted >If a UE indicates “Option 2” for *XYZ*, a value ‘0’ of the measurement gap cancellation field in a DCI format provided by a PDCCH reception indicates to the UE that the UE behavior for the associated RRM measurement gap occasion is as described in [10, TS 38.133]. When the UE detects more than one DCI formats that include the measurement gap cancellation field and are associated with a same associated RRM measurement gap occasion, the UE applies the indication provided by the measurement gap cancellation field of a last DCI format as described in Clause 9 from the more than one DCI formats.< Unchanged parts are omitted > |

### 2.1.2 Main Open issues

No major open issues identified, CRs already approved at RAN#108.

## 2.2 RAN2

### 2.2.1 Discussions and Agreements

#### 2.2.1.1 RAN2#130

The RAN2 agreements can be found in [R2-2506205](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_131/Docs/R2-2506205.zip).

#### 2.3.2 Main Open issues

No major open issues left. CRs brought for approval at this meeting.

## 2.3 RAN3

#### 2.3.1 Discussions and Agreements

#### 2.3.1.3 RAN3#129

For Unnecessary RLC retransmission avoidance, no consensus on whether needs new F1AP IE for gNB-CU to provide signalling to the gNB-DU to enable or disable unnecessary RLC retransmission avoidance. RAN3 agreed to add the text in F1-U spec, e.g. gNB-DU performs the required behaviour as defined in TS 38.322.

For UL Timely RLC retransmission, RAN3 agreed no enhancement is needed.

For DL Timely RLC retransmission, RAN3 adopted Option 1 “CU based solution” that CP inform UP for the thresholds and CU inform DU for retransmission/poll

RAN3 agreed to add the support of DL PDU Set Information Marking Support Indication in F1AP and E1AP.

For UL Rate Control:

- RAN3 agreed no coordination between MN and SN.

- RAN3 agreed no need for gNB to inform SMF for the rate control information

- RAN3 agreed to develop XnAP TP based on R3-255280, to add the missing behaviour text for Indication of Bitrate Adaptation IE.

- No consensus on gNB-CU provides Recommended UL bit rate info per QoS flow to gNB-DU

For Clean-up for QoS Notification Control (QNC), RAN3 agreed to use general terminology (GBR QoS) rather the specific QoS parameter (e.g. GFBR, PDB, etc) to describe the QNC notification, and add the reference to TS 23.501.

For MMSID, RAN3 agreed to not change the MMSID format in RAN3 BL CRs.

For whether the gNB need to report the status of Available Bitrate monitoring, RAN3 agreed to wait for reply LS from SA2.

#### 2.3.2 Main Open issues

Only one main open issue due to missing SA2 feedback: whether the gNB need to report the status of Available Bitrate monitoring.

## 2.4 RAN4

#### 2.4.1 Discussions and Agreements

#### 2.4.1.2 RAN4#116

The agreements for RAN4 can be found at R4-2512144. The main agreements include decision on

* Formulas for measurement delay extension
* UE power classes that are subject to measurement gap skipping

The following Draft CRs are endorsed:

* R4-2512320, Inter-RAT measurements E-UTRAN TDD measurements, Apple
* R4-2512315, Draft CR38.133 Introduction of measurement gap cancelation, Nokia
* R4-2512316, Draft CR on NR inter-frequency L1 measurement for XR, vivo
* R4-2512317, DraftCR on Inter-RAT measurements E-UTRAN FDD for Rel-19 XR, Huawei, HiSilicon
* R4-2512318,Draft CR on measurement gap skipping in intra-frequency measurement with gaps for R19 XR, ZTE, Sanechips
* R4-2512319, draftCR38133 Inter-frequency measurement requirements with XR, Ericsson

and are combined in the Big CR

* R4-2512355, Big CR on RRM requirements for NR XR Phase 3, Nokia

For RRM performance, the workplan in R4-2512335 is agreed.

#### 2.4.2 Main Open issues

No open issue for RRM core requirements.

For RRM performance requirements, discussion is needed on:

* List of test cases;
* Parameters for the test cases;
* Model used for measurement gap cancelation.