**3GPP TSG-RAN WG4 Meeting #111 R4-24XXXXX**

**Fukuoka, Japan, 20th – 24th May, 2024**

**Title:** WF on [111][140] RRM\_Spec\_Improvement

**Agenda Item:** 12.1

**Source:** Apple

**Document for:** Approval

# On Hierarchy of indent

* Agreements:
  + Section 8.3.2 in TS38.133 v18.6.0 will be used as the example clause.
  + Other example section(s) are not precluded
  + Approach
    - Option 1: RAN2 pseudo-code
    - Other options, which can be reflected in the example provide by each interested company.

# On editorial CR drafting plan until RAN4#112bis

* Agreement:
  + Interested companies are encouraged to collaborate on CR review and drafting before RAN4#112bis
    - CR will be based on TS38.133 v18.6.0
    - The updated CR will be submitted in RAN4#112bis
    - The proposed revision should be strictly limited to the following three issues
      * Issue1: [], “TBD” and “FFS” clean up
      * Issue2: Terminology/style inconsistency, incorrect notation/symbols/abbreviation, undefined abbreviations, redundant information/notes clean up
      * Issue3: Empty test cases clean up
  + CR drafting plan is summarized in Table 1.
    - Volunteer companies are expected to draft the CR, collect the feedbacks and make contribution to RAN4#112bis.

Table 1: CR drafting plan

|  |  |  |  |
| --- | --- | --- | --- |
| * Sections | Page number | # of pages | Volunteer company |
| Foreword  1          Scope  2          References  3          Definitions, symbols and abbreviations  4                SA: RRC\_IDLE state mobility | 259 | 408 pages | Apple |
| 5                SA: RRC\_INACTIVE state mobility | 74 |
| 6                RRC\_CONNECTED state mobility | 75 |
| 7                Timing | 26 | 330 pages | BeammWave (Joakim Axmon, joakim.axmon@beammwave.com) |
| 8                Signalling characteristics | 304 |
| 9                Measurement Procedure | 444 | 444 pages | Nokia |
| 10             Measurement Performance requirements | 183 | 365 pages | Ericsson (Iana Siomina, iana.siomina@ericsson.com) |
| 11          void |  |
| 12             V2X Requirements | 45 |
| A.1           Purpose of annex  A.2           Requirement classification for statistical testing  A.3           RRM test configurations | 137 |
| A.4           EN-DC tests with all NR cells in FR1 | 519 | 519 pages | LGE |
| A.5           EN-DC tests with one or more NR cells in FR2 | 410 | 410 pages | Huawei |
| A.6           NR standalone tests with all NR cells in FR1 | 935 | 935 (can be further split if needed) | Company1:Ericsson (Iana Siomina, iana.siomina@ericsson.com) |
| Company2: |
| A.7           NR standalone tests with one or more NR cells in FR2 | 843 | 843(can be further split if needed) | Company1: |
| Company2: |
| A.8           E-UTRA standalone tests for NR RRM | 90 | 395 pages |  |
| A.9           V2X Tests | 70 |
| A.10        EN-DC Tests with NR PSCell under CCA and Other NR Cells in FR1 | 235 |
| A.11        NR Standalone Tests with NR PCell under CCA and Other NR Cells in FR1 | 315 | 315 pages |  |
| A.12        E-UTRA Standalone Tests with at Least One NR Cell under CCA | 150 | 446 pages |  |
| A.14        NR standalone tests for Satellite access | 237 |
| A.15        NR standalone tests with one or more NR cells in FR2-2 | 59 |
| A.16        NR standalone tests with all NR cells in FR1 for RedCap | 656 | 656 pages | Mediatek |
| A.17        NR standalone tests with one or more NR cells in FR2 for RedCap | 202 | 470 pages |  |
| A.18        E-UTRA standalone tests for NR RRM for RedCap | 53 |
| A.19        NR standalone tests for ATG | 120 |
| Annex B (normative): Conditions for RRM requirements applicability for operating bands | 95 |

* + CR review plan between RAN4#112 and RAN4#112bis is summarized as follow
    - Due to version control concern, a specific date is allocated for each interested companies to upload their comments/suggested revision, if any, on each CR
    - The draft folder information will be announced separately.
    - Comments or revisions with track changes can be added in the reviewed CRs at least at the first occurrence of the issue.

Offline drafting/review plan for R4-2413165 Draft CR for RRM Spec Improvement (section 1~6)(Apple)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
|  |  |  |  |  |  |
| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
| BeammWave | Nokia | Ericsson | Huawei | Mediatek |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| LGE | Qualcomm | vivo | Xiaomi | CATT |  |

Offline drafting/review plan for R4-2411047 DraftCR 38.133 Editorial corrections to sections 7 and 8 (BeammWave)

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| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
|  |  |  |  |  |  |
| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
| Nokia | Ericsson | Huawei | Mediatek | Apple |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| Qualcomm | vivo | Xiaomi | CATT | LGE |  |

Offline drafting/review plan for R4-2411971 DraftCR Section 9 specification quality improvement (Nokia)

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| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
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| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
| Ericsson | Huawei | Mediatek | Apple | BeammWave |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| vivo | Xiaomi | CATT | LGE | Qualcomm |  |

Offline drafting/review plan for R4-2413208 Draft CR on NR standalone tests with all NR cells in FR1 for RedCap (Mediatek)

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| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
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| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
| Huawei | Apple | Nokia | BeammWave | Ericsson |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| Xiaomi | CATT | LGE | Qualcomm | vivo |  |

Offline drafting/review plan for R4-2413396 Draft CR 38133 RRM specification improvement for clauses 10 to A\_3 (Ericsson)

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| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
|  |  |  |  |  |  |
| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
| Apple | Mediatek | BeammWave | Nokia | Huawei |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| CATT | LGE | Qualcomm | vivo | Xiaomi |  |

Offline drafting/review plan for R4-2413397 Draft CR 38133 RRM specification improvement for clause A\_6 (Ericsson)

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| --- | --- | --- | --- | --- | --- |
| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
|  |  |  |  | LGE |  |
| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
| CATT |  | Qualcomm | vivo | Xiaomi |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| Apple | Mediatek | BeammWave | Nokia | Huawei |  |

Offline drafting/review plan for R4-2411690 Draft CR on specification quality improvement for clause A.4 in TS38.133 (LGE)

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| --- | --- | --- | --- | --- | --- |
| Sept.09 | Sept.10 | Sept.11 | Sept.12 | Sept.13 |  |
|  |  |  |  |  |  |
| Sept. 16 | Sept.17 | Sept.18 | Sept.19 | Sept.20 |  |
|  | Qualcomm | vivo | Xiaomi | CATT |  |
| Sept. 23 | Sept.24 | Sept.25 | Sept.26 | Sept.27 |  |
| Mediatek | BeammWave | Nokia | Huawei | Apple |  |

# Other agreement

* **Modal verbs**
  + Agreement: deprioritized
* **Duplicated requirements**
  + Agreement: deprioritized
* **Unused test configurations**
  + Agreement: deprioritized
* **Suffix alignment**
  + Agreement: deprioritized
* **References or mapping tables in the core part requirements that point to the relevant test cases from Rel-19**
  + Agreement: Deprioritized. Meanwhile, interested companies can bring examples on how to implement.
* **Abbreviations**
  + “PRB” or “RB”:
    - Current status: both are used, choose one of them? None of them is in Abbreviation of TS 38.133.
    - Agreement: “PRB” should be consistently used in all sections instead of “RB” and the abbreviation is to be included in section 3.
  + “BW”:
    - Current status: used, but not in the Abbreviation section in TS 383.133.
    - Agreement: Include the abbreviation in the Abbreviations section 3 of TS 38.133.
  + “TRS”: is used but not defined in Abbreviations section in TS 38.133.
    - Agreement: Include the abbreviation in the Abbreviations section 3 of TS 38.133.