3GPP TSG-RAN WG2 Meeting #109 electronic R2-2001662

24 Feb – 6 Mar 2020

**Agenda item: 8.2**

**Source: Vice Chairman (ZTE Corporation)**

**Title: Report from Break-out session on SRVCC, CLI, PRN, eMIMO, RACS**

**Document for: Approval**

General

Please refer to [R2-2002046](file:///C:\Data\3GPP\RAN2\Docs\R2-2002046.zip) for detailed guidance on e-meeting methods.

In particular, the question box might be used:

* primarily for copying and pasting the agreements that are being shown live via screen sharing, so delegates that are experiencing delays can also see the agreements
* possibly to allow delegates to enter specific comments/question (in case, only on the proposal being discussed)

Recording of voice or video at meetings is not used in 3GPP. This applies also to this e-Meeting. At this e-Meeting, no specific actions are taken to prevent the recording of web conferences. Companies that have concerns related to recordings, if any, may express those by email in the main meeting organizational thread [AT109e][000]

Organizational

1. Incoming LSs are noted by default. Contact companies should flag LSs that need presenting.
2. Running CRs submitted before the meeting are endorsed as baseline and moved to offline email discussion.
3. With a few exceptions, only email discussions reports and summary discussion papers will be treated during the e-meeting (indicated clearly in the meeting notes)
4. All organization emails and notes will be shared over the following email discussion throughout the two meeting weeks:

* [AT109e][100] Organizational Sergio's session (SRVCC, CLI, PRN, eMIMO, RACS)

Scope:

* + - Share plans for the meeting and list of ongoing email discussions for the sessions related to SRVCC, CLI, PRN, eMIMO, RACS
    - Share meetings notes and agreements for review and endorsement

Schedule/Plan

RACS:

This WI will only be handled via offline email discussions kicked off at the e-meeting start.

SRVCC:

This WI will only be handled via offline email discussions kicked off at the e-meeting start.

CLI:

This WI will only be handled via offline email discussions kicked off at the e-meeting start.

eMIMO:

This WI will be handled via offline email discussions kicked off at the e-meeting start (110, 112) or later during the e-meeting (111, ???) and by web conference calls:

Wednesday February 26th, 13:30 - 15:30 CET

* Check the status of email discussion 110 and other RRC aspects
* Check the status of email discussion 112
* Start the discussion on [R2-2000660](file:///C:\Data\3GPP\Extracts\R2-2000660-%20%20Report%20of%20%5b108%2368%5d%5bNR%20eMIMO%5d%20Design%20of%20DL%20MAC%20CEs.docx), [R2-2001551](file:///C:\Data\3GPP\Extracts\R2-2001551%20-%20Summary%20of%20DL%20MAC%20CE%20design%20for%20agenda%206.16.3.doc) and [R2-2000227](file:///C:\Data\3GPP\Extracts\R2-2000227_Summary%20of%20Email%20discussion%20108%2370%20-%20BFR%20MAC%20CE.docx)

Tuesday March 3rd, 6:30 - 7:30 CET

* TBD

PRN:

This WI will be handled via offline email discussions kicked off at the e-meeting start (113) or later during the e-meeting (114, 115, ???) and by web conference calls:

Tuesday February 25th, 13:30 - 15:30 CET

* Start the discussion on [R2-2002069](file:///C:\Data\3GPP\Extracts\R2-2002069%20%5bdraft%5d%20Reply%20LS%20on%20CAG%20definition.doc), [R2-2001676](file:///C:\Data\3GPP\RAN2\Docs\R2-2001676.zip), [R2-2001674](file:///C:\Data\3GPP\Extracts\R2-2001674%20SummaryPRN-ConnectedMode-v3.docx), [R2-2001675](file:///C:\Data\3GPP\Extracts\R2-2001675%20Summary%20of%20%5bPRN%5d%20Other%20(HRNN,%20Access%20Control,%20etc)%20v1.docx)

Wednesday March 4rd, 5:30 - 6:30 CET

* TBD

List and status of offline email discussions

NOTE: No offline email discussions will be kicked off before Monday February 24th, 9:00 CET

* [AT109e][101][RACS] Stage 2 CRs (Mediatek)

Intended outcome: Agreed 36.300 and 38.330 CRs, also taking into account proposals in [R2-2000939](file:///C:\Data\3GPP\Extracts\R2-2000939%20-%20Generic%20stage-2%20description%20for%20RRC%20segmentation.docx)

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][102][RACS] Stage 3 CRs (ZTE)

Intended outcome: Agreed 36.331 and 38.331 CRs

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][103][RACS] Optional signalling of UE capabilities at handover (Ericsson)

Intended outcome: Decision on proposals in [R2-2001227](file:///C:\Data\3GPP\Extracts\R2-2001227.docx) and possible drafting of a LS to SA2

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][104][SRVCC] Stage 2 CRs (Ericsson)

Intended outcome: Agreed 37.340 and 38.300 CRs

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][105][SRVCC] RRC CR (Huawei)

Intended outcome: Agreed 38.331 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][106][SRVCC] 38.306 CR (China Unicom)

Intended outcome: Agreed 38.306 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][107][CLI] Stage 2 CRs (Huawei)

Intended outcome: Agreed 37.340 and 38.300 CRs

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][108][CLI] RRC CR (LG)

Intended outcome: Agreed 38.331 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][109][CLI] 38.306 CR (Qualcomm)

Intended outcome: Agreed 38.306 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][110][EMIMO] RRC CR (Ericsson)

Initial scope: Continue the discussion on RRC aspects, based on [R2-2001671](file:///C:\Data\3GPP\Extracts\R2-2001671%20-%20Summary%20of%20%5bNR%20eMIMO%5d%20RRC%20aspects_v3.docx)

Initial intended outcome:

* + - Set of proposals with full consensus (aim to agree to those over email)
    - Set of proposals that need further (online) discussion

Initial intermediate deadline (for companies' feedback): Tuesday 2020-02-25 20:00 CET

Initial intermediate deadline (for rapporteur's summary): Wednesday 2020-02-26 01:30 CET

Final deadline: Thursday 2020-03-05 12:00 CET

Status: Started

* [AT109e][111][EMIMO] MAC CR (Samsung)

Scope: Update the MAC CR, based on the progress of the discussion on DL/UL MAC CE design and the general beam enhancement aspects

Intended outcome: Agreed 38.321 CR

Deadline: Thursday 2020-03-05 12:00 CET

Status: Not yet started

* [AT109e][112][EMIMO] Beam management enhancements (Samsung)

Scope: Continue the discussion on beam management enhancements, based on [R2-2001672](file:///C:\Data\3GPP\Extracts\R2-2001672_Summary%20of%20Beam%20Management%20Enhancements.docx)

Initial intended outcome:

* + - Set of proposals with full consensus (aim to agree to those over email)
    - Set of proposals that need further (online) discussion

Initial intermediate deadline (for companies' feedback): Tuesday 2020-02-25 20:00 CET

Initial intermediate deadline (for rapporteur's summary): Wednesday 2020-02-26 01:30 CET

Final intended outcome:

* + - (Further) set of proposals with full consensus (aim to agree to those over email)
    - Set of proposals with almost full consensus and easy to agree
    - Set of open issues and proposals to postpone to next meeting
    - Open issues that should no longer be pursued

Final deadline: Friday 2020-02-28 12:00 CET

Status: Started

* [AT109e][113][PRN] Stage 2 CR (Nokia)

Intended outcome: Agreed 38.300 CR, taking into account proposals in [R2-2000570](file:///C:\Data\3GPP\Extracts\R2-2000570%20NPN%20Emergency%20Calls%20in%20CAG%20Cells.docx) and possible new agreements during the meeting.

Deadline for feedback on baseline CR and [R2-2000570](file:///C:\Data\3GPP\Extracts\R2-2000570%20NPN%20Emergency%20Calls%20in%20CAG%20Cells.docx): Thursday 2020-02-27 12:00 CET

Deadline for feedback on further updates: Wednesday 2020-03-04 16:00 CET

Deadline for rapporteur's version for agreement: Thursday 2020-03-05 12:00 CET

Status: Started

* [AT109e][114][PRN] RRC CR (Nokia)

Scope: Update the RRC CR, based on the progress on the remaining open issues

Intended outcome: Agreed 38.331 CR

Deadline: Thursday 2020-03-05 12:00 CET

Status: Not yet started

* [AT109e][115][PRN] 38.304 CR (Qualcomm)

Scope: Update the 38.304 CR, based on the progress on the remaining open issues

Intended outcome: Agreed 38.304 CR

Deadline: Thursday 2020-03-05 12:00 CET

Status: Not yet started

## 6.5 Optimisations on UE radio capability signalling

(RACS-RAN-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191088](http://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_84\Docs\RP-191088.zip)). Documents in this agenda item will be handled in a break out session

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Apart from running CRs, it's possible to contribute to sub agenda items 6.5.2 and 6.5.3, if any new issues are identified. This Work Item will only be handled via offline email discussions kicked off at the e-meeting start.

### 6.5.1 Organisational

Including incoming LSs, rapporteur inputs, running CRs, etc

[R2-2000424](file:///C:\Data\3GPP\Extracts\R2-2000424.docx) Work plan for RACS-RAN work item MediaTek Inc., CATT discussion Rel-16 RACS-RAN-Core

* Noted

[R2-2000421](file:///C:\Data\3GPP\Extracts\R2-2000421.docx) Introduction of RACS [36.300] MediaTek Inc. CR Rel-16 36.300 16.0.0 1258 - B RACS-RAN-Core

* Endorsed as baseline CR. Moved to offline email discussion for agreement

[R2-2000422](file:///C:\Data\3GPP\Extracts\R2-2000422.docx) Introduction of RACS [38.300] MediaTek Inc. CR Rel-16 38.300 16.0.0 0187 - B RACS-RAN-Core

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][101][RACS] Stage 2 CRs (Mediatek)

Intended outcome: Agreed 36.300 and 38.300 CRs, also taking into account proposals in [R2-2000939](file:///C:\Data\3GPP\Extracts\R2-2000939%20-%20Generic%20stage-2%20description%20for%20RRC%20segmentation.docx)

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

[R2-2000354](file:///C:\Data\3GPP\Extracts\R2-2000354_38.331_CR1441_(REL_16)_Introduction%20of%20UECapabilityInformation%20segmentation%20in%20TS38.331%20-%20v02.docx) Introduction of UECapabilityInformation segmentation in TS38.331 ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd, MediaTek Inc, CATT, Ericsson, Intel Corporation, Spreadtrum Communications CR Rel-16 38.331 15.8.0 1441 - B RACS-RAN-Core

* Remove reference to "Athens, Greece" in the CR header
* Endorsed as baseline CR with the change above. Moved to offline email discussion for agreement

[R2-2000423](file:///C:\Data\3GPP\Extracts\R2-2000423.docx) Introduction of UECapabilityInformation segmentation in 36.331 MediaTek Inc., CATT, Ericsson, Spreadtrum Communications, ZTE Corporation, Sanechips, OPPO, Qualcomm Incorporated CR Rel-16 36.331 15.8.0 4189 - B RACS-RAN-Core

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][102][RACS] Stage 3 CRs (ZTE)

Intended outcome: Agreed 36.331 and 38.331 CRs

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

### 6.5.2 UE radio capability signalling using UE capability identity

Other aspects, if any, can also be covered here

[R2-2001227](file:///C:\Data\3GPP\Extracts\R2-2001227.docx) Inter-node signaling of UE Capabilities Ericsson discussion

* Offline email discussion 103 (Ericsson): discuss proposals 1&2
* [AT109e][103][RACS] Optional signalling of UE capabilities at handover (Ericsson)

Intended outcome: Decision on proposals in [R2-2001227](file:///C:\Data\3GPP\Extracts\R2-2001227.docx) and possible drafting of LS to SA2.

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

The following two papers will be noted but not treated (feedback from RAN3 is needed first)

[R2-2000355](file:///C:\Data\3GPP\Extracts\R2-2000355_UE%20radio%20capability%20ID%20in%20inter-node%20RRC%20messages.docx) UE radio capability ID in inter-node RRC messages ZTE Corporation, Sanechips discussion Rel-16 RACS-RAN-Core

* Noted

[R2-2000356](file:///C:\Data\3GPP\Extracts\R2-2000356_38.331_CR1485__(REL_16)_Introduction%20of%20UE%20radio%20capability%20ID%20in%20inter-node%20RRC%20messages%20-%20v02.docx) Introduction of UE radio capability ID in inter-node RRC messages ZTE Corporation, Sanechips CR Rel-16 38.331 15.8.0 1485 - B RACS-RAN-Core

* Noted

### 6.5.3 Segmentation of UE radio capabilities

[R2-2000939](file:///C:\Data\3GPP\Extracts\R2-2000939%20-%20Generic%20stage-2%20description%20for%20RRC%20segmentation.docx) Generic stage-2 description for RRC segmentation Ericsson discussion Rel-16 RACS-RAN-Core

* Proposals in this paper to be considered as part of the offline email discussion 101

The following two papers will be noted but not treated

[R2-2000765](file:///C:\Data\3GPP\Extracts\R2-2000765%20Transfer%20of%20segmented%20UECapabilityInformation%20by%20SRB2.doc) Transfer of segmented UECapabilityInformation by SRB2 Samsung discussion Rel-16 RACS-RAN-Core [R2-1915246](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1915246.zip)

* Noted

[R2-2001329](file:///C:\Data\3GPP\Extracts\R2-2001329%20Remaining%20issues%20on%20UE%20capability%20segmentation.doc) Remaining issues on UE capability segmentation Huawei, HiSilicon discussion Rel-16 RACS-RAN-Core

* Noted

## 6.14 Single Radio Voice Call Continuity from 5G to 3G

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; target; Mar 20; WID: [RP-190713](http://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_83\Docs\RP-190713.zip)). Documents in this agenda item will be handled in a break out session

Time budget: 0.5 TU

Tdoc Limitation: 1 tdoc

Only running CRs are expected to be submitted for this Work Item. For important unexpected issues it's still possible to contribute to sub agenda item 6.14.2. This Work Item will only be handled via offline email discussions, kicked off at the e-meeting start.

### 6.14.1 Organisational

Including incoming LSs, running CRs, rapporteur inputs, etc

[R2-2000325](file:///C:\Data\3GPP\Extracts\R2-2000325%20-%20CR%20on%2037.340%20for%20SRVCC%20from%205G%20to%203G.docx) Introduction of SRVCC from 5G to 3G Ericsson, ZTE CR Rel-16 37.340 16.0.0 0165 2 B SRVCC\_NR\_to\_UMTS-Core [R2-1916335](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1916335.zip)

* Endorsed as baseline CR. Moved to offline email discussion for agreement

[R2-2000335](file:///C:\Data\3GPP\Extracts\R2-2000335%20-%20CR%20on%2038.300%20for%20SRVCC%20from%205G%20to%203G.doc) Introduction of SRVCC from 5G to 3G Ericsson CR Rel-16 38.300 16.0.0 0186 - B SRVCC\_NR\_to\_UMTS-Core

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][104][SRVCC] Stage 2 CRs (Ericsson)

Intended outcome: Agreed 37.340 and 38.300 CRs

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

[R2-2000542](file:///C:\Data\3GPP\Extracts\R2-2000542%20Introduction%20of%20SRVCC%20from%205G%20to%203G.docx) Introduction of SRVCC from 5G to 3G Huawei, HiSilicon, China Unicom CR Rel-16 38.331 15.8.0 1446 - B SRVCC\_NR\_to\_UMTS-Core

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][105][SRVCC] RRC CR (Huawei)

Intended outcome: Agreed 38.331 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

[R2-2000651](file:///C:\Data\3GPP\Extracts\R2-2000651.doc) Introduction of SRVCC from 5G to 3G China Unicom, Huawei, HiSilicon CR Rel-16 38.306 15.8.0 0235 - B SRVCC\_NR\_to\_UMTS-Core

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][106][SRVCC] 38.306 CR (China Unicom)

Intended outcome: Agreed 38.306 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

The following documents are withdrawn

[R2-2000152](file:///C:\Data\3GPP\Extracts\R2-2000152.doc) Running CR for the introduction of SRVCC from 5G to 3G China Unicom CR Rel-16 38.306 15.8.0 0222 - B SRVCC\_NR\_to\_UMTS-Core Withdrawn

[R2-2000174](file:///C:\Data\3GPP\Extracts\R2-2000174.doc) Running CR for the introduction of SRVCC from 5G to 3G China Unicom CR Rel-16 38.306 15.8.0 0225 - B SRVCC\_NR\_to\_UMTS-Core Withdrawn

R2-2000326 Running CR for introduction of SRVCC from 5G to 3G Ericsson draftCR Rel-15 38.300 15.8.0 B SRVCC\_NR\_to\_UMTS-Core [R2-1914646](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1914646.zip) Withdrawn

### 6.14.2 Other

## 6.15 Cross Link Interference (CLI) handling and Remote Interference Management (RIM) for NR

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; target; Dec 19; WID: [RP-191997](http://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_85\Docs\RP-191997.zip)) Documents in this agenda item will be handled in a break out session.

Time budget: 0 TU

Tdoc Limitation: 1 tdoc

Apart from running CRs, it's possible to contribute to sub agenda item 6.15.2 for the remaining open issues. This Work Item will only be handled via offline email discussions kicked off at the e-meeting start.

### 6.15.1 Organisational

Including incoming LSs, running CRs, rapporteur inputs, etc

[R2-2001411](file:///C:\Data\3GPP\Extracts\R2-2001411.docx) Introduction of cross link interference management Huawei, HiSilicon CR Rel-16 38.300 16.0.0 0201 - B NR\_CLI\_RIM

* Endorsed as baseline CR. Moved to offline email discussion for agreement

[R2-2001412](file:///C:\Data\3GPP\Extracts\R2-2001412.docx) Introduction of cross link interference management Huawei, HiSilicon, ZTE Corporation (Rapporteur) CR Rel-16 37.340 16.0.0 0182 - B NR\_CLI\_RIM

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][107][CLI] Stage 2 CRs (Huawei)

Intended outcome: Agreed 37.340 and 38.300 CRs

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

[R2-2001542](file:///C:\Data\3GPP\Extracts\R2-2001542%20Introduction%20of%20CLI%20handling%20and%20RIM%20in%20TS38.331.docx) Introduction of CLI handling and RIM in TS38.331 LG Electronics Inc. CR Rel-16 38.331 15.8.0 1494 - B NR\_CLI\_RIM

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][108][CLI] RRC CR (LG)

Intended outcome: Agreed 38.331 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

[R2-2000441](file:///C:\Data\3GPP\Extracts\R2-2000441-CLI-38.306_CR0230r0.docx) Introduction of Cross Link Interference (CLI) handling and Remote Interference Management (RIM) Qualcomm Incorporated CR Rel-16 38.306 15.8.0 0230 - B NR\_CLI\_RIM-Core [R2-1915716](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1915716.zip)

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][109][CLI] 38.306 CR (Qualcomm)

Intended outcome: Agreed 38.306 CR

Deadline for companies' feedback: Thursday 2020-02-27 12:00 CET

Deadline for rapporteur's version for agreement: Friday 2020-02-28 12:00 CET

### 6.15.2 Other

The following two papers will be noted but not treated (for most proposals, feedback from RAN1/RAN3 to our previous LSs is needed first)

[R2-2000555](file:///C:\Data\3GPP\Extracts\R2-2000555-UE-CLI-Remaining-Issues-V1.docx) Remaining Issues of UE-CLI Reporting Nokia, Nokia Shanghai Bell discussion Rel-16

* Noted

[R2-2000556](file:///C:\Data\3GPP\Extracts\R2-2000556-UE-CLI-For-NSA-V1.docx) UE-CLI Measurements for EN-DC Nokia, Nokia Shanghai Bell discussion Rel-16

* Noted

[R2-2000557](file:///C:\Data\3GPP\Extracts\R2-2000557%20Draft%20LS_to_RAN3_on_EN-DC-UE-CLI.docx) Draft LS to RAN3 on UE-CLI measurements for EN-DC Nokia, Nokia Shanghai Bell discussion Rel-16

* Noted

[R2-2001621](file:///C:\Data\3GPP\Extracts\R2-2001621%20-%20Remaining%20last%20issues%20on%20CLI.docx) Remaining last issues on CLI Ericsson discussion Rel-16 NR\_CLI\_RIM

* Noted

## 6.16 Enhancements on MIMO for NR

(NR\_eMIMO-Core; leading WG: RAN1; REL-16; started: Jun 18; target; Mar 20; WID: [RP-192271](http://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_85\Docs\RP-192271.zip)). Documents in this agenda item will be handled in a break out session.

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

It's possible to contribute to all sub agenda items, to address the remaining open issues. Summary documents may then be utilized to summarize documents submitted to a given sub-AI and to make tentative proposals. For this Work Item, the discussion (on summary/company tdocs) will start via offline email discussions and will then continue during a web conference and further followup offline email discussions.

### 6.16.1 Organisational

Including incoming LSs , rapporteur inputs, running stage 2 CRs , etc

[R2-2000095](file:///C:\Data\3GPP\Extracts\R2-2000095_R1-1913423.docx) LS on explicit higher layer signalling on PUCCH resource grouping for simultaneous spatial relation updates (R1-1913423; contact: LGE) RAN1 LS in Rel-16 NR\_eMIMO-Core To:RAN2

* Noted

[R2-2000096](file:///C:\Data\3GPP\Extracts\R2-2000096_R1-1913463.doc) Reply LS on multi PDCCH-based and single PDCCH-based multi-TRP operation (R1-1913463; contact: Huawei) RAN1 LS in Rel-16 NR\_eMIMO-Core To:RAN2

* Noted

### 6.16.2 RRC aspects

Including output of email discussion [108#36][NR eMIMO] Running RRC CR (Ericsson).

A summary document will also be utilized to treat this agenda item (Ericsson).

[R2-2001104](file:///C:\Data\3GPP\Extracts\R2-2001104_RRCwayforward_final.docx) Proposals for [108#36][NR eMIMO] Running RRC CR (Ericsson) Ericsson Limited discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001109](file:///C:\Data\3GPP\Extracts\R2-2001109-Running%2038.331%20NReMIMO.docx) Running RRC CR for Introduction of NR eMIMO Ericsson draftCR Rel-16 38.331 15.8.0 B NR\_eMIMO-Core [R2-1916343](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1916343.zip)

* Revised in [R2-2002071](file:///C:\Data\3GPP\Extracts\R2-2002071-Introduction%20of%20MIMO%20enhancements.docx)

[R2-2002071](file:///C:\Data\3GPP\Extracts\R2-2002071-Introduction%20of%20MIMO%20enhancements.docx) Introduction of MIMO enhancements Ericsson CR Rel-16 38.331 15.8.0 1500 B NR\_eMIMO-Core

* Endorsed as baseline CR. Moved to offline email discussion

[R2-2001671](file:///C:\Data\3GPP\Extracts\R2-2001671%20-%20Summary%20of%20%5bNR%20eMIMO%5d%20RRC%20aspects_v3.docx) Summary of [NR eMIMO] RRC aspects Ericsson discussion Rel-16 NR\_eMIMO-Core

* Initially moved to offline email discussion with the intention to go back online during the web conference call(s)
* [AT109e][110][EMIMO] RRC CR (Ericsson)

Initial scope: Continue the discussion on RRC aspects, based on [R2-2001671](file:///C:\Data\3GPP\Extracts\R2-2001671%20-%20Summary%20of%20%5bNR%20eMIMO%5d%20RRC%20aspects_v3.docx)

Initial intended outcome:

* + - Set of proposals with full consensus (aim to agree to those over email)
    - Set of proposals that need further (online) discussion

Initial intermediate deadline (for companies' feedback): Tuesday 2020-02-25 20:00 CET

Initial intermediate deadline (for rapporteur's summary): Wednesday 2020-02-26 01:30 CET

Final intended outcome: Agreed 38.331 CR

Final deadline: Thursday 2020-03-05 12:00 CET

R2-2001677 Offline discussion 110: eMIMO RRC CR discussion Ericsson discussion Rel-16 NR\_eMIMO-Core

[R2-2001345](file:///C:\Data\3GPP\Extracts\R2-2001345.docx) Remaining RRC signalling aspects of NR eMIMO Intel Corporation discussion Rel-16 NR\_eMIMO-Core

* …

The following papers are covered by the summary document and then noted

[R2-2000860](file:///C:\Data\3GPP\Extracts\R2-2000860%20Multiple%20rate%20matching%20patterns%20with%20M-TRP.docx) Multiple rate matching patterns with M-TRP Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001036](file:///C:\Data\3GPP\Extracts\R2-2001036_Discussion%20the%20eMIMO%20RRC%20parameter%20CRS%20pattern%20list_v1.docx) Discussion the MIMO RRC parameter CRS pattern list Qualcomm Incorporated discussion Rel-16 NR\_eMIMO-Core

* Noted

### 6.16.3 DL MAC CE design

DL MAC CE design for TCI states activation/deactivation (for both single-PDCCH and Multi-PDCCH mTRP operation) and for all other functionalities defined by RAN1.

Including output of email discussion [108#68][NR eMIMO] Design of DL MAC CEs (Oppo).

A summary document will also be utilized to treat this agenda item (Oppo).

The following two papers will be handled during the first web conference call

[R2-2000660](file:///C:\Data\3GPP\Extracts\R2-2000660-%20%20Report%20of%20%5b108%2368%5d%5bNR%20eMIMO%5d%20Design%20of%20DL%20MAC%20CEs.docx) Report of [108#68][NR eMIMO] Design of DL MAC CEs OPPO report Rel-16 NR\_eMIMO-Core

[R2-2001551](file:///C:\Data\3GPP\Extracts\R2-2001551%20-%20Summary%20of%20DL%20MAC%20CE%20design%20for%20agenda%206.16.3.doc) Summary of DL MAC CE design for aganda 6.16.3 OPPO discussion Rel-16 NR\_eMIMO-Core Late

The following papers are covered by the summary document and then noted

[R2-2000385](file:///C:\Data\3GPP\Extracts\R2-2000385%20MAC%20CEs%20regarding%20multiple%20CCs%20or%20BWPs.docx) MAC CEs regarding multiple CCs/BWPs vivo discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2000659](file:///C:\Data\3GPP\Extracts\R2-2000659%20-%20CC%20list-based%20SRS%20Activation%20%20MAC%20CE.doc) CC list-based SRS Activation MAC CE OPPO discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2000766](file:///C:\Data\3GPP\Extracts\R2-2000766%20Enhancement%20of%20multiple%20PDCCH-based%20TRP%20transmssion.doc) Enhancement of multiple PDCCH-based TRP transmission Samsung discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2000890](file:///C:\Data\3GPP\Extracts\R2-2000890.docx) Views on eMIMO MAC CEs CATT discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001034](file:///C:\Data\3GPP\Extracts\R2-2001034_Design%20of%20MIMO%20DL%20MAC%20CEs_v1.docx) Design of MIMO DL MAC CE Qualcomm Incorporated discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001126](file:///C:\Data\3GPP\Extracts\R2-2001126%20Remaining%20update%20for%20PDSCH%20TCI%20state%20MAC%20CE.docx) Remaining update for PDSCH TCI state MAC CE Ericsson discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001128](file:///C:\Data\3GPP\Extracts\38.321_CR(Rel-16)_R2-2001128-%20TCI%20state%20for%20PUCCH%20MAC%20CE.docx) New MAC CE for indicating spatial resource for PUCCH resources Ericsson draftCR Rel-16 38.321 15.8.0 NR\_eMIMO-Core

* Noted

[R2-2001196](file:///C:\Data\3GPP\Extracts\R2-2001196.docx) MAC CE signalling for multi-beam enhancement Huawei, HiSilicon discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001465](file:///C:\Data\3GPP\Extracts\R2-2001465%20%20Consideration%20on%20TCI%20state%20MAC%20CE%20for%20mTRP%20mPDCCH%20transmissios.doc) Considerations on TCI state MAC CE for mPDCCH mTRP transmission ZTE Corporation, Sanechips discussion Rel-16 NR\_eMIMO-Core

* Noted

### 6.16.4 General beam management enhancements

Including details of BFR procedure for Scell. Other aspects, if any, can also be covered here

Including output of email discussion [108#69][NR eMIMO] Running MAC CR (Samsung)

Including output of email discussion [108#70][NR eMIMO] BFR MAC CE (Samsung)

A summary document will also be utilized to treat this agenda item (Samsung).

[R2-2000767](file:///C:\Data\3GPP\Extracts\R2-2000767%20DraftCR_38321_Running%20CR%20for%20NR%20eMIMO.docx) MAC running CR for NR eMIMO Samsung CR Rel-16 38.321 15.8.0 0691 - B NR\_eMIMO-Core

* Endorsed as baseline CR. Moved to offline email discussion (to be kicked off after progress of the discussion on DL/UL MAC CE design and the general beam enhancement aspects)
* [AT109e][111][EMIMO] MAC CR (Samsung)

Scope: Update the MAC CR, based on the progress of the discussion on DL/UL MAC CE design and the general beam enhancement aspects

Intended outcome: Agreed 38.321 CR

Deadline: Thursday 2020-03-05 12:00 CET

[R2-2001672](file:///C:\Data\3GPP\Extracts\R2-2001672_Summary%20of%20Beam%20Management%20Enhancements.docx) Summary of [NR eMIMO] Beam management enhancements Samsung discussion Rel-16 NR\_eMIMO-Core

* Initially moved to offline email discussion with the intention to go back online during the web conference call(s)
* [AT109e][112][EMIMO] Beam management enhancements (Samsung)

Scope: Continue the discussion on beam management enhancements, based on [R2-2001672](file:///C:\Data\3GPP\Extracts\R2-2001672_Summary%20of%20Beam%20Management%20Enhancements.docx)

Initial intended outcome:

* + - Set of proposals with full consensus (aim to agree to those over email)
    - Set of proposals that need further (online) discussion

Initial intermediate deadline (for companies' feedback): Tuesday 2020-02-25 20:00 CET

Initial intermediate deadline (for rapporteur's summary): Wednesday 2020-02-26 01:30 CET

Final intended outcome:

* + - (Further) set of proposals with full consensus (aim to agree to those over email)
    - Set of proposals with almost full consensus and easy to agree
    - Set of open issues and proposals to postpone to next meeting
    - Open issues that should no longer be pursued

Final deadline: Friday 2020-02-28 12:00 CET

R2-2001678 Offline discussion 112: Beam management enhancements Samsung discussion Rel-16 NR\_eMIMO-Core

The following paper will be handled during the first web conference call

[R2-2000227](file:///C:\Data\3GPP\Extracts\R2-2000227_Summary%20of%20Email%20discussion%20108%2370%20-%20BFR%20MAC%20CE.docx) Summary of Email discussion 108#70 - BFR MAC CE Samsung Electronics Co., Ltd discussion Rel-16 NR\_eMIMO-Core

The following papers are covered by the summary document and then noted

[R2-2000226](file:///C:\Data\3GPP\Extracts\R2-2000226_Remaining%20issues%20of%20SCell%20BFR.doc) Remaining issues of SCell BFR Samsung Electronics Co., Ltd discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2000386](file:///C:\Data\3GPP\Extracts\R2-2000386%20SR%20cancellation%20due%20to%20the%20truncated%20BFR%20MAC%20CE.docx) SR cancellation due to the truncated BFR MAC CE vivo discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2000587](file:///C:\Data\3GPP\Extracts\._R2-2000587_SCell%20BFR%20Operation.doc) SCell BFR Operation Apple, Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_eMIMO-Core [R2-1915934](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1915934.zip)

* Noted

[R2-2000658](file:///C:\Data\3GPP\Extracts\R2-2000658%20-%20Open%20issues%20on%20SCell%20BFR.doc) Open issues on SCell BFR OPPO discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2000891](file:///C:\Data\3GPP\Extracts\R2-2000891.docx) Views on Remaining Issues of SCell BFR CATT discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001304](file:///C:\Data\3GPP\Extracts\R2-2001304_Consideration%20on%20Truncated%20format%20on%20SCell%20BFR%20MAC%20CE.docx) Consideration on Truncated format on SCell BFR MAC CE LG Electronics Inc. discussion NR\_eMIMO-Core

* Noted

[R2-2001421](file:///C:\Data\3GPP\Extracts\R2-2001421%20Remaining%20issues%20on%20SCell%20BFR%20procedure.docx) Remaining issues on SCell BFR procedure Asia Pacific Telecom co. Ltd discussion

* Noted

[R2-2001484](file:///C:\Data\3GPP\Extracts\R2-2001484%20Remaining%20issues%20on%20SCell%20BFR.docx) Remaining issues on SCell BFR Qualcomm Inc discussion Rel-16

* Noted

[R2-2001509](file:///C:\Data\3GPP\Extracts\R2-2001509-%20The%20remaining%20issues%20on%20Beam%20Failure%20Recovery%20on%20SpCell%20and%20SCell.doc) The remaining issue on BFR on SpCell and SCell ZTE Corporation, Sanechips, Asia Pacific Telecom co. Ltd discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001599](file:///C:\Data\3GPP\Extracts\R2-2001599%20Remaining%20issues%20of%20SCell%20BFR.docx) Remaining issues of SCell BFR ASUSTeK discussion Rel-16 NR\_eMIMO-Core [R2-1916037](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1916037.zip)

* Noted

[R2-2001600](file:///C:\Data\3GPP\Extracts\R2-2001600%20SCell%20BFR%20regarding%20Scell%20deactivation.docx) SCell BFR regarding Scell deactivation ASUSTeK discussion Rel-16 NR\_eMIMO-Core

* Noted

[R2-2001652](file:///C:\Data\3GPP\Extracts\R2-2001652%20-%20BFR%20MAC%20CE%20for%20SpCell.docx) BFR MAC CE for SpCell Ericsson, Nokia, Nokia Shanghai Bell, Apple discussion Rel-16 NR\_eMIMO-Core

* Noted

The following document is withdrawn

[R2-2001464](file:///C:\Data\3GPP\Extracts\R2-2001464-%20The%20remaining%20issues%20on%20Beam%20Failure%20Recovery%20on%20SpCell%20and%20SCell.doc) The remaining issue on BFR on SpCell and SCell ZTE Corporation, Sanechips, Asia Pacific Telecom co. Ltd discussion Rel-16 NR\_eMIMO-Core Withdrawn

## 6.18 Private Network Support for NG-RAN

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191563](http://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_84\Docs\RP-191563.zip)). Documents in this agenda item will be handled in a break out session.

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

It's possible to contribute to all sub agenda items, to address the remaining open issues. Summary documents may then be utilized to summarize documents submitted to a given sub-AI and to make tentative proposals. For this Work Item, the discussion (on summary/company tdocs) will start during a web conference and will then continue via offline email discussions.

### 6.18.1 Organisational

Including incoming LSs , rapporteur inputs, running stage 2 CRs , etc

[R2-2000568](file:///C:\Data\3GPP\Extracts\R2-2000568%20NPN%20Work%20Plan.docx) NPN Work Plan Nokia (Rapporteur) discussion Rel-16 NG\_RAN\_PRN-Core [R2-1914598](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1914598.zip)

* Noted

[R2-2000025](file:///C:\Data\3GPP\Extracts\R2-2000025_R3-197591.doc) Reply LS on Sending CAG ID in NAS layer (R3-197591; contact: Ericsson) RAN3 LS in Rel-16 NG\_RAN\_PRN To:SA3, SA2, RAN2 Cc:CT1

* Noted (content covered in the summary paper)

[R2-2000074](file:///C:\Data\3GPP\Extracts\R2-2000074_S3-194559.doc) Reply LS on Sending CAG ID in NAS layer (S3-194559; contact: Qualcomm) SA3 LS in Rel-16 FS\_Vertical\_LAN\_SEC To:RAN3, SA2, RAN2 Cc:CT1

* Noted (content covered in the summary paper)

[R2-2000057](file:///C:\Data\3GPP\Extracts\R2-2000057_S2-1912731.doc) Reply LS on sending CAG ID during resume procedure (S2-1912731; contact: Qualcomm) SA2 LS in Rel-16 Vertical\_LAN To:CT1 Cc:RAN2

* Noted (content covered in the summary paper)

[R2-2000069](file:///C:\Data\3GPP\Extracts\R2-2000069_S2-2001616.doc) LS on Sending CAG ID (S2-2001616; contact: Ericsson) SA2 LS in Rel-16 Vertical\_LAN To:CT1, RAN2, RAN3, SA3, SA

* Noted

[R2-2000078](file:///C:\Data\3GPP\Extracts\R2-2000078_S5-197805.doc) LS on NPN network sharing (S5-197805; contact: Huawei) SA5 LS in Rel-16 FS\_OAM\_NPN To:SA2 Cc:RAN2, RAN3, SA1

* Noted

[R2-2000065](file:///C:\Data\3GPP\Extracts\R2-2000065_S2-2001398.doc) LS reply on NPN network sharing (S2-2001398; contact: Huawei) SA2 LS in Rel-16 Vertical\_LAN To:SA5 Cc:RAN2, RAN3, SA1

* Noted

[R2-2000055](file:///C:\Data\3GPP\Extracts\R2-2000055_S2-1912602.doc) LS on RAN sharing for NPNs (S2-1912602; contact: Qualcomm) SA2 LS in Rel-16 Vertical\_LAN To:RAN2, RAN3

* Noted

[R2-2000066](file:///C:\Data\3GPP\Extracts\R2-2000066_S2-2001400.doc) Reply LS on CMAS/ETWS and emergency services for SNPNs (S2-2001400; contact: Qualcomm) SA2 LS in Rel-16 Vertical\_LAN To:RAN2 Cc:SA1, CT1

* Noted

[R2-2000079](file:///C:\Data\3GPP\Extracts\R2-2000079_S5-197806.doc) LS on CAG definition (S5-197806; contact: Huawei) SA5 LS in Rel-16 FS\_OAM\_NPN To:SA2, RAN2 Cc:RAN3, CT4

* Questions to RAN2 need to be answered. The discussion can be based on [R2-2002069](file:///C:\Data\3GPP\Extracts\R2-2002069%20%5bdraft%5d%20Reply%20LS%20on%20CAG%20definition.doc)
* Noted

[R2-2000067](file:///C:\Data\3GPP\Extracts\R2-2000067_S2-2001401.doc) LS reply on CAG definition (S2-2001401; contact: Huawei) SA2 LS in Rel-16 Vertical\_LAN To:SA5 Cc:RAN2, RAN3, CT4

* Noted

[R2-2002069](file:///C:\Data\3GPP\Extracts\R2-2002069%20%5bdraft%5d%20Reply%20LS%20on%20CAG%20definition.doc) [DRAFT] LS on CAG definition Huawei LS out Rel-16 NG\_RAN\_PRN-Core To:SA5 Cc:SA2 Late

* - …

[R2-2000051](file:///C:\Data\3GPP\Extracts\R2-2000051_S1-193605.doc) Reply LS on NPN clarifications (S1-193605; contact: Qualcomm) SA1 LS in Rel-16 Vertical\_LAN, NG\_RAN\_PRN To:SA2, RAN3 Cc:RAN2, SA3

* Noted

[R2-2002096](file:///C:\Data\3GPP\RAN2\Docs\R2-2002096.zip) Reply LS on manual CAG selection (S1-201084; contact: Qualcomm) SA1 LS in Rel-16 To:CT1 Cc: RAN2, SA2

* Noted

[R2-2000569](file:///C:\Data\3GPP\Extracts\R2-2000569%20NPN%20Stage%202.docx) Non-Public Networks Nokia, China Telecom (Rapporteurs) CR Rel-16 38.300 16.0.0 0195 - B NG\_RAN\_PRN-Core [R2-1914599](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1914599.zip)

* Revised in [R2-2002068](file:///C:\Data\3GPP\Extracts\R2-2002068%20NPN%20Stage%202.docx)

[R2-2002068](file:///C:\Data\3GPP\Extracts\R2-2002068%20NPN%20Stage%202.docx) Non-Public Networks Nokia, China Telecom (Rapporteurs) CR Rel-16 38.300 16.0.0 0195 1 B NG\_RAN\_PRN-Core [R2-1914599](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1914599.zip)

* Endorsed as baseline CR. Moved to offline email discussion for agreement
* [AT109e][113][PRN] Stage 2 CR (Nokia)

Intended outcome: Agreed 38.300 CR, taking into account proposals in [R2-2000570](file:///C:\Data\3GPP\Extracts\R2-2000570%20NPN%20Emergency%20Calls%20in%20CAG%20Cells.docx) and possible new agreements during the meeting.

Deadline for feedback on baseline CR and [R2-2000570](file:///C:\Data\3GPP\Extracts\R2-2000570%20NPN%20Emergency%20Calls%20in%20CAG%20Cells.docx): Thursday 2020-02-27 12:00 CET

Deadline for feedback on further updates: Wednesday 2020-03-04 16:00 CET

Deadline for rapporteur's version for agreement: Thursday 2020-03-05 12:00 CET

[R2-2000570](file:///C:\Data\3GPP\Extracts\R2-2000570%20NPN%20Emergency%20Calls%20in%20CAG%20Cells.docx) Emergency Calls in CAG-Only Cells Nokia (Rapporteur), China Telecom, Ericsson, Intel, Nokia Shanghai Bell, Vodafone, ZTE discussion Rel-16 NG\_RAN\_PRN-Core

* To be considered as part of the offline email discussion 113

The following paper is covered by the summary document(s) and then noted

[R2-2001331](file:///C:\Data\3GPP\Extracts\R2-2001331%20Open%20issues%20related%20to%20NPN.doc) Open issues in NPN Qualcomm Incorporated discussion

* Noted

### 6.18.2 Cell selection and reselection

Including output of email discussion [108#37][PRN] Running RRC CR (Nokia).

Including output of email discussion [108#71][PRN] Running 38.304 CR (Qualcomm).

A summary document will also be utilized to treat this agenda item (Qualcomm).

[R2-2001035](file:///C:\Data\3GPP\RAN2\Docs\R2-2001035.zip) Introducing the support of Non-Public Networks Nokia (Rapporteur) CR Rel-16 38.331 15.8.0 1468 - B NG\_RAN\_PRN-Core

* Endorsed as baseline CR. Moved to offline email discussion (to be kicked off after progress on the remaining open issues)
* [AT109e][114][PRN] RRC CR (Nokia)

Scope: Update the RRC CR, based on the progress on the remaining open issues

Intended outcome: Agreed 38.331 CR

Deadline: Thursday 2020-03-05 12:00 CET

[R2-2001311](file:///C:\Data\3GPP\Extracts\R2-2001311%20108%2371PRN%20%20Running38.304%20CR%20Report%20v3.docx) Report for email discussion [108#71][PRN] Running 38.304 CR (Qualcomm) Qualcomm Incorporated discussion

* Noted

[R2-2001310](file:///C:\Data\3GPP\Extracts\R2-2001310%20Running%20CR%20for%2038.304%20v2.docx) PRN Running CR for TS 38.304 Qualcomm Incorporated CR Rel-16 38.304 15.6.0 0148 - B NG\_RAN\_PRN

* Endorsed as baseline CR. Moved to offline email discussion (to be kicked off after progress on the remaining open issues)
* [AT109e][115][PRN] 38.304 CR (Qualcomm)

Scope: Update the 38.304 CR, based on the progress on the remaining open issues

Intended outcome: Agreed 38.304 CR

Deadline: Thursday 2020-03-05 12:00 CET

The following paper will be handled during the first web conference call

[R2-2001673](file:///C:\Data\3GPP\Extracts\R2-2001673%20%5bPre109e%5d%5bPRN%5d%20Summary%20for%20PRN%20-%20cell%20selection%20and%20reselection%20v2.docx) Summary of [PRN] Cell Selection and selection Qualcomm discussion Rel-16 NG\_RAN\_PRN -Core

=> Revised in [R2-2001676](file:///C:\Data\3GPP\RAN2\Docs\R2-2001676.zip)

[R2-2001676](file:///C:\Data\3GPP\RAN2\Docs\R2-2001676.zip) Summary of [PRN] Cell Selection and selection Qualcomm discussion Rel-16 NG\_RAN\_PRN -Core

A decision on the following proposals (sorted and tentatively amended by the session chair, also based on latest comments on the reflector) will be attempted online:

Proposal 1: RRC\_INACTIVE state is supported for SNPN and CAG. FFS whether any specific enhancement is needed

Proposal 2: Remove the following Editor’s Notes without introducing any other changes:

Editor's Note: The need for list of NIDs depends on the RAN sharing scenarios to be supported.

Editor's Note: The support of sharing logical cells is FFS.

Proposal 3: RAN2 confirm that For SNPN, cellReservedForOperatorUse is allowed to be configured per SNPN, while for CAG, cellReservedForOperatorUse is allowed to be configured per PLMN.

Proposal 9a: PCI range of SNPN cells can be optionally signalled to UEs. Further details FFS (i.e. proposals 9b, 9c)

Proposal 20: RAN2 to discuss whether a Rel-16 non-NPN capable UE is required to read the NPN identifier information broadcasted in SIB1 by a cell.

Proposal 19: To confirm that all R16 UEs and onward are required to support identification of NPN cell that broadcasts NPN identity and thus be able to consider a cell broadcasting reservedForOtherUse set to TRUE and NPN ID as mobility candidate.

Proposal 4: When cell broadcasts any CAG IDs or NIDs and the cell status is indicated as "not barred" and "not reserved" for operator use and "true" for other use, and cellReservedForFutureUse IE is not indicated as “true”, all UEs shall treat this cell as candidate during the cell selection and cell reselection procedures. FFS on how to capture this in the specification accounting for whether a Rel-16 UE non-NPN capable UE is required to be able to read the NPN info broadcasted in the cell.

Proposal 5: ASN.1 and RRC design shall be such that a Rel-15 UE considers a CAG-only cell as acceptable cell if the cell is not barred to Rel-15 UEs, and if a PLMN ID without CAG list is broadcast and that PLMN is forbidden (e.g. by use of PLMN ID for which all registration attempts are rejected such that the PLMN ID becomes forbidden).

Proposal 6a: Emergency calls for Rel-16 UEs (and Rel-15 UEs) in a CAG-only cell can be supported by setting cellReservedForOtherUse = false, and if a PLMN ID without CAG list is broadcast and that PLMN is forbidden (e.g. by use of PLMN ID for which all registration attempts are rejected such that the PLMN ID becomes forbidden). FFS whether/how NPN capability of UE impacts this.

Proposal 6b: Emergency calls for Rel-16 UEs in a CAG-only cell can be supported by setting cellReservedForOtherUse=true and and allowing the Rel-16 UEs to override this flag and access the PLMNs in the NPN list in limited service state. FFS whether/how NPN capability of UE impacts this.

Proposal 12: RAN2 to discuss if proximity indication is supported or not for CAGs.

Proposal 13: RAN2 to discuss whether EN-DC is supported in NPNs. If not, trackingAreaCode should be mandatory in NPN-IdentityInfo.

Proposal 11: RAN2 to discuss if NPN-only cell definition needs to be updated as follows: A cell that is only available for NPNs’ subscriber. This is indicated by setting the cellReservedForOtherUse IE to true while the npn-IdentityInfoList-r16 IE is present in CellAccessRelatedInfo.

Then, if time allows, the online discussion will continue on the following proposals:

Proposal 8a: RAN2 to discuss if the field intraFreqReselection in MIB message is ignored or not for a cell in (a) licensed spectrum, (b) not in licensed spectrum.

Proposal 8b: For a UE with non-empty allowed CAG list, if the highest ranked cell or best cell according to absolute priority reselection rules is a CAG cell which is not suitable due to not being a CAG member cell and the cell is not in licensed spectrum, the UE shall not consider this cell as candidate for cell reselection but shall continue considering other cells on the same frequency for cell reselection. It is FFS whether this behaviour is applicable to licensed spectrum.

Proposal 8c: For a UE in SNPN AM, if the highest ranked cell or best cell according to absolute priority reselection rules is a cell which is not suitable due to not broadcasting the registered or selected SNPN ID ~~or the CAG ID~~ and the cell is not in licensed spectrum, the UE shall not consider this cell as candidate for cell reselection but should continue to consider other cells on the same frequency for cell reselection. It is FFS whether this behaviour is applicable to licensed spectrum.

Proposal 7: The UE shall perform ranking of all cells that fulfil the cell selection criterion S, which is defined in 5.2.3.2, but may exclude CAG-only cells that are known by the UE not to be CAG member cells. FFS whether this applies to CAG-cells other than CAG-only cells.

Proposal 9b: RAN2 to the following options for how PCI range of SNPN is signalled:

1. The White list introduced in the NR-U and the Legacy black list can be used to indicate PCI range info for the SNPN

2. PCI-range signalled to UEs is defined as the legacy way, e.g. a single PCI list is signalled to UEs without any info associated to NPN ID/NPN type.

3. PCI-range signalled to UEs is defined per NPN type, e.g. PCI-range signalled to UEs is indicated separately for SNPN/PNI-NPN

4. PCI-range signalled to UEs is defined per NPN ID

5. Separate PCI range list for CAG/SNPN cells, rather than black/white cell list. The PCI list contain one or a list of PCI range of RPN (mixed the CAG Cells and SNPN Cells) for a PLMN.

Proposal 9c: RAN2 to the following options for how PCI range of CAG is signalled:

1. Both the PCI range list and related CAG ID can be signalled to UEs.

2. PCI-range signalled to UEs is defined as the legacy way, e.g. a single PCI list is signalled to UEs without any info associated to NPN ID/NPN type

3. PCI-range signalled to UEs is defined per NPN type, e.g. PCI-range signalled to UEs is indicated separately for SNPN/PNI-NPN

4. Reserve a list of PCI range per PLMN per frequency

5. Reserve only one PCI range per PLMN per frequency

6. Reserve only one PCI range per CAG ID per frequency

7. Reserve a list of PCI range per CAG ID per frequency

8. CAG PCI range is introduced as a list of blacklisted/whitelisted cells. No changes required to ASN.1 and NR-U CRs are the baseline.

9. Separate PCI range list for CAG/SNPN cells, rather than black/white cell list. The PCI list contain one or a list of PCI range of RPN (mixed the CAG Cells and SNPN Cells) for a PLMN.

10. Principles from E-UTRA can be inherited (cp. csg-PhysCellIdRange IE)

Proposal 10: RAN2 should discuss whether following can be used as a baseline:

AS and NAS operate as discussed below during manual CAG selection:

#1. As part of AS-NAS interface, NAS provides AS with allowed CAG list.

#2. Upon triggering of manual CAG selection by NAS, AS scans all carrier frequencies and obtains PLMNs and CAG IDs broadcast by found cells. Note that UE does not take allowed CAG list into account in this step.

#3. AS provides the found PLMNs and CAGs to NAS.

#4. NAS selects a CAG ID and provides AS with the selected CAG ID (and the selected CAG ID is separate from allowed CAG list provided before).

#5. With cell selection, the UE select a cell belonging to the selected PLMN and the selected CAG ID. Note that UE does not take allowed CAG list into account in this step.

#6. As an outcome of the manual CAG selection procedure the UE is allowed to access a cell which fulfils the cell selection criteria and is not barred or reserved for operator use for UEs not belonging to Access Identities 11 or 15 and inform NAS that access is possible (for location registration procedure).

#7. After the completion of the manual CAG selection, RAN2 should select one from the following two UE behaviors:

#7a. UE reselects a cell belong to allowed CAG list.

#7b. UE shall prioritize to reselect a cell supporting selected CAG ID, but also can consider cells belonging to allowed CAG list in case that cells supporting selected CAG ID is not available.

A decision on the following proposals will likely be moved to email discussion:

Proposal 14: It is FFS if high quality criteria applies to SNPNs.

Proposal 15: All CAG identities associated to the same PLMN identity shall be listed in the same cag-IdentityList.

Proposal 16: To facilitate the cell reselection from a non-CAG cell to a CAG cell, the highest ranked cell or best cell acc. to absolute priority reselection rules should not be applied by the CAG-capable UE.

Proposal 17: It if FFS whether the supported NID/CAG ID or network type indicator is broadcast along with the inter-frequency carrier info in SIB4.

Proposal 18: For RRC\_IDLE/RRC\_INACTIVE UE in manual CAG/SNPN mode, it is FFS whether the UE AS should inform the NAS if UE AS can’t search for an acceptable or suitable cell belonging to the selected CAG/SNPN.

The following papers are covered by the summary document(s) and then noted

[R2-2000003](file:///C:\Data\3GPP\Extracts\R2-2000003%20Access%20Control%20about%20NPN.docx) Access Control about NPN CATT discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000004](file:///C:\Data\3GPP\Extracts\R2-2000004%20Idle%20and%20Inactive%20Open%20Issues%20for%20NPN.docx) Idle and Inactive Open Issues for NPN CATT discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000132](file:///C:\Data\3GPP\Extracts\R2-2000132%20-%20Support%20of%20emergency%20calls%20in%20NPN-only%20cells.docx) Support of emergency calls in NPN-only cells Ericsson discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000357](file:///C:\Data\3GPP\Extracts\R2-2000357.docx) Remaining issues on the cell reselection ZTE Corporation, Sanechips discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000400](file:///C:\Data\3GPP\Extracts\R2-2000400-NPNRRC-EditorsNotes.docx) Proposals on Editor’s Notes of running RRC CR Nokia, Nokia Shanghai Bell discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000402](file:///C:\Data\3GPP\Extracts\R2-2000402-NPN-IdleModeIssues.docx) Handling of selected CAG ID in Idle/Inactive mode Nokia, Nokia Shanghai Bell discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000829](file:///C:\Data\3GPP\Extracts\R2-2000829_PCI%20range.docx) Blacklist/whitelist for PCI range signaling and stage-3 details Sony discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001035](file:///C:\Data\3GPP\RAN2\Docs\R2-2001035.zip) Introducing the support of Non-Public Networks Nokia (Rapporteur) CR Rel-16 38.331 15.8.0 1468 - B NG\_RAN\_PRN-Core

* Noted

[R2-2001170](file:///C:\Data\3GPP\Extracts\R2-2001170-MobilityIssue_v00.docx) Remaining mobility issues for idle mode and connected mode Intel Corporation discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001174](file:///C:\Data\3GPP\Extracts\R2-2001174_NPN_open_issues_38304_spec.doc) Open issues in the specification of NPN in TS 38.304 Lenovo, Motorola Mobility discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001376](file:///C:\Data\3GPP\Extracts\R2-2001376%20General%20considerations%20on%20idle%20and%20inactive%20mode%20for%20NPN.DOC) General considerations on idle and inactive mode for NPN Huawei, HiSilicon discussion Rel-16 NG\_RAN\_PRN

* Noted

[R2-2001423](file:///C:\Data\3GPP\Extracts\R2-2001423%20Signalling%20Design%20on%20the%20PCI%20Range.docx) Signalling Design on the PCI Range CMCC discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001424](file:///C:\Data\3GPP\Extracts\R2-2001424%20TP%20on%20NPN%20Running%20RRC%20for%20PCI%20list%20of%20PRN%20Cells.docx) TP on NPN Running RRC for PCI list of PRN Cells CMCC discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001526](file:///C:\Data\3GPP\Extracts\R2-2001526%20Resolving%20miscellaneous%20open%20issues.docx) Resolving miscellaneous issues LG Electronics France discussion NG\_RAN\_PRN-Core

* Noted

[R2-2001527](file:///C:\Data\3GPP\Extracts\R2-2001527%20High%20Quality%20Criterion%20for%20SNPN.docx) High Quality Criterion for SNPN LG Electronics France discussion NG\_RAN\_PRN-Core

* Noted

[R2-2001528](file:///C:\Data\3GPP\Extracts\R2-2001528%20Manual%20CAG%20selection.docx) Manual CAG selection LG Electronics France discussion NG\_RAN\_PRN-Core

* Noted

The following document is withdrawn

R2-2000399 Support for Non-Public Networks Nokia (Rapporteur) draftCR Rel-16 38.331 15.8.0 NG\_RAN\_PRN-Core [R2-1915388](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1915388.zip) Withdrawn

### 6.18.3 Connected mode aspects

Connected mode specific aspects, also including CAG ID transmission related issues (e.g. inclusion of CAG ID during Resume, etc).

A summary document will also be utilized to treat this agenda item (Nokia).

The following paper will be handled during the first web conference call

[R2-2001674](file:///C:\Data\3GPP\Extracts\R2-2001674%20SummaryPRN-ConnectedMode-v3.docx) Summary of [PRN] Connected mode aspects Nokia discussion Rel-16 NG\_RAN\_PRN -Core

A decision on the following proposals will be attempted online:

Proposal 1.2: For cells shared between PLMNs and NPNs, non-NPN capable UEs use the first PLMN ID in the Rel-15 PLMN list for the SIB validity check.

Proposal 2.1: To index NPNs, build on the existing plmn-IdentityIndex (to avoid ASN.1 changes other than in SIB1).

Proposal 2.2: In RAN sharing scenarios, the lowest index values belong to the PLMNs (using legacy indexing) and the highest index values belong to NPNs.

Proposal 2.3: Add a condition that NPN-only cell (when cellReservedForOtherUse is set to true), generating NPN-indexes (for PNI-NPNs and SNPNs) shall count the PLMN-index part as zero

Proposal 3.1: There is no need to include CAG ID in RRCResumeComplete message for UE in automatic CAG selection mode.

Proposal 3.2: The selectedPLMN-Identity can refer to a NPN in the description of RRCSetupComplete RRCResumComplete messages and the relevant procedures.

Proposal 3.3: When there is no need to send the selected CAG ID in the RRC message, UE shall use the smallest PLMN/NPN index value that refers to PLMN or PNI-NPN that has the same PLMN identity as the selected PNI-NPN in the RRCSetupComplete and RRCResumComplete messages interpedently from the selected CAG ID.

Proposal 4.1: Extend the current measurement reporting procedures to include NPN information to support ANR.

Proposal 4.2: The CAG ID/SNPN NID information shall be added into the CGI-InfoNR

Proposal 4.3: There is no necessary of the CAG-UE to report the MemberStatus and corresponding identity of reported cell acquired from system information in the measurement report message as what the LTE CSG-UEs execute.

Proposal 5.1: The NPN-only cell can’t work as SCG of EN-DC.

Proposal 5.2: it is proposed that normal network controlled mobility procedure can apply for a UE leaving a CAG cell in connected mode

Then, if time allows, the online discussion will continue on the following proposals:

Proposal 1.1: For NPN-only cells, the first NPN ID (PLMN ID and NID or PLMN ID and CAG ID) is used for the SIB validity check by Rel-16 UEs.

Proposal 1.3: For cells shared between PLMNs and NPNs, whether NPN capable UEs use the first PLMN ID in the Rel-15 PN list or the first NPN ID in the NPN list to perform the SIB validity check.

Proposal 2.4: Whether there is need to create any order between SNPNs and PNI-NPNs during the indexing.

Proposal 2.5: Whether PNI-NPNs having the same PLMN ID are considered as a separate networks when indexing.

Proposal 3.4: Whether UE in manual CAG selection mode shall only stay on cell supporting the selected CAG ID in RRC\_CONNECTED state and whether there is no need to include CAG ID in RRCResumeComplete message for UE in manual CAG selection mode.

Proposal 4.4: Whether to introduce a new indicator whether to include the npn-IdentityInfoList in the reportCGI field.

A decision on the following proposals will likely be moved to email discussion:

Proposal 1.4: Specify the stage 3 details based on the agreements on proposal 1.1, 1.2, and 1.3.

Proposal 2.6: Specify the stage 3 details based on the agreements on proposal 2.1, 2.2, 2.2, 2.4 and 2.5.

Proposal 3.5: Specify the stage 3 details based on the agreements on proposal 3.1, 3.2, 3.2, and 3.4.

Proposal 4.5: Specify the stage 3 details based on the agreements on proposal 4.1, 4.2, 4.3, and 4.4.

Proposal 4.6: When execute measurement procedure configured by the Mesconfig, the UE shall not ignore the measurement of some cells (indicated in the MeasObject) based on the reserved PCI list information.

Proposal 4.7: The additional information, i.e. NPN ID, may be provided in the HO measurement report and gNB in NPN could evaluate this assistant information before making the HO decision.

The following papers are covered by the summary document(s) and then noted

[R2-2000005](file:///C:\Data\3GPP\Extracts\R2-2000005%20Connected%20Mode%20Open%20Issues%20for%20NPN.docx) Connected Mode Open Issues for NPN CATT discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000358](file:///C:\Data\3GPP\Extracts\R2-2000358.docx) Consideration on the remaining Connected State Issues ZTE Corporation, Sanechips discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000401](file:///C:\Data\3GPP\Extracts\R2-2000401-NPNRRC-OpenIssues.docx) Proposals on open RRC issues Nokia, Nokia Shanghai Bell discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001071](file:///C:\Data\3GPP\Extracts\R2-2001071%20Discussion%20on%20the%20proximity%20indication%20in%20connected%20mode.docx) Discussion on the proximity indication in connected mode vivo discussion [R2-1916098](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1916098.zip)

* Noted

[R2-2001377](file:///C:\Data\3GPP\Extracts\R2-2001377%20General%20considerations%20on%20connected%20mode%20for%20NPN.DOC) General considerations on connected mode for NPN Huawei, HiSilicon, China Telecom discussion Rel-16 NG\_RAN\_PRN

* Noted

[R2-2001430](file:///C:\Data\3GPP\Extracts\R2-2001430%20Access%20and%20mobility%20control%20for%20NPN.docx) Access and mobility control for NPN CMCC discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001572](file:///C:\Data\3GPP\Extracts\R2-2001572_Transfer%20of%20NPN%20ID%20in%20RRC%20connection%20establishment.doc) Transfer of NPN ID in RRC connection establishment Samsung Electronics Co., Ltd discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001573](file:///C:\Data\3GPP\Extracts\R2-2001573_Discussion%20on%20ANR%20for%20NPN.doc) Discussion on ANR for NPN Samsung Electronics Co., Ltd discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001586](file:///C:\Data\3GPP\Extracts\R2-2001586%20Remaining%20issues%20discussion%20on%20NPN.doc) Remaining issues discussion on NPN China Telecom discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

### 6.18.4 Other

Including HRNN (Human Readable Name) aspects and common idle and connected mode aspects (e.g. access control, etc.)

A summary document will also be utilized to treat this agenda item (ZTE).

The following paper will tentatively be handled during the first web conference call

[R2-2001675](file:///C:\Data\3GPP\Extracts\R2-2001675%20Summary%20of%20%5bPRN%5d%20Other%20(HRNN,%20Access%20Control,%20etc)%20v1.docx) Summary of [PRN] Other (HRNN, Access Control, etc) ZTE Corporation discussion Rel-16 NG\_RAN\_PRN -Core

A decision on the following proposals (tentatively amended by the session chair) will be attempted online:

Proposal 1a HRNN is broadcast in a new SIB.

Proposal 1b HRNN should be associated with the network IDs implicitly by broadcasting the same amount of HRNN elements as the number of CAGs and NIDs in SIB1 and these elements can also be absent. (ASN.1 details to be discussed via email)

Proposal 2 The existing UAC associated to the PLMN of a CAG ID can be reused and UAC per CAG is not supported.

Proposal 3 The UAC parameters of the SNPN should be configured per SNPN ID by reusing the uac-BarringInfo.

The following papers are covered by the summary document(s) and then noted

[R2-2000130](file:///C:\Data\3GPP\Extracts\R2-2000130%20-%20Remaining%20RRC%20aspects%20of%20NPN.docx) Remaining RRC aspects of NPN Ericsson discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2000131](file:///C:\Data\3GPP\Extracts\R2-2000131%20-%20dCR38331%20-%20Remaining%20RRC%20aspects%20of%20NPN.docx) Remaining RRC aspects of NPN Ericsson draftCR Rel-16 38.331 15.8.0 B NG\_RAN\_PRN-Core

* Noted

[R2-2000668](file:///C:\Data\3GPP\Extracts\R2-2000668.docx) Consideration on the HRNN and Access control ZTE Corporation, Sanechips, Qualcomm Inc discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001072](file:///C:\Data\3GPP\Extracts\R2-2001072%20Consideration%20on%20fixed%20MCC%20for%20SNPN.docx) Consideration on fixed MCC for SNPN vivo discussion [R2-1916097](http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_108\Docs\R2-1916097.zip)

* Noted

[R2-2001155](file:///C:\Data\3GPP\Extracts\R2-2001155_UE_initiated_change_NPN_config.doc) UE-initiated change of NPN UE configuration Lenovo, Motorola Mobility discussion NG\_RAN\_PRN-Core

* Noted

[R2-2001169](file:///C:\Data\3GPP\Extracts\R2-2001169-UAC_v03.docx) Network indexing for UAC and Connection Control Intel Corporation discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001378](file:///C:\Data\3GPP\Extracts\R2-2001378%20Considerations%20on%20SI%20Validity%20Checking.doc) Considerations on SI Validity Checking Huawei, HiSilicon discussion Rel-16 NG\_RAN\_PRN

* Noted

[R2-2001585](file:///C:\Data\3GPP\Extracts\R2-2001585%20Discussion%20on%20human-readable%20network%20name.doc) Discussion on human-readable network name China Telecom, Huawei, HiSilicon discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

[R2-2001587](file:///C:\Data\3GPP\Extracts\R2-2001587%20Discussion%20on%20the%20deployment%20for%20CAG.DOC) Discussion on the deployment for CAG China Telecom, Huawei, HiSilicon discussion Rel-16 NG\_RAN\_PRN-Core

* Noted

## Summary

FFS